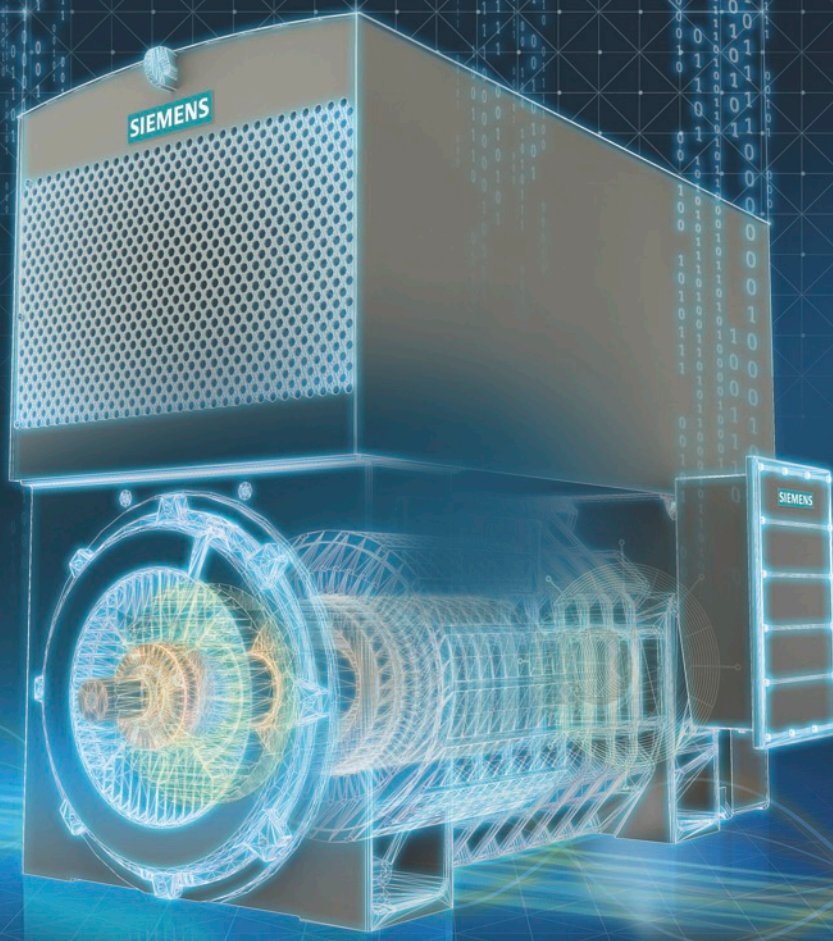


SIEMENS



Motors

High Voltage Three-phase Induction Motors

SIMOTICS HV Series A-compact PLUS

Catalog
D 84.9

Edition
2019

[siemens.com/simotics-hv-a-compact-plus](https://www.siemens.com/simotics-hv-a-compact-plus)

Related catalogs

Three-Phase Induction Motors
SIMOTICS HV, SIMOTICS TN
Series H-compact

D 84.1

PDF (E86060-K5584-A111-A8-7600)



Three-Phase Induction Motors
SIMOTICS HV M

D 84.3

PDF (E86060-K5583-A131-A1-7600)



High Voltage Three-phase Induction Motors

SIMOTICS HV Series A-compact PLUS

Motors



Catalog D 84.9 · 2019

Supersedes:
Catalog D 84.9 · 2015

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Introduction

Overview
Technical features
Article number code
Type selection
Overview of bearing versions
Overview of explosion-protected motors
Conveyor applications
Options

1

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors
Air/air-cooled motors
Air/water-cooled motors

2

Marine versions

3

Selection and configuration tools

4

Service & Support

5

Appendix

6



The products and systems described in this catalog are manufactured/distributed under application of a certified quality management system in accordance with DIN EN ISO 9001 (Certified Registration No. 1210047062 TMS). The certificate is recognized by all IQNet countries.

Introduction



1/2	Overview
1/4	Technical features
1/5	Terminal boxes
1/8	Vibration
1/9	Article number code
1/11	Type selection
1/12	Overview of bearing versions
1/13	Overview of explosion-protected motors
1/13	Classification of zones
1/14	Conveyer applications
1/15	Options
1/15	Description of options

Introduction

Overview

1

Overview



The SIMOTICS HV Series A-compact PLUS high voltage motors are a new generation of modular motors manufactured by Siemens Electrical Drives Ltd., Tianjin, China.

These motors have a high degree of reliability and are very compact. They are suitable for a wide range of applications, e.g. pumps, fans, compressors.

The motors' high availability still applies when used indoors, outdoors and even in regions with rough climates – as well as at high altitudes and in areas with a high humidity.

SIMOTICS HV Series A-compact PLUS high voltage motors

Basic information

- Motor types:
 - 1RA1 (Open cooling circuit; IP23/IC01)
 - 1RP1 (Open cooling circuit; IP24W/IC01)
 - 1RQ1/1SG1 (Air/air cooling; IP55/IC611)
 - 1RN1/1SL1 (Air/water cooling; IP55/IC81W)
- Rated voltage/frequency:
 - 6 kV/50 Hz
 - 10 kV/50 Hz
 - 6.6 kV/60 Hz
- Insulation class:
 - Thermal class 155 (F), utilized to 130 (B)
- Type of construction:
 - IM B3
 - IM B35
 - IM V1
- Standards:
 - IEC
 - GB
 - JB
- Shaft height:
 - 1RA1: 315 ... 630 mm
 - 1RP1: 355 ... 450 mm (500 ... 630 mm on request)
 - 1RQ1/1SG1, 1RN1/1SL1: 355 ... 630 mm

The motors listed in chapter 2 are suitable for line operation or for operation with converters with sinusoidal output. Marine versions also suitable for low-voltage operation with non-sinusoidal output converters can be found in chapter 3.

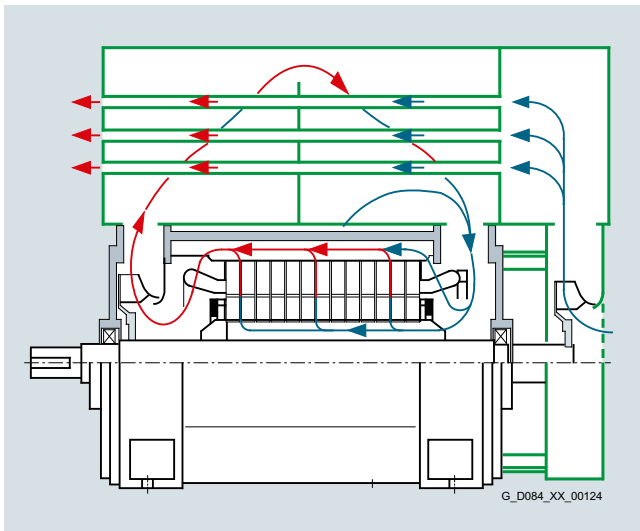
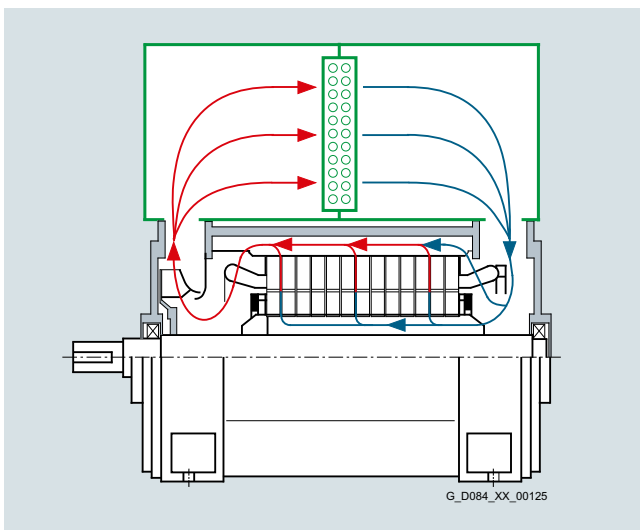
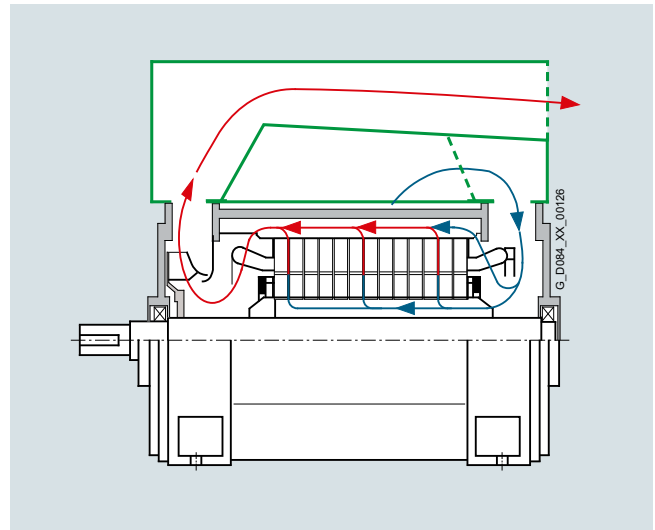
Designs for hazardous areas (article number 1S.1) are available on request.

Overview (continued)**Great performance in a compact design**SIMOTICS HV Series A-compact PLUS

The development of the A-compact PLUS series was focused on achieving the highest degree of reliability and lowest envelope dimensions. As a result, the A-compact PLUS high voltage motor fulfills both of these requirements: Reliable power and compact design.

A-compact PLUS motors are designed for highly reliable operation of standard applications. Simplified order and optimized production processes result in considerably shorter delivery times. This reduces lifecycle costs and leads to stable production processes.

If an extensive range of options or highly customized motors are required, the SIMOTICS HV Series A-compact PLUS, which is produced in the manufacturing location Tianjin in China, is the right choice.

Air/air cooling**Air/water cooling****Open-circuit cooling****Design with modular top-mounted cooling units**Internal ventilation circuit

A uni-directional fan is mounted on the motor shaft at the drive end.

This fan blows air through the rotor and the air gap. Both the rotor and stator are constructed with radial air ducts in which the cooling air, driven by the rotor, flows outwards and provides intensive cooling of the rotor and stator.

External cooling circuit

The cooling units for the various cooling methods are isolated from the stator housing vibration and can be mounted/dismounted without disconnection of electrical terminals on the motor.

1RA1/1RP1 motor: open-circuit cooling IP23/IP24W

The cooling air is drawn in laterally below the housing by the fan mounted on the shaft, guided through the motor and expelled axially at the NDE as warm air.

1RQ1/1SG1 motor: air-to-air cooling IP55

A uni-directional external fan is fitted to the NDE of the motor shaft. This drives the cooling air through the tubes. The air exits axially at the drive end.

1RN1/1SL1 motor: air-to-water cooling IP55

Independent of the ambient conditions the top-mounted air-to-water heat exchanger always ensures the highest cooling power – with minimum thermal dissipation to the immediate environment.

Introduction

Technical features

1

Overview

With the longest lifetime and highest reliability

Working to serve you

The frame and end shields are manufactured out of gray cast iron. Advanced design methods result in a compact and rigid frame with excellent damping characteristics. The gray cast-iron frame in conjunction with high-quality anti-corrosion protection protect the motors against the effects of the weather over many years.

The aluminum die-cast technology, which is used for the rotor manufacturing, has the benefit of being extremely rugged due to the form-fit connection between the rotor bars and laminated core. Where mechanically necessary the proven design with copper bars is used.

Proven technology

Well-proven MICALASTIC VPI insulation

A-compact PLUS motors have the MICALASTIC insulating system that has proven itself over many years in high-rating, high-voltage motors – and that worldwide. An important component of this insulating system is the VPI technique (Vacuum Pressure Impregnation) that is harmonized with the insulation design. This insulation technique fulfills every requirement regarding:

- Motors can either be fed directly from the line supply or a drive converter
- High switching and reversing strength due to the high stiffness of the winding overhangs
- Excellent corona shielding
- In conjunction with the extraordinary mechanical strength and thermal endurance, these factors ensure an extremely long winding lifetime - even under tough environmental conditions.

Bearings with the highest reliability

The bearings of our A-compact PLUS motors are precisely aligned to the speed, load and other operating conditions. The motors are equipped with anti-friction bearings, or when technically required with sleeve bearings. They are well sealed to make the motors insensitive to external environmental effects – therefore playing a role in achieving the high degree of availability and increasing the productivity of the overall plant or system. The low maintenance costs also have a positive impact on the operating costs.

Continuous monitoring

Even the most sophisticated motor can be exposed to operational conditions for which it was not originally designed.

Sensors and monitoring devices can continually sense the electrical, thermal and mechanical operating data.

Terminal box

Overview of generally used main terminal boxes

Terminal box	Rated voltage	Current	Cable entries	Cable entry diameter, max.
	kV	A	Number	mm
1XB1 631	1	1230	Undrilled	–
1XB7 750	1	2840	Undrilled	–
1XD2 313-3AA	6.6	450	1	75
1XB8 751	6.6	630 (for parallel connection)	Undrilled gland plate	–
1XD2 513-3AA	11	450	1	75
1XD1 532-3AA	11	800	Undrilled gland plate	–

Connection options

Terminal box	Terminal element	Number of cables	Max. cable cross section (Cu or Al) that can be connected
			mm ²
1XB1 631	Cable lug	4 cables	240
1XB7 750	Cable lug	8 cables	240
1XD2 313-3AA	Cable lug on M16 stud	1 cable, 3-core	1 x 3 x 300
1XB8 751	Cable lug on M16 stud	2 cables, 3-core	2 x 3 x 240
1XD2 513-3AA	Cable lug on M16 stud	1 cable, 3-core	1 x 3 x 300
1XD1 532-3AA	Cable lug on busbar	3 cables, 3-core or 9 cables, 1-core	3 x 3 x 240 or 9 x 1 x 300

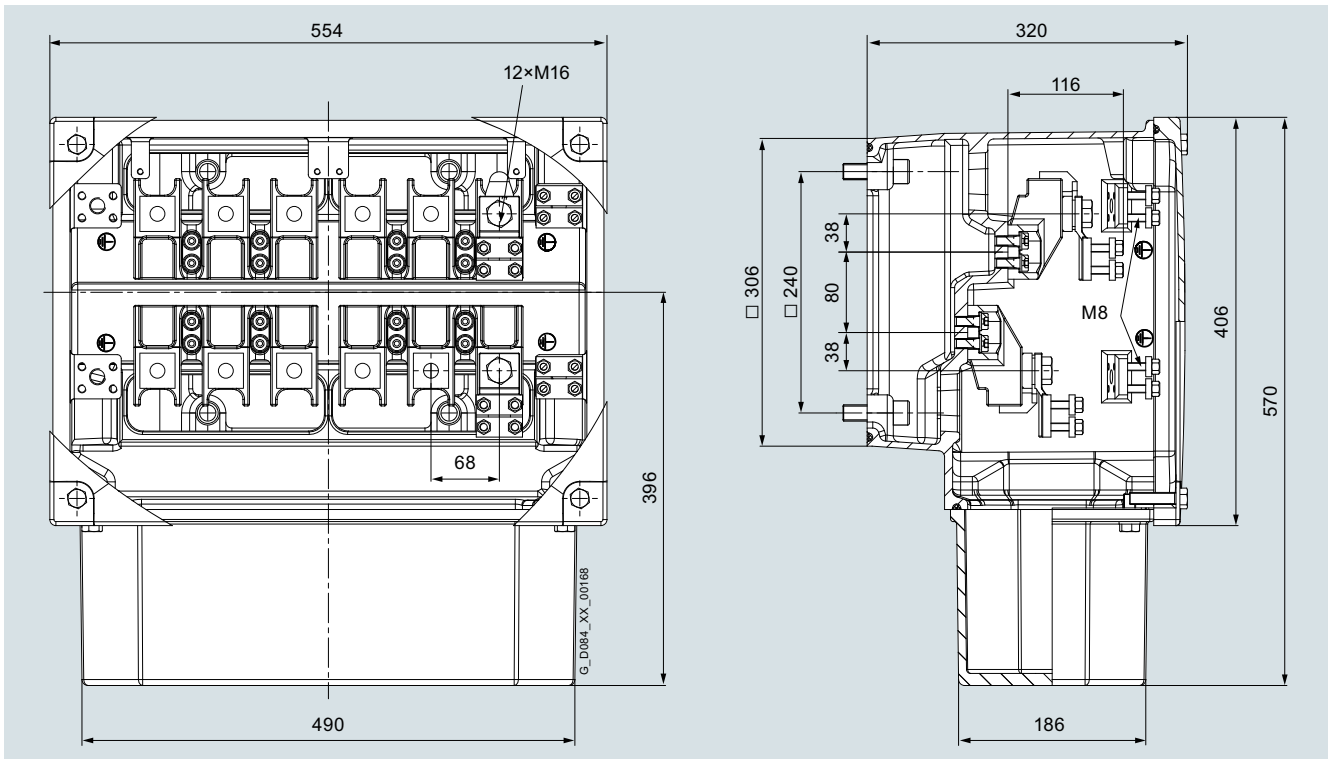
Auxiliary terminal box

- The monitoring elements are connected-up in auxiliary terminal boxes.
- The auxiliary box is integrated into the motor frame.
- The plate for connection will be sealed with a plate of steel, according to IP55.
- The position as standard is on the right hand side. Left or right side is possible, independent of main terminal box.
- 2 openings for cable glands size M25 x 1,5 are standard, they are closed with plugs.

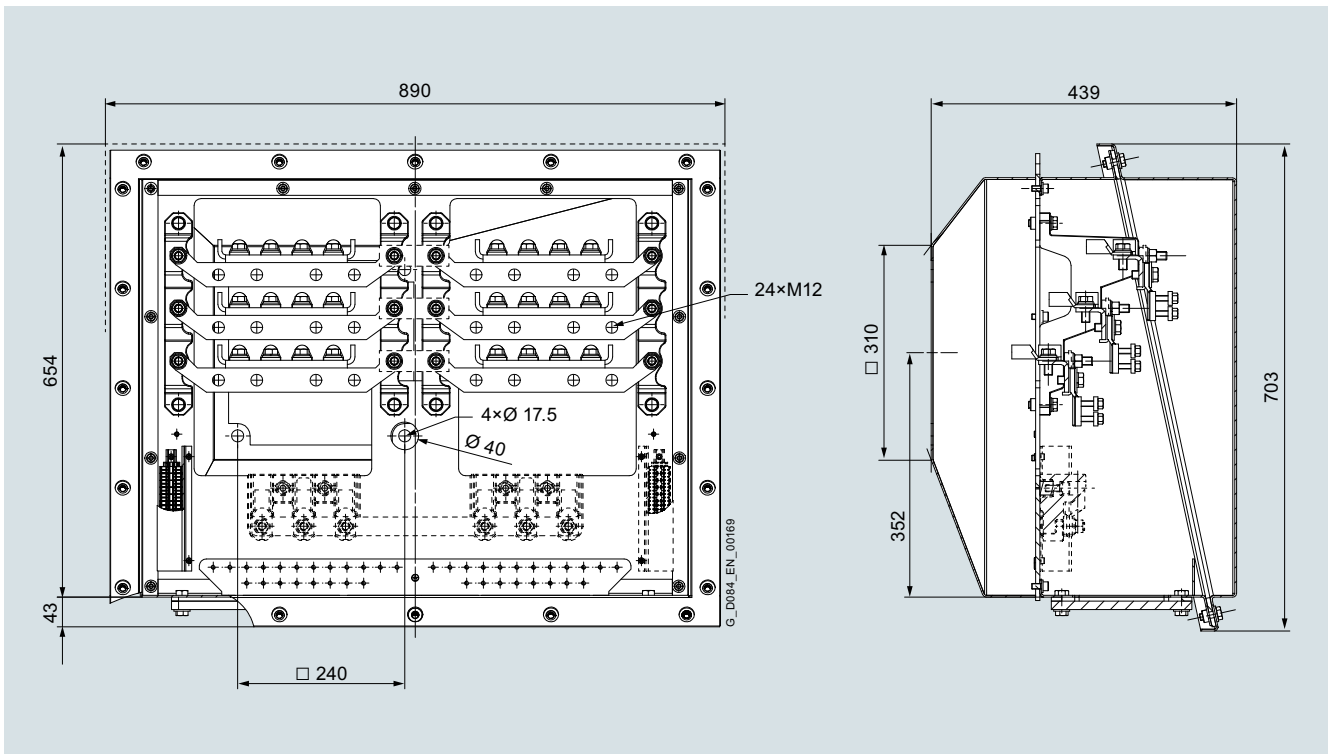
Auxiliary terminal box type	Integrated in motor frame
Material	Cast iron and steel plate
Max. number of terminals	24 x for leads 2,5 mm ²
Terminal box dimensions	220 x 220
With two threads for cable glands	M25 x 1,5
Max. equipment mounting height	40 mm

Dimensional drawings

Main terminal box 1XB1 631



Main terminal box 1XB7 750



Introduction

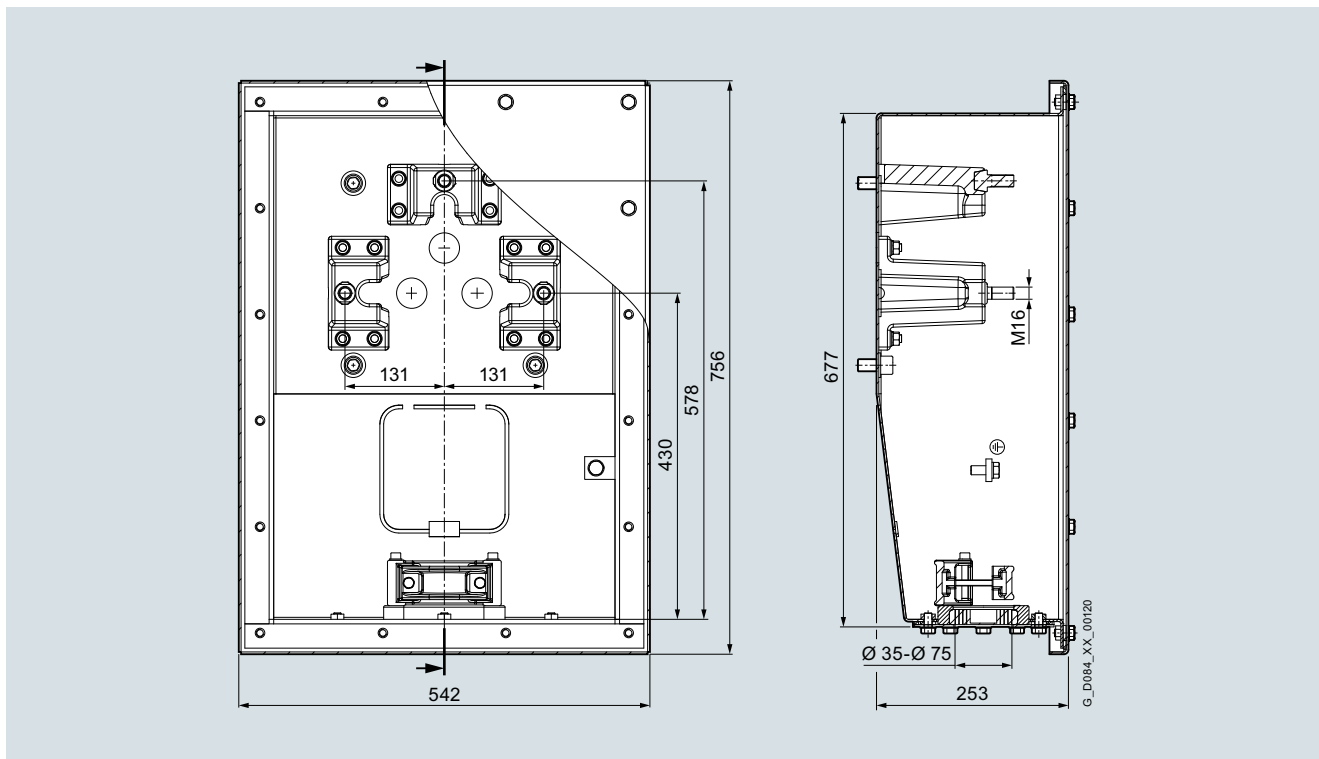
Technical features

Terminal boxes

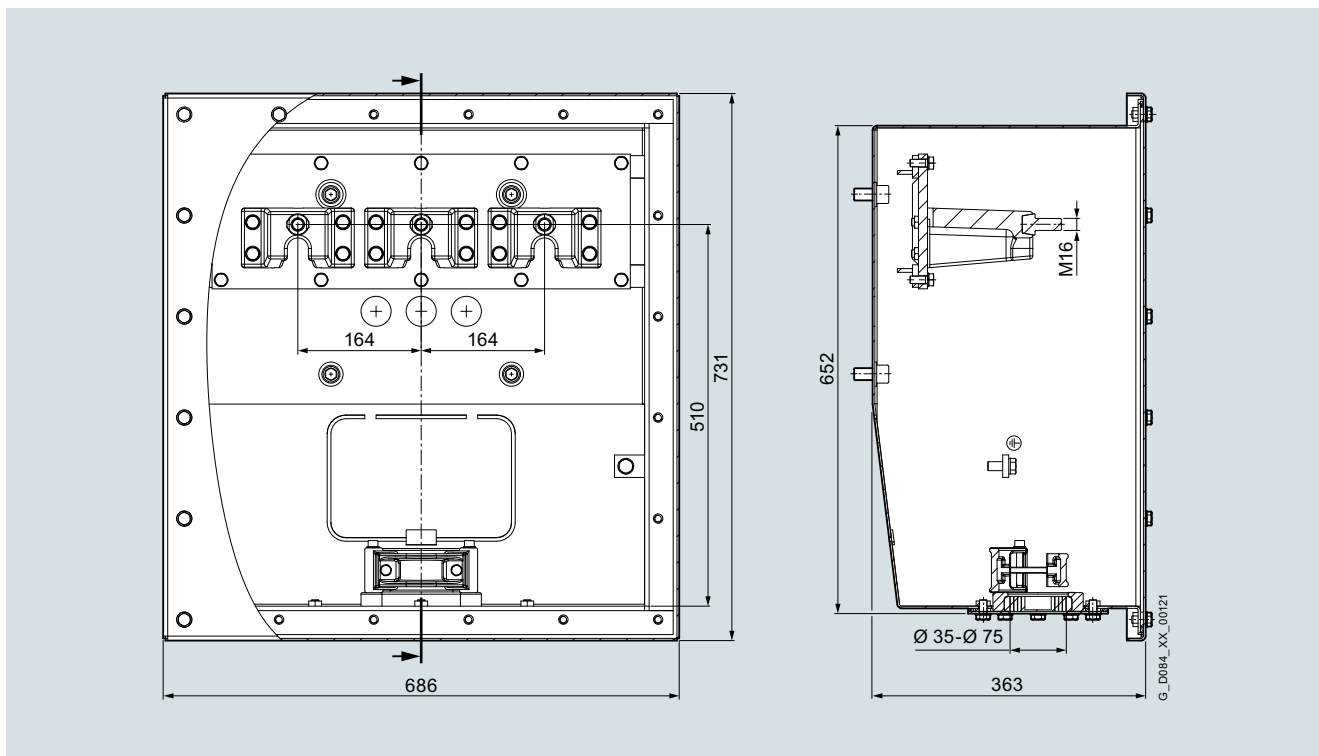
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Dimensional drawings (continued)

Main terminal box 1XD2 313-3AA

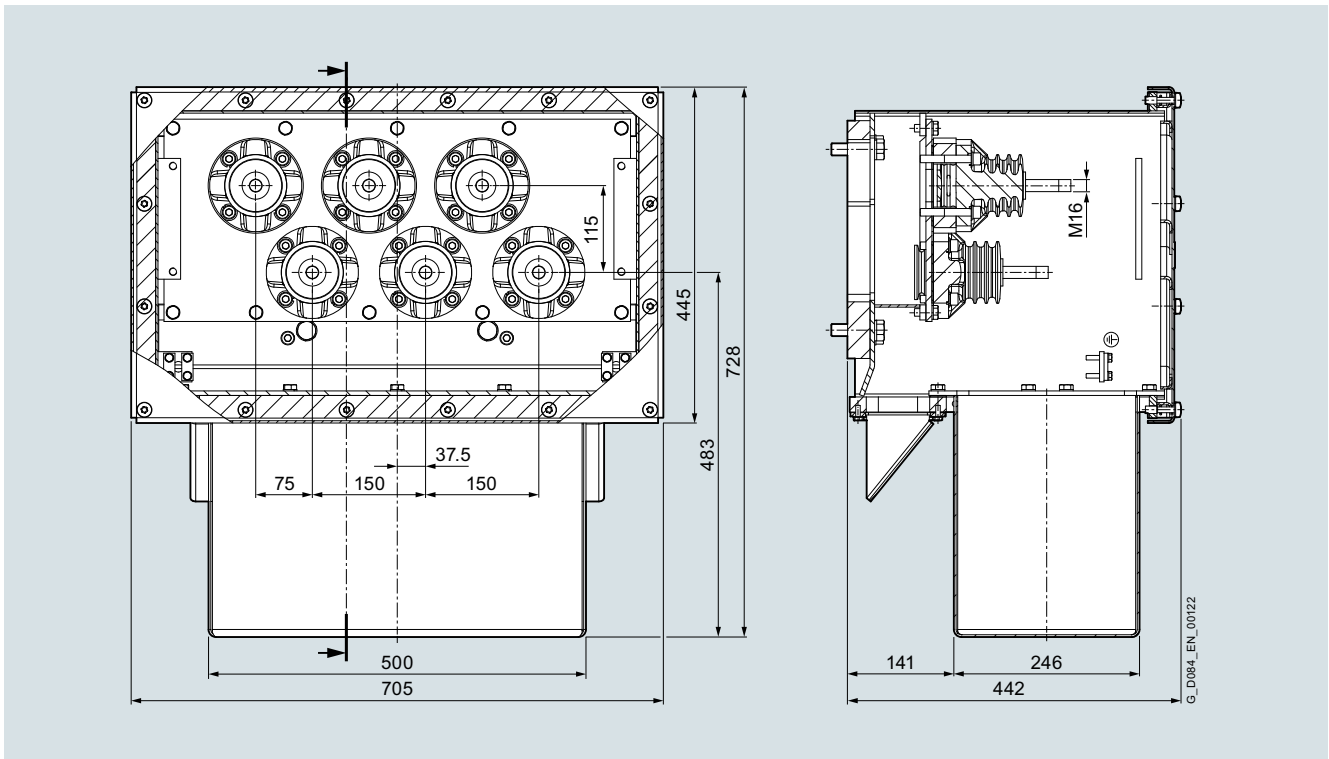


Main terminal box 1XD2 513-3AA

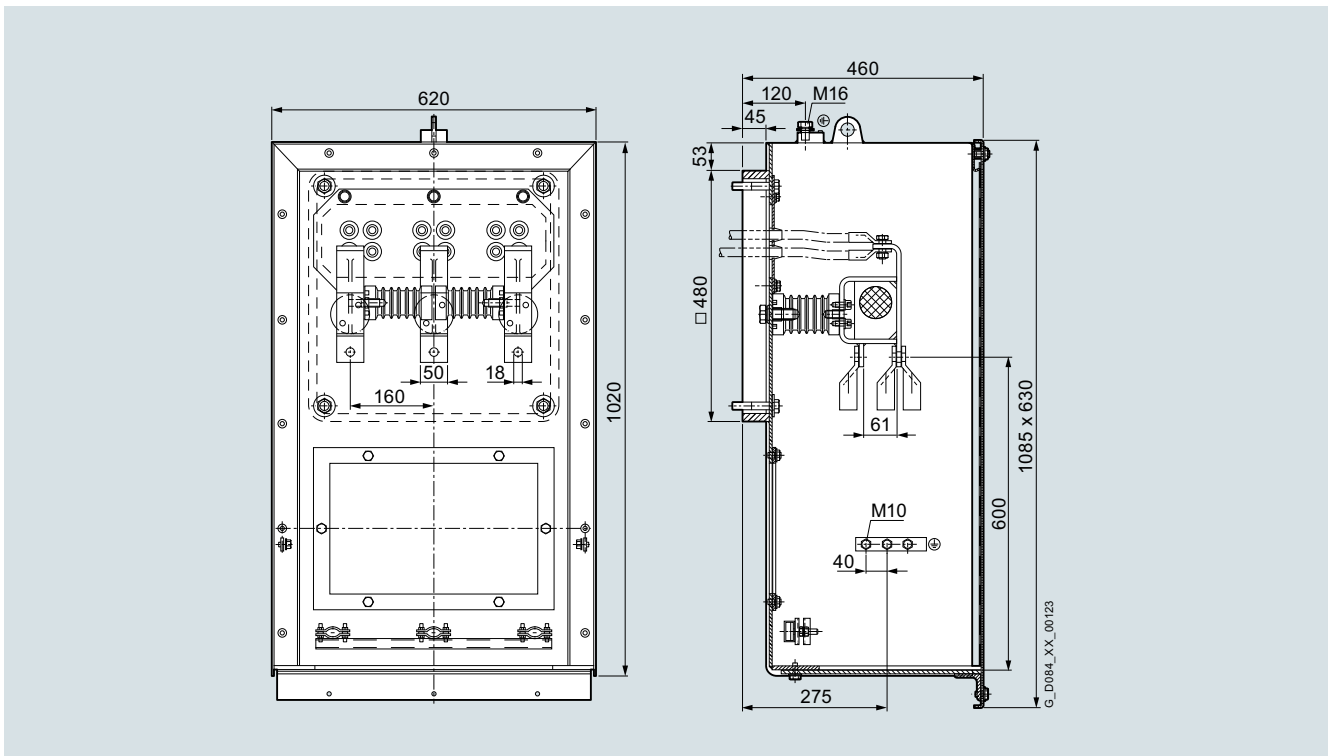


Dimensional drawings (continued)

Main terminal box 1XB8 751



Main terminal box 1XD1 532-3AA



Introduction

Technical features

Vibration

Overview

High vibration quality

An innovative production process in conjunction with high-precision balancing results in the vibration severity grade A (2.3 mm/s) according to IEC 60034-14.

Environment-friendly low noise levels

These motors have low noise values – even in the basic version.

This has been achieved as a result of the following:

- Optimum mechanical design of the motor
- Motor frame and end shields made of grey cast iron for high damping
- Optimized cooling
- Aerodynamically designed fan
- Air intake and enclosure designed for low noise
- Carefully selected number of stator and rotor slots for low magnetic noise excitation
- Supplementary measures to reduce the noise level

1RA1/1RP1			1RQ1/1SG1			1RN1/1SL1 ¹⁾	
Motor type	Noise dB (A)	Noise with damping measures dB (A)	Motor type	Noise dB (A)	Noise with damping measures dB (A)	Motor type	Noise dB (A)
315-2 ²⁾	75	–					
355-2	86	82(L22)	355-2	87	83(L20)	355-2	78
400-2	88	84(L22)	400-2	88	84(L20)	400-2	80
450-2	90	85(L22)	450-2	90	85(L20+L22)	450-2	80
500-2 ²⁾	92	86(L21+L22)	500-2	92	86(L20+L21+L22)	500-2	82
560-2 ²⁾	93	87(L21+L22)	560-2	94	87(L20+L21+L22)	560-2	83
630-2 ²⁾	94	88(L21+L22)	630-2	95	88(L20+L21+L22)	630-2	84
355-4	81	–	355-4	82	78(L20)	355-4	76
400-4	83	–	400-4	84	80(L20)	400-4	78
450-4	84	79(L22)	450-4	86	81(L20+L22)	450-4	79
500-4 ²⁾	85	80(L21+L22)	500-4	88	82(L20+L21+L22), 86(L20+L22) for IM V1	500-4	80
560-4 ²⁾	86	81(L21+L22)	560-4	89	83(L20+L21+L22) 87(L20+L22) for IM V1	560-4	80
630-4 ²⁾	87	82(L21+L22)	630-4	90	84(L20+L21+L22) 88(L20+L22) for IM V1	630-4	81
355-6	78	–	355-6	78	–	355-6	76
400-6	79	–	400-6	79	–	400-6	78
450-6	79	–	450-6	79	–	450-6	79
500-6 ²⁾	80	–	500-6	80	–	500-6	80
560-6 ²⁾	81	–	560-6	81	–	560-6	80
630-6 ²⁾	82	–	630-6	82	–	630-6	81
355-8	78	–	355-8	78	–	355-8	76
400-8	79	–	400-8	79	–	400-8	78
450 -8, -10, -12	79	–	450 -8, -10, -12	79	–	450 -8, -10, -12	79
500 -8, -10, -12, -14, -16 ²⁾	80	–	500 -8, -10, -12, -14, -16	80	–	500 -8, -10, -12, -14, -16	80
560 -8, -10, -12, -14, -16 ²⁾	81	–	560 -8, -10, -12, -14, -16	81	–	560 -8, -10, -12, -14, -16	80
630 -8, -10, -12, -14, -16 ²⁾	82	–	630 -8, -10, -12, -14, -16	82	–	630 -8, -10, -12, -14, -16	81

Note:

The noise levels above are based on 50 Hz, a stiff foundation and no load operation.

The measuring method is according to ISO1680. With a tolerance of + 3 dB (A). Motor operates at 60 Hz: + 3 dB (A).

Converter operation:

Perfect Harmony +0...3 dB(A),
SINAMICS LV with filter +5...8 dB(A),
SINAMICS LV without filter +10...15 dB(A)

¹⁾ No noise damping measures available.

²⁾ 1RA1 only

Overview

Structure of the Article No.:	Position:	1	2	3	4	5	6	7	-	8	9	10	11	12	-	Z
1st to 2nd position: Main Group Identification	Safe area motors Explosion-protected motors	1	R													
3rd position:	Safe area (1R...) • Squirrel cage – open cooling circuit ODP/WPI (IP23 / IC01) • Squirrel cage – air/water cooling TEWAC (IP55 / ICW81) • Squirrel cage – open cooling circuit WPII (IP24 / IC01) • Squirrel cage – air/air cooling TEAAC (IP55 / IC611 or IC616) Explosion-protection (1S...) • Squirrel cage – air/air cooling (IP55 / IC611) • Squirrel cage – air/water cooling (IP55 / ICW81)	1	S													
4th position: Series	Motor series A-compact PLUS				1											
5th to 6th position: Shaft height in mm according to horizontal machine	• 315 • 355 • 400 • 450 • 500 • 560 • 630					3	1									
7th position: Core length	Code is an indicator only, does not show the real core length Different core length for pole numbers and shaft heights								0							
8th position: Pole number	• 2-pole • 4-pole • 6-pole • 8-pole • 10-pole • 12-pole • 14-pole • 16-pole Additional order code required: H1A								2							
9th position: Cooling type	Motors with electrical catalog design type 1 ¹⁾ • Shaft mounted fan (for open machine and air/water cooling) • Shaft mounted fans for internal and external cooling (for air/air cooling) Motors with electrical catalog design type 2 ²⁾ • Shaft mounted fan (for open machine and air/water cooling) • Shaft mounted fans for internal and external cooling (for air/air cooling) Motors with Marine design • Shaft mounted fan (for open machine and air/water cooling) • Shaft mounted fans for internal and external cooling (for air/air cooling) Motors with electrical catalog design type 3 (grade 2 efficiency) ¹⁾ • Shaft mounted fan (for open machine and air/water cooling) • Shaft mounted fans for internal and external cooling (for air/air cooling)										H					
											J					
											K					
											I					
											M					
											L					
											P					
											N					

¹⁾ Basic electrical design type 1 = 40 °C ambient temperature, startup with 90 % voltage.

²⁾ Basic electrical design type 2 = 50 °C ambient temperature, startup with 80 % voltage (typical for Indian market).

Introduction

Article number code

1

Overview (continued)

Structure of the Article No.:		Position:	1	2	3	4	5	6	7	-	8	9	10	11	12	-	Z			
10th position: Rotor winding for line supply and con- verter fed operation	Motors for line supply and for Perfect Harmony converters							Letter												
	<ul style="list-style-type: none"> • Standard copper bar rotor • Standard aluminum cast rotor • Standard aluminum cast rotor (Grade 3 in GB Standard) 								<ul style="list-style-type: none"> J, K, L A, B, C, P D, E, F, G 											
11th position: Voltage and frequency	Motors for Low Voltage converters							Letter												
	<ul style="list-style-type: none"> • Copper bar rotor • Aluminum cast rotor 								<ul style="list-style-type: none"> R, S, T Q, V, W 											
12th position: Type of construction	Line operation ¹⁾							Converter operation												
	• 3.3 kV, 50 Hz							• 675 V, 50 Hz											0	
	• 6.6 kV, 60 Hz							• 675 V, 60 Hz											1	
	• –							• –											2	
	• 4.16 kV, 60 Hz							• –												3
	• 4.0 kV, 60 Hz							• –												4
	• 2.3 kV, 60 Hz							• –												5
	• 6.0 kV, 50 Hz							• –												6
	• 6.6 kV, 50 Hz							• –												7
	• 10 kV, 50 Hz							• –												8
• Other voltage/frequency							• Other voltage/frequency			Additional text data required									9	
Options	• Horizontal (IM B3)																		0	
	• Vertical (IM V1) with protective hood																			4
	• Horizontal (IM B35) with IEC flange and feet																			6
	• Vertical (IM V1) without protective hood																			8
Additional information as text and/or option code required.																	Z			

¹⁾ Also for operation with converters with sinusoidal output.

Overview

Basic considerations when selecting a motor

- Ambient conditions: Temperature, moisture, altitude
- Type of driven load and moment of inertia
- Starting frequency and voltage drop
- Duty type and other special requirements
- Temperature rise
- Direction of rotation
- Sort of coupling
- Position of the terminal box

The influence of ambient temperature and altitude on power rating

1RA1/1RP1

Cooling air temperature	Site altitude above sea level				
	1000 m	1500 m	2000 m	2500 m	3000 m
40 °C	100 %	96 %	93 %	O. r. ¹⁾	O. r. ¹⁾
45 °C	96 %	92 %	88 %	O. r. ¹⁾	O. r. ¹⁾
50 °C	91 %	87 %	83 %	O. r. ¹⁾	O. r. ¹⁾
55 °C	86 %	82 %	77 %	O. r. ¹⁾	O. r. ¹⁾

1RN1/1SL1

Water intake temperature	Site altitude above sea level				
	1000 m	1500 m	2000 m	2500 m	3000 m
25 °C	100 %	96 %	93 %	O. r. ¹⁾	O. r. ¹⁾
30 °C	96 %	92 %	88 %	O. r. ¹⁾	O. r. ¹⁾
35 °C	91 %	87 %	83 %	O. r. ¹⁾	O. r. ¹⁾
40 °C	86 %	82 %	77 %	O. r. ¹⁾	O. r. ¹⁾

1RQ1/1SG1

Cooling air temperature	Site altitude above sea level				
	1000 m	1500 m	2000 m	2500 m	3000 m
40 °C	100 %	96 %	92 %	O. r. ¹⁾	O. r. ¹⁾
45 °C	95 %	91 %	86 %	O. r. ¹⁾	O. r. ¹⁾
50 °C	90 %	85 %	80 %	O. r. ¹⁾	O. r. ¹⁾
55 °C	84 %	78 %	73 %	O. r. ¹⁾	O. r. ¹⁾

Guideline for coupling selection

- The A-compact PLUS motors are designed for operation with a flexible coupling.
- Motor and driven machine have to be aligned according to manual.
- The maximum half coupling weights of A-compact PLUS are shown in the table below.
- If the coupling weight exceeds the maximum value, the feasibility has to be checked.

Motor type	Frame size	Pole number	Maximum weight of half coupling
1R.1	355	-2	50 kg
		-4	60 kg
		-6/-8	90 kg
	400	-2	50 kg
		-4	90 kg
		-6/-8	140 kg
	450	-2	60 kg
		-4	140 kg
		-6/-8/-10/-12	140 kg
500	-2	90 kg	
	-4	210 kg	
	-6/-8/-10/-12/-14/-16	250 kg	
560	-2	170 kg	
	-4	300 kg	
	-6/-8/-10/-12/-14/-16	410 kg	
630	-2	250 kg	
	-4	470 kg	
	-6/-8/-10/-12/-14/-16	620 kg	

Normal conditions

Selection and ordering data included in this chapter are valid for standard operating and installation conditions:

- Installation altitude of the motor ≤ 1000 m above sea level
- Ambient temperature (= coolant temperature for air-cooled motors) = 40 °C
- Coolant temperature for water-cooled motors = 25 °C
- Thermal class 155 (F), utilized to 130 (B)
- Continuous duty S1
- Permissible tolerances in compliance with IEC/EN 60034-1:
 - Rated voltage $V_{rated} \pm 5\%$
 - Rated frequency $f_{rated} \pm 2\%$

The A-compact PLUS series is designed to be directly switched-on when certain starting conditions are maintained.

Motor starting does not have to be separately checked if the following criteria are maintained:

- The voltage when starting does not drop below $0.9 \times V_{rated}$.
- The load torque increases approximately with the square of the speed ($T \sim n^2$).
- The maximum load torque does not exceed 50 % of rated torque at rated speed.

Start-up with max. permissible inertia according to "selection and ordering data" is possible either for three times from cold or two times from warm motor condition (natural coast down between consecutive starts assumed).

If limits of load characteristic and/or inertia are exceeded, the motor start-up calculation has to be checked. In this case, please contact your Siemens sales representative.

¹⁾ On request

Introduction

Overview of bearing versions

1

Overview

Bearing version

Motors for connection to the line supply have anti-friction bearings or sleeve bearings as standard according to the following overview.

The bearing concepts for motors for converter operation depend on the speed control range.

Overview, bearing versions

Motor type	Bearing version		IM V1 Number of poles ≥ 4 50 Hz/60 Hz
	IM B3, IM B35 Number of poles 2 50 Hz/60 Hz	Number of poles ≥ 4 50 Hz/60 Hz	
...31.	Anti-friction bearings (sleeve bearings not available)	–	–
...35.		Anti-friction bearings (sleeve bearings on request)	Anti-friction bearings (sleeve bearings not available)
...40.	Anti-friction bearings (sleeve bearings optional)		
...45. ¹⁾			
...50.	Sleeve bearings		
...56.			
...63.			

Assignment, type of construction and anti-friction bearing type

Motor series	Type of construction	Shaft height mm	Drive end	Non-drive end
1R.1/1S.1	IM B3	315 ... 560	Deep-groove ball bearing (locating bearing)	Deep-groove ball bearing (floating bearing)
		630	Double bearing: Deep-groove ball bearing and cylindrical roller bearing (locating bearing)	Cylindrical-roller bearing (floating bearing)
	IM V1	355	Deep-groove ball bearing (thrust bearing)	Deep-groove ball bearing (floating bearing)
		400 ... 560	Deep-groove ball bearing (floating bearing)	Angular-contact ball bearing (thrust bearing)
		630	Deep-groove ball bearing (floating bearing)	Pair of angular-contact ball bearings (thrust bearing)

For motors with sleeve bearings, lateral flanges are used. Generally, these motors are equipped with two floating bearings. This means that the rotor must be axially guided by the bearings of the driven machine through a coupling with limited axial play. An appropriate sleeve bearing can be installed at the drive end if the motor rotor is to be axially guided.

¹⁾ 1.R.145.-2 (60 Hz) only available with sleeve bearings

Overview

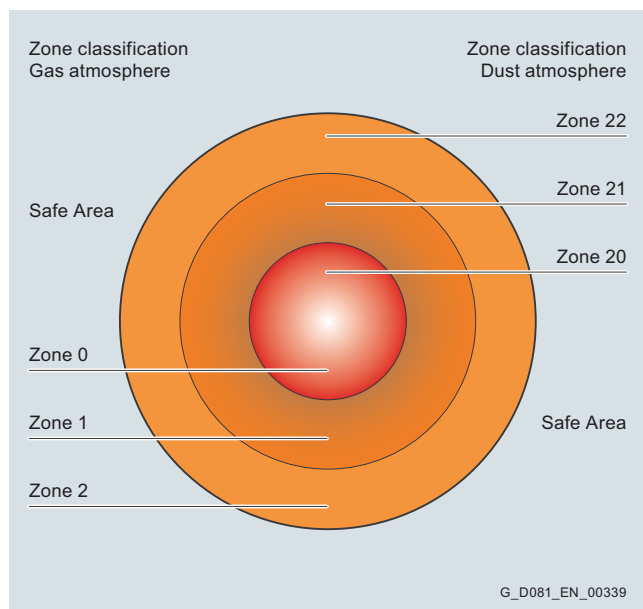
In many industries, the manufacture, processing, transport or storage of combustible materials results in the creation or release of gases, vapors or mist into the environment. Combustible dusts are created in other processes.

Explosive atmospheres are formed when gases, vapors, mist or dust come into contact with oxygen in the air. If ignited, this can result in an explosion.

In the chemical and petrochemical industries in particular, when crude oil and natural gas are transported, or in mining, milling (e.g. grain and granular solids), this can result in serious injury to personnel and damage to equipment.

To ensure maximum safety in these areas, legislators in most countries have implemented appropriate stipulations in the form of laws and regulations based on national and international standards.

Hazardous areas are classified in zones. Classification in zones depends on the probability of the presence of an explosive atmosphere, the classification in zones is provided in GB and IEC standard. Further, a distinction is made between various explosion groups as well as temperature classes and these are included in the hazard assessment.



Depending on the particular zone and therefore the associated hazard, operating equipment must comply with defined minimum requirements regarding the type of protection. The different types of protection require corresponding measures to prevent ignition that should be implemented at the motor in order to prevent that a surrounding explosive atmosphere is ignited.

Gas ^{1), 2)}	Zone definition according to GB 3836.14-2014 for Gas atmosphere	Assigned types of protection
2	An area in which normal operation it is not expected that an explosive gas atmosphere occurs and if so, only infrequently and only briefly.	Ex nA

Gas ^{1), 2)}	Zone definition according to IEC60079-10-1 for Gas atmosphere	Assigned types of protection
2	An area in which normal operation it is not expected that an explosive gas atmosphere occurs and if so, only infrequently and only briefly.	Ex ec

Dust ^{1), 2)}	Zone definition according to IEC60079-10-2 for Dust atmosphere	Assigned types of protection
2	An area in which normal operation it is not expected that an explosive dust atmosphere occurs and if so, only infrequently and only briefly.	Ex tc

¹⁾ Motors, which are marked for gas or dust protection, must not be used in hybrid mixtures! Hybrid mixtures: When explosive gas and dust atmospheres occur simultaneously.

²⁾ Motors for Zone 1 may also be used in Zone 2.

Introduction

Conveyor applications

1

Overview

A-compact PLUS can perfect fit for conveyor application with optimized solution for converter operation and fluid coupling operation. Below options are valid for 1RQ1 series; shaft height 355, 400, 450; 4-pole, 6-poles; 6 kV/50 Hz and 10 kV/50 Hz; horizontal mounting motor.

Option code	Description
K17	Solution for conveyor with fluid coupling within standard scope (see definition of standard scope below or description in the Drive Technology Configurator).
K18	Solution for conveyor with fluid coupling exceeding standard scope (available on request; see definition of standard scope below or description in the Drive Technology Configurator).
K19	Solution for conveyor with converter

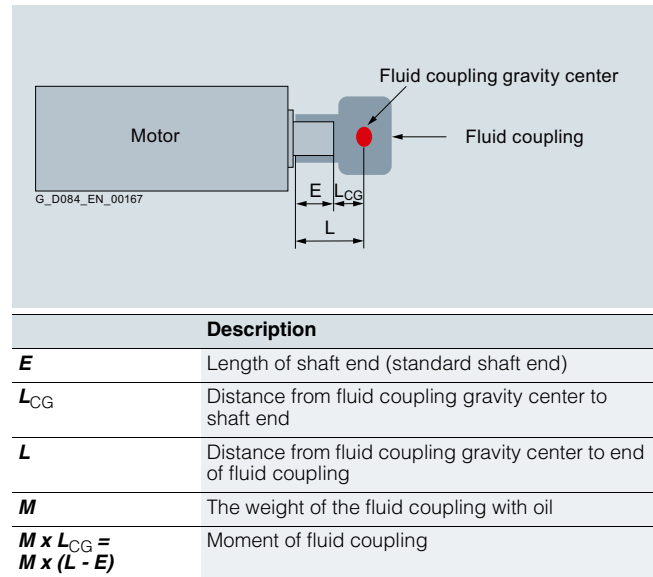
For converter operation, please select K19 option.

For fluid coupling operation, K17 or K18 can be selected. The three criteria listed below define the standard scope for option K17. If all three criteria are fulfilled, the bearing lifetimes meet 40000 hours and no critical speed calculation is needed. If any of these criteria are exceeded, option K18 must be selected (available on request).

- The weight of fluid coupling with oil (M) must not exceed 900 kg.
- The distance from fluid coupling gravity center to motor shaft end (L_{CG}) must not exceed 500 mm.
- The $M \times L_{CG}$ moment must not exceed the maximum moment value in below table.

Type	Maximum moment (kg × mm) $M \times L_{CG}$
1RQ1.355, 4-pole	70000
1RQ1.355, 6-pole	270000
1RQ1.400, 4-pole	120000
1RQ1.400, 6-pole	400000
1RQ1.450, 4-pole	160000
1RQ1.450, 6-pole	400000

Definition of the $M \times L_{CG}$ fluid coupling moment:



Note:

The values M and L must be provided by the supplier of the fluid coupling.

Overview

Order Code	Description	Remark
	Monitoring of stator windings	
A65	6 embedded resistance thermometers Pt100 for 2-, 3- or 4-wire connection from terminal box without lightning arresters ¹⁾	Standard
2 × A65	12 embedded resistance thermometers Pt100 for 2-, 3- or 4-wire connection from terminal box without lightning arresters ¹⁾	For safe area motors only
A67	6 embedded screened resistance thermometers Pt100 for 2-, 3- or 4-wire circuit connection without lightning arrester ¹⁾	
2 × A67	12 embedded screened resistance thermometers Pt100 for 2-, 3- or 4-wire circuit connection without lightning arrester ¹⁾	
	Monitoring of bearings	
A40	2 resistance thermometers Pt100 for 2-, 3- or 4-wire connection from terminal box for anti-friction bearings ¹⁾	
A41	2 resistance thermometers Pt100 for 2-, 3- or 4-wire connection from terminal box for sleeve bearings ¹⁾	
A42	2 double resistance thermometers Pt100 for 2-, 3- or 4-wire connection from terminal box for anti-friction bearings ¹⁾	
A43	2 double resistance thermometers Pt100 for 2-, 3- or 4-wire connection from terminal box for sleeve bearings ¹⁾	
A70	2 dial-type thermometers without contacts	For safe area motors only
A71	2 dial-type thermometers with contacts	For safe area motors only
G50	Shock pulse measuring nipple (SPM) at DE and NDE	
H05	Shock pulse measurement, fixed sensors and distributor box	
H07	Shock pulse measurement (SPM), complete alarm box	For safe area motors only
P63	One M8x10 thread per bearing for vibration sensor mounting (sensor not included)	
	Monitoring of ventilation	
A44	1 resistance thermometer Pt100 for 2-, 3- or 4-wire connection from terminal box, for cold air temperature ¹⁾	
A45	1 resistance thermometer Pt100 for 2-, 3- or 4-wire connection from terminal box, for hot air temperature ¹⁾	
A46	1 double resistance thermometer Pt100 for 2-, 3- or 4-wire connection from terminal box, for cold air temperature ¹⁾	For safe area motors only
A47	1 double resistance thermometer Pt100 for 2-, 3- or 4-wire connection from terminal box, for hot air temperature ¹⁾	For safe area motors only
A86	1 dial-type thermometer with 2 NO-Contacts for cold air temperature incl. terminal box	For safe area motors only
A87	1 dial-type thermometer with 2 NO-Contacts for hot air temperature incl. terminal box	For safe area motors only
	Other monitoring	
A03	Speed monitoring using an inductive proximity switch, Pepperl + Fuchs, incl. terminal box, without evaluation unit	For safe area motors only
H08	Leakage water detection	For safe area motors only
	Special winding	
C20	Special winding	
	Heater	
M12	Anti-condensation heater for 110 to 120 V	For safe area motors only
M13	Anti-condensation heater for 220 to 240 V	For safe area motors only
M14	Anti-condensation heater Ex eb II T3, rated voltage range 110 to 120 V	For explosion-protected motors only
M15	Anti-condensation heater with other rated voltages, V = additional text required	Standard for explosion-protected motors
	Terminal box	
L54	Terminal box 1XB8 751, 6 terminals with cable gland for 2 cable entries for line connection with rated current > 315 A	
L59	Terminal box 1XB8 911, for 1 cable entry	For safe area motors only

¹⁾ In standard configuration 2 terminals are allocated per Pt100 temperature sensor. 3- or 4-wire temperature monitoring systems can be connected by using cable end sleeves for crimping 2 leads into one sleeve. For this purpose twin sleeves are available from several suppliers. Different configurations of auxiliary terminals for separate 3 terminals or 4 terminals connections are available on request.

Introduction

Options

Description of options

1

Overview (continued)

Order Code	Description	Remark
	Terminal box mounting positions	
K10	Terminal box on left hand side, view from DE	
K83	Terminal box rotated through 90°, cable entry from DE	
K84	Terminal box rotated through 90°, cable entry from NDE	
K85	Terminal box rotated through 180°, cable entry from above	
	Neutral point terminal box	
L56	Neutral point terminal box 1XB8 911, up to 11 kV, 3 terminals	For safe area motors only
L58	Neutral point terminal box 1XB9 011, for installing current transformer (without current transformer)	Current transformer size has to be checked
T20	Neutral point terminal box 1XD2 313-3AA, up to 6.6 kV, 3 terminals	
T21	Neutral point terminal box 1XD2 513-3AA, up to 11 kV, 3 terminals	
L57	Neutral point terminal box 1XB8 751, up to 6 kV, 6 terminals for star point (rated current over 315 A)	
L62	Neutral point terminal box 1XE1 542-0AA, up to 10 kV, 1 bus bar for star point	
	Auxiliary terminal box	
M50	Auxiliary terminal box in cast iron	
M51	Auxiliary terminal box in stainless steel	
M52	Separate auxiliary terminal box for anti-condensation heater	
	Direction of rotation	
K97	Rotation clockwise (CW)	
K98	Rotation counter-clockwise (CCW)	
K99	Bi-directional rotation ¹⁾	For safe area motors only
	Conveyor application	
K17	Solution for conveyor with fluid coupling within standard scope	For safe area motors only
K18	Solution for conveyor with fluid coupling exceeding standard scope	On request; for safe area motors only
K19	Solution for conveyor with converter	For safe area motors only
	Sleeve bearings and instrumentation	
K96	Sleeve bearing instead of anti-friction bearing ²⁾	
H09+ H11	DIN flange type for forced oil lubrication for oil inlet with flowmeter, manometer and throttle valve (incl. counter flange) + DIN flange type for forced oil lubrication for oil outlet with sight glass (incl. counter flange)	
H10+ H12	ANSI flange type for forced oil lubrication for oil inlet with flowmeter, manometer and throttle valve (incl. counter flange) + ANSI flange type for forced oil lubrication for oil outlet with sight glass (incl. counter flange)	
L60	Forced-circulation oil lubrication (with oil cooling) instead of oil ring lubrication	For safe area motors only
	Mechanical options	
K52	Degree of protection IP56 non-heavy-sea	For safe area motors only
L17	Mounting a coupling provided (finish machined and balanced)	
L31	Motor mounting materials for mounting on a steel foundation: Bolts, shims and taper dowels	
L32	Motor mounting materials for mounting on a concrete foundation or concrete base: Threaded bolts, armature plates, sole plates, shims and taper dowels	
L33	Motor mounting materials to mount on a concrete foundation or concrete base: T-head bolts, foundation bolt sleeves, sole plates, shims and taper dowels	
Y55	Non-standard cylindrical shaft end on DE	
K16	Second shaft end up to 50 % rated torque	For safe area motors only
P45	External screws made of stainless steel	
	Insulated bearing	
L27	Insulated bearing on NDE ³⁾	

¹⁾ On request.

²⁾ Only for 2-pole motors shaft height 400 and 450. Sleeve bearings are standard for shaft height 500 and 560 2-pole and 450 60 Hz 2-pole

³⁾ Operation with Perfect Harmony type converters on request.

Overview (continued)

Order Code	Description	Remark
	Noise minimization	
L20	Silencer for air inlet	Only 1RQ1 35./40., 2-pole and 4-pole
L20+L22	Silencer for air inlet and foam lining	Only 1RQ1 45., 2-pole and 4-pole, IMV1 50./56./63., 4-pole
L20+L21+L22	Silencer for air inlet, silencer for air outlet and foam lining	Only 1RQ1 50./56./63., 2-pole and 4-pole
L22	Foam lining	Only 1RA1/1RP1 35.-45., 2-pole and 1RA1/1RP1 45., 4-pole
L21+L22	Silencer for air outlet and foam lining	Only 1RA1 50./56./63., 2-pole and 4-pole
	Special coating	
E83	Outdoor use with low salinity (corrosivity grade C3)	For safe area motors only
E84	Outdoor use for aggressive atmosphere (corrosivity grade C5-I)	For safe area motors only
K26	Special paint finish in RAL 7030	For safe area motors only
K76	Special paint finish according to corrosivity C5-M (320 µm)	For safe area motors only
Y53	Standard paint finish in a color different from RAL 7030	Plain text required
Y54	Special paint finish in a color different from RAL 7030	Plain text required; for safe area motors only
Y82	Additional rating plate with order data	
	Ambient temperature	
D04	Operation at ambient temperatures down to -30 °C and transport down to -40 °C	For safe area motors only
	Installation altitude and coolant temperature ¹⁾	
D06	Installation altitude 1500 m	
D07	Installation altitude 2000 m	
D08	Installation altitude 2500 m	On request
D09	Installation altitude 3000 m	On request; for safe area motors only
D11	Cooling medium temperature 45 °C for air-cooled motors	
D12	Cooling medium temperature 50 °C for air-cooled motors	
D13	Cooling medium temperature 55 °C for air-cooled motors	
D15	Cooling water temperature 30 °C for water-cooled motors	
D16	Cooling water temperature 35 °C for water-cooled motors	
D17	Cooling water temperature 40 °C for water-cooled motors	
	Documentation	
B21	Documentation on CD-ROM	
B22	Documentation by e-mail	
B23	Documentation printed on paper	
B34	Document "Standard test procedure"	For safe area motors only
B35	Document "Balancing report"	
B36	Document "Test description"	
B37	Document "Load characteristics"	
B38	Document "Recommended spare parts"	For safe area motors only
B41	Document "Instrumentation data sheets"	For safe area motors only
B45	Document "Manufacturing work schedule", update monthly	
D00	Documentation in German	
D56	Documentation in Russian	For safe area motors only
D72	Documentation in Italian	For safe area motors only
D76	Documentation in English	
D77	Documentation in French	For safe area motors only
D78	Documentation in Spanish	For safe area motors only
D79	Documentation in Portuguese	For safe area motors only
D84	Documentation in Chinese (simplified)	
	Certificates	
D47	Certificate for import into Eurasian Customs Union (EAC)	For safe area motors only

¹⁾ Please see the derating rate on page 1/11

Introduction

Options

Description of options

1

Overview (continued)

Order Code	Description	Remark
	Testing	
F01	Factory routine test, witnessed	
F14	Plot of the no-load characteristic and determining the iron and friction losses, unwitnessed	
F15	Plot of the no-load characteristic and determining the iron and friction losses, witnessed	
F16	Measurement of locked rotor characteristic and determining of locked rotor losses, unwitnessed ¹⁾	
F17	Measurement of locked rotor characteristic and determining of locked rotor losses, witnessed ¹⁾	
F26	Measurement of dielectric loss factor (tan delta) on built-in stator winding, unwitnessed	For safe area motors only
F27	Measurement of dielectric loss factor (tan delta) on built-in stator winding, witnessed	For safe area motors only
F28	Noise measurement under no-load conditions, without noise analysis, unwitnessed	
F29	Noise measurement under no-load conditions, without noise analysis, witnessed	
F34	Plot of the current and torque characteristic when accelerating, unwitnessed ¹⁾	
F35	Plot of the current and torque characteristic when accelerating, witnessed ¹⁾	
F38	Overspeed test, unwitnessed ¹⁾	
F39	Overspeed test, witnessed ¹⁾	
F52	Measurement of the starting torque and starting (inrush) current, unwitnessed ¹⁾	
F53	Measurement of the starting torque and starting (inrush) current, witnessed ¹⁾	
F82	Type test with heat run for horizontal motors, unwitnessed ³⁾	
F83	Type test with heat run for horizontal motors, witnessed ³⁾	
F92	Type test with heat run for vertical motors, unwitnessed ^{2) 3)}	
F93	Type test with heat run for vertical motors, witnessed ^{2) 3)}	
	Extension of liability for defects	
Q80	Extension of liability for defects, by 12 months to a total of 24 months (2 years) from delivery	
Q81	Extension of liability for defects, by 18 months to a total of 30 months (2.5 years) from delivery	
Q82	Extension of liability for defects, by 24 months to a total of 36 months (3 years) from delivery	
Q83	Extension of liability for defects, by 30 months to a total of 42 months (3.5 years) from delivery	
Q84	Extension of liability for defects, by 36 months to a total of 48 months (4 years) from delivery	
Q85	Extension of liability for defects, by 48 months to a total of 60 months (5 years) from delivery	
	Spare parts	
S60	Spare parts with motor: anti-friction bearing set, 2 set (DE+NDE)	
S61	Spare parts with motor: sleeve bearing and machine sealing, 2 set (DE+NDE)	
S62	Spare parts with motor: resistance thermometer for anti-friction bearing (single, A40), 2 pc (DE+NDE)	
S63	Spare parts with motor: resistance thermometer for anti-friction bearing (duplex, A42), 2 pc (DE+NDE)	
S64	Spare parts with motor: resistance thermometer for sleeve bearing (single, A41), 2 pc (DE+NDE)	
S65	Spare parts with motor: resistance thermometer for sleeve bearing (duplex, A43), 2 pc (DE+NDE)	
S66	Spare parts with motor: resistance thermometer for cold and warm air (single, A44+A45), 2 pc (inlet and outlet)	
S67	Spare parts with motor: resistance thermometer for cold and warm air (duplex, A46+A47), 2 pc (inlet and outlet)	For safe area motors only
S68	Spare parts with motor: water leakage sensor for water cooler (H08), 1 pc	For safe area motors only

¹⁾ Not available for SH630

³⁾ Does not contain measurement of short circuit characteristic for SH630

²⁾ Possible only in horizontal position with special bearings for testing



2/2	Open-circuit cooled motors
2/2	<u>SIMOTICS HV Series A-compact PLUS</u> <u>1RA1, 1RP1</u>
	Selection and ordering data
2/3	6 kV, 50 Hz
2/11	6.6 kV, 60 Hz
2/14	10 kV, 50 Hz
	Dimensional drawings (1RA1)
2/22	IM B3, anti-friction bearings
2/31	IM B3, sleeve bearings
2/32	IM B35, anti-friction bearings
2/36	IM V1, anti-friction bearings
2/43	IM B3, anti-friction bearings (10 kV)
2/51	IM B3, sleeve bearings (10 kV)
2/52	IM B35, anti-friction bearings (10 kV)
2/56	IM V1, anti-friction bearings (10 kV)
	Dimensional drawings (1RP1)
2/63	IM B3, anti-friction bearings
2/65	IM B3, sleeve bearings
2/66	IM B35, anti-friction bearings
2/68	IM B3, anti-friction bearings (10 kV)
2/70	IM B3, sleeve bearings (10 kV)
2/71	IM B35, anti-friction bearings (10 kV)
2/73	Air/air-cooled motors
2/73	<u>SIMOTICS HV Series A-compact PLUS</u> <u>1RQ1, 1SG1</u>
	Selection and ordering data
2/74	6 kV, 50 Hz
2/82	6.6 kV, 60 Hz
2/85	10 kV, 50 Hz
	Dimensional drawings
2/93	IM B3, anti-friction bearings
2/101	IM B3, sleeve bearings
2/102	IM B35, anti-friction bearings
2/106	IM V1, anti-friction bearings
2/113	IM B3, anti-friction bearings (10 kV)
2/121	IM B3, sleeve bearings (10 kV)
2/122	IM B35, anti-friction bearings (10 kV)
2/126	IM V1, anti-friction bearings (10 kV)
2/133	Air/water-cooled motors
2/133	<u>SIMOTICS HV Series A-compact PLUS</u> <u>1RN1, 1SL1</u>
	Selection and ordering data
2/134	6 kV, 50 Hz
2/142	6.6 kV, 60 Hz
2/145	10 kV, 50 Hz
	Dimensional drawings
2/153	IM B3, anti-friction bearings
2/161	IM B3, sleeve bearings
2/162	IM B35, anti-friction bearings
2/166	IM V1, anti-friction bearings
2/173	IM B3, anti-friction bearings (10 kV)
2/181	IM B3, sleeve bearings (10 kV)
2/182	IM B35, anti-friction bearings (10 kV)
2/186	IM V1, anti-friction bearings (10 kV)

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Overview



Technical Data

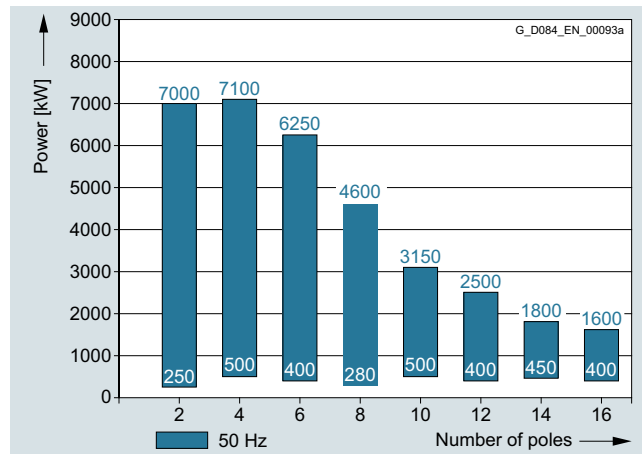
Overview of technical data

A-compact PLUS 1RA1, 1RP1 ¹⁾	
Rated voltage	6 kV, 6.6 kV, 10 kV
Rated frequency	50 Hz, 60 Hz
Motor type	Induction motor with squirrel-cage rotor
Type of construction	IM B3, IM B35, IM V1
Degree of protection	IP23, IP24W
Cooling method	IC01
Stator winding insulation	Thermal class 155 (F), utilized to 130 (B)
Shaft height	315 ... 630 mm
Bearings	Anti-friction bearings, sleeve bearings
Cage material	Aluminum, copper
Standards	IEC, GB, JB
Frame design	Frame: Cast iron Top cover: Steel

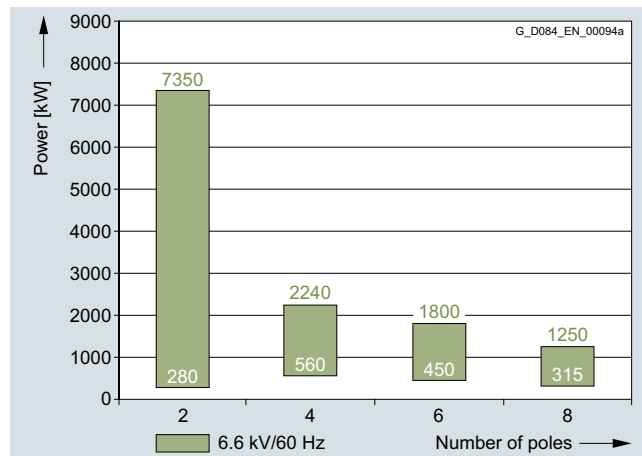
Technical Data (continued)

Power range

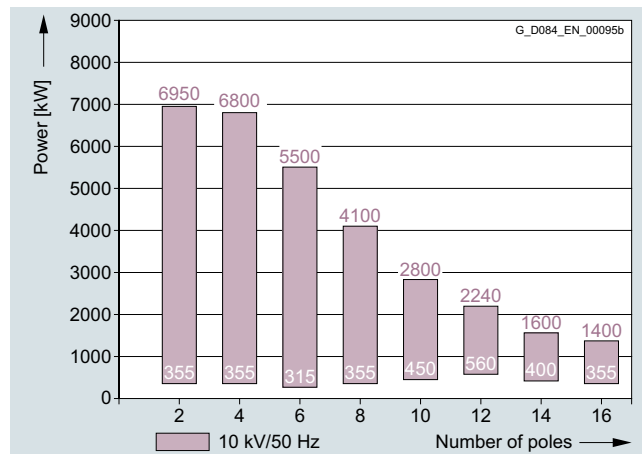
6 kV; 50 Hz



6.6 kV; 60 Hz



10 kV; 50 Hz



¹⁾ 1RP1 available from shaft height 355 to 450 mm.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data

For shaft heights 355 to 450 mm and pole numbers 2 to 8, the following data also apply to 1RP1 motors.

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
2-pole															
250	1RA1312-2HA6	2968	28.5	94.0	94.2	0.90	0.89	804	2.5	0.75	5.7	0.8	2.9	25	
280	1RA1312-2HB6	2967	32.0	94.0	94.1	0.90	0.89	901	2.5	0.80	5.7	0.8	2.9	20	
315	1RA1312-2HC6	2969	36.0	94.1	94.2	0.90	0.88	1013	2.7	0.80	5.9	0.8	2.9	21	
355	1RA1312-2HP6	2962	40.5	93.9	94.3	0.90	0.89	1145	2.4	0.70	5.3	0.8	2.9	17	
400	1RA1314-2HA6	2961	45.5	94.1	94.4	0.90	0.89	1290	2.5	0.85	5.8	0.8	3.3	20	
450	1RA1314-2HB6	2960	51.5	93.8	94.2	0.90	0.88	1452	2.2	0.75	5.2	0.8	3.3	15	
500	1RA1350-2HD6	2957	58	94.0	94.0	0.89	0.89	1615	2.5	0.65	5.3	0.8	3.8	31	
560	1RA1352-2HD6	2958	64	94.3	94.3	0.89	0.89	1808	2.5	0.65	5.4	0.8	4.3	31	
630	1RA1354-2HD6	2957	70	94.4	94.5	0.91	0.91	2035	2.7	0.70	5.8	0.8	4.6	31	
710	1RA1356-2HD6	2958	80	94.6	94.7	0.91	0.91	2292	2.8	0.80	6.0	0.8	4.9	31	
800	1RA1400-2HD6	2965	92	94.7	94.7	0.89	0.90	2577	2.1	0.55	4.8	1.2	7.2	52	
900	1RA1402-2HD6	2901	102	94.8	95.0	0.90	0.91	2963	2.2	0.55	4.9	1.2	7.6	54	
1000	1RA1404-2HD6	2968	112	95.1	95.2	0.91	0.92	3218	2.5	0.60	5.7	1.2	8.4	56	
1120	1RA1406-2HD6	2970	124	95.4	95.6	0.91	0.92	3601	2.6	0.70	5.9	1.2	9.1	60	
1170	1RA1406-2HE6	2968	130	95.4	95.6	0.91	0.92	3764	2.5	0.65	5.7	1.2	9.1	54	
1250	1RA1450-2HA6	2975	142	95.4	95.4	0.89	0.89	4012	2.9	0.65	6.4	2.1	12.6	77	
1400	1RA1450-2HB6	2971	156	95.4	95.5	0.90	0.90	4501	2.5	0.60	5.4	2.1	12.6	62	
1600	1RA1452-2HA6	2972	178	95.6	95.7	0.90	0.89	5141	2.7	0.70	5.8	2.1	13.4	62	
1800	1RA1454-2HA6	2972	200	95.9	96.0	0.90	0.90	5785	2.7	0.80	5.8	2.1	14.7	65	
2000	1RA1456-2HA6	2974	225	96.1	96.2	0.90	0.90	6423	2.8	0.80	6.0	2.1	16.1	68	
2240	1RA1500-2HJ6	2976	245	95.8	95.6	0.91	0.90	7189	2.5	0.65	5.0	2.8	30.7	100	
2500	1RA1502-2HJ6	2974	275	95.9	95.7	0.91	0.91	8029	2.5	0.65	5.0	2.8	32.8	100	
2800	1RA1504-2HJ6	2977	305	96.1	96.0	0.92	0.91	8982	2.7	0.70	5.5	2.8	36.0	125	
3150	1RA1506-2HJ6	2978	340	96.3	96.2	0.92	0.91	10102	2.8	0.70	5.7	2.8	39.3	150	
3550	1RA1560-2HJ6	2972	395	96.3	96.4	0.90	0.89	11407	2.4	0.50	5.2	2.8	41.1	125	
4000	1RA1562-2HJ6	2974	440	96.5	96.7	0.90	0.89	12844	2.5	0.50	5.4	2.8	43.3	125	
4500	1RA1564-2HJ6	2977	495	96.8	96.9	0.90	0.89	14434	2.8	0.55	6.0	2.8	48.0	145	
4950	1RA1566-2HJ6	2978	550	96.9	97.1	0.90	0.89	15874	2.9	0.60	6.0	2.8	50.9	145	
5150	1RA1630-2HJ6	2979	570	96.9	97.0	0.89	0.90	16513	2.1	0.35	4.8	3.0	63.8	150	
5750	1RA1632-2HJ6	2980	640	97.1	97.2	0.89	0.90	18430	2.2	0.35	5.0	3.0	69.2	160	
6300	1RA1634-2HJ6	2981	690	97.2	97.3	0.90	0.91	20181	2.4	0.40	5.4	3.0	74.8	175	
7000	1RA1636-2HJ6	2983	770	97.4	97.5	0.90	0.90	22411	2.6	0.45	5.9	3.0	81.6	200	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
4-pole															
500	1RA1350-4HA6	1479	59	94.5	94.6	0.87	0.83	3229	2.4	0.90	5.2	1.0	6.8	220	
560	1RA1352-4HA6	1477	65	94.6	94.9	0.87	0.86	3620	2.4	0.90	5.2	1.0	7.5	265	
630	1RA1354-4HA6	1479	73	94.9	95.1	0.87	0.86	4069	2.4	0.90	5.3	1.0	8.2	290	
710	1RA1356-4HA6	1479	82	95.1	95.3	0.88	0.86	4584	2.5	1.10	5.6	1.0	9.1	305	
800	1RA1400-4HA6	1482	93	95.1	95.2	0.87	0.85	5155	2.4	0.90	5.5	1.5	12.9	265	
900	1RA1402-4HA6	1482	104	95.2	95.4	0.88	0.86	5799	2.4	0.90	5.5	1.5	13.9	285	
1000	1RA1404-4HA6	1482	114	95.4	95.6	0.89	0.88	6444	2.4	0.90	5.5	1.5	15.6	320	
1120	1RA1406-4HA6	1484	126	95.5	95.7	0.89	0.87	7209	2.6	1.10	6.2	1.5	17.4	335	
1250	1RA1450-4HA6	1484	142	95.5	95.7	0.88	0.86	8044	2.9	0.90	6.2	2.0	19.0	330	
1400	1RA1450-4HB6	1480	160	95.4	95.7	0.88	0.87	9034	2.4	0.90	5.5	2.0	19.0	240	
1600	1RA1452-4HA6	1479	182	95.5	95.9	0.88	0.88	10331	2.4	0.80	5.5	2.0	21.0	265	
1800	1RA1454-4HA6	1481	205	95.8	96.0	0.88	0.87	11607	2.7	0.90	5.8	2.0	23.0	265	
2000	1RA1456-4HA6	1481	225	95.9	96.2	0.89	0.88	12897	2.7	0.90	5.8	2.0	25.0	290	
2240	1RA1500-4HA6	1483	250	95.7	96.0	0.89	0.87	14422	2.5	0.85	5.1	2.8	38.8	180	
2500	1RA1502-4HA6	1485	280	95.8	96.1	0.89	0.87	16082	2.6	0.90	5.5	2.8	42.9	200	
2800	1RA1504-4HA6	1485	315	95.9	96.3	0.89	0.87	18008	2.6	0.90	5.5	2.8	47.2	220	
3150	1RA1506-4HA6	1486	355	96.2	96.5	0.89	0.87	20240	2.8	1.00	5.7	2.8	52.4	250	
3550	1RA1560-4HJ6	1489	400	96.7	96.8	0.88	0.85	22764	2.5	0.60	5.8	3.1	84.3	1400	
4000	1RA1562-4HJ6	1489	450	96.8	97.0	0.88	0.85	25653	2.5	0.60	5.8	3.1	89.8	1400	
4700	1RA1564-4HJ6	1488	530	96.9	97.1	0.88	0.85	30163	2.5	0.60	5.8	3.1	94.6	1400	
4950	1RA1566-4HJ6	1487	560	96.9	97.1	0.88	0.86	31782	2.5	0.60	5.8	3.1	96.7	1400	
5000	1RA1630-4HJ6	1490	560	97.1	97.0	0.88	0.87	32056	3.0	0.60	6.0	3.7	131.3	1450	
5500	1RA1630-4HK6	1489	620	97.1	97.0	0.88	0.85	35266	2.9	0.60	6.0	3.7	131.3	1300	
5600	1RA1632-4HJ6	1490	630	97.1	97.1	0.88	0.86	35902	2.9	0.60	6.0	3.7	142.9	1350	
6600	1RA1634-4HJ6	1489	740	97.2	97.2	0.88	0.86	42333	2.9	0.60	6.0	3.7	154.2	1350	
7100	1RA1636-4HJ6	1489	800	97.2	97.2	0.88	0.86	45537	2.9	0.60	6.0	3.7	168.3	1400	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
6-pole															
400	1RA1350-6HA6	984	48.5	94.0	94.4	0.84	0.81	3881	2.8	1.00	5.6	0.7	9.7	210	
450	1RA1352-6HA6	985	54	94.3	94.6	0.85	0.82	4365	2.8	1.00	5.6	0.7	11.2	250	
500	1RA1354-6HA6	985	60	94.5	94.9	0.85	0.82	4848	2.9	1.00	5.8	0.7	12.1	320	
560	1RA1356-6HA6	984	67	94.6	94.9	0.85	0.84	5435	2.9	1.00	5.8	0.7	13.6	360	
630	1RA1400-6HA6	987	75	94.9	95.1	0.85	0.81	6098	2.8	1.00	5.5	1.0	18.0	355	
710	1RA1402-6HA6	988	84	95.2	95.3	0.85	0.80	6866	3.0	1.10	5.8	1.0	19.8	475	
800	1RA1404-6HA6	987	95	95.3	95.4	0.85	0.81	7739	3.0	1.10	5.8	1.0	22.0	540	
900	1RA1406-6HA6	988	106	95.4	95.6	0.85	0.81	8704	3.1	1.20	6.0	1.0	24.4	655	
1000	1RA1450-6HA6	990	118	95.6	95.9	0.85	0.81	9643	2.4	1.00	5.5	1.4	30.0	1335	
1120	1RA1450-6HB6	988	132	95.5	95.9	0.86	0.83	10824	2.2	1.00	5.0	1.4	30.0	990	
1250	1RA1452-6HA6	988	146	95.5	96.0	0.86	0.84	12086	2.2	0.90	5.0	1.4	32.0	1100	
1400	1RA1454-6HA6	989	164	95.7	96.1	0.86	0.83	13524	2.3	1.00	5.3	1.4	35.0	1100	
1600	1RA1456-6HA6	989	188	95.9	96.3	0.85	0.81	15444	2.5	1.00	5.6	1.4	38.0	1100	
1800	1RA1500-6HA6	991	210	96.1	96.3	0.85	0.82	17351	2.3	1.00	5.2	1.6	55.2	920	
2000	1RA1502-6HA6	991	230	96.2	96.4	0.86	0.83	19281	2.3	1.00	5.2	1.6	61.5	1025	
2240	1RA1504-6HA6	991	260	96.3	96.6	0.86	0.82	21578	2.4	1.00	5.5	1.6	68.2	1170	
2500	1RA1506-6HA6	991	290	96.4	96.7	0.86	0.84	24092	2.4	1.00	5.5	1.6	75.8	1310	
2800	1RA1560-6HJ6	992	325	96.5	96.7	0.85	0.80	26950	2.4	0.65	5.4	2.4	124.6	3400	
3150	1RA1562-6HJ6	992	370	96.5	96.7	0.85	0.81	30340	2.4	0.65	5.4	2.4	129.0	3400	
3550	1RA1564-6HJ6	991	410	96.6	96.8	0.86	0.83	34207	2.4	0.65	5.4	2.4	140.2	3400	
4000	1RA1566-6HJ6	992	460	96.7	96.9	0.86	0.82	38520	2.4	0.65	5.4	2.4	152.6	3800	
4500	1RA1630-6HJ6	993	530	96.9	96.9	0.85	0.82	43287	2.4	0.70	5.8	3.6	205.7	4200	
5000	1RA1632-6HJ6	993	580	97.0	97.0	0.86	0.83	48106	2.4	0.70	5.8	3.6	220.6	4200	
5600	1RA1634-6HJ6	992	650	97.0	97.1	0.86	0.83	53917	2.4	0.70	5.8	3.6	229.3	4200	
6250	1RA1636-6HJ6	992	720	97.1	97.2	0.86	0.84	60181	2.4	0.70	5.8	3.6	245.9	4300	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
8-pole															
280	1RA1350-8HA6	737	36.5	93.2	93.2	0.79	0.72	3626	2.5	1.00	5.0	0.5	9.7	350	
315	1RA1352-8HA6	737	40.5	93.3	93.5	0.80	0.75	4083	2.5	1.00	5.0	0.5	11.2	395	
355	1RA1354-8HA6	737	45.5	93.7	93.8	0.80	0.74	4599	2.6	1.00	5.0	0.5	12.1	490	
400	1RA1356-8HA6	738	51	93.9	94.0	0.80	0.73	5178	2.7	1.10	5.3	0.5	13.6	580	
450	1RA1400-8HA6	737	57	94.1	94.5	0.81	0.77	5830	2.2	0.90	4.3	0.7	18.0	760	
500	1RA1402-8HA6	738	63	94.4	94.7	0.81	0.76	6470	2.2	0.95	4.4	0.7	19.8	930	
560	1RA1404-8HA6	737	70	94.4	94.8	0.82	0.79	7257	2.2	0.95	4.4	0.7	22.0	1010	
630	1RA1406-8HA6	739	78	94.6	95.0	0.82	0.76	8147	2.4	1.00	4.8	0.7	24.4	1250	
710	1RA1450-8HA6	742	89	94.9	95.3	0.81	0.75	9144	2.1	0.80	5.0	1.0	30.0	1790	
800	1RA1450-8HB6	740	99	95.0	95.3	0.82	0.78	10331	2.1	0.80	4.5	1.0	30.0	1405	
900	1RA1452-8HA6	740	110	95.1	95.4	0.82	0.77	11618	2.1	0.80	4.5	1.0	32.0	1455	
1000	1RA1454-8HA6	740	122	95.3	95.7	0.82	0.76	12902	2.2	0.80	4.5	1.0	35.0	1530	
1120	1RA1456-8HA6	740	138	95.4	95.7	0.82	0.77	14454	2.2	0.80	4.5	1.0	38.0	1630	
1250	1RA1500-8HA6	742	150	95.8	96.0	0.84	0.79	16090	2.3	0.80	4.5	1.3	55.2	2045	
1400	1RA1502-8HA6	742	168	95.9	96.1	0.84	0.79	18014	2.3	0.90	4.6	1.3	61.5	2275	
1600	1RA1504-8HA6	742	190	96.0	96.2	0.84	0.81	20601	2.3	0.90	4.6	1.3	68.2	2520	
1800	1RA1506-8HA6	743	215	96.2	96.4	0.84	0.79	23152	2.3	0.90	5.0	1.3	75.8	2945	
2100	1RA1560-8HJ6	742	255	96.0	96.3	0.83	0.79	27028	2.0	0.60	4.0	1.9	124.6	3600	
2350	1RA1562-8HJ6	742	285	96.2	96.5	0.83	0.79	30234	2.0	0.60	4.1	1.9	129.0	4400	
2600	1RA1564-8HJ6	743	310	96.3	96.6	0.83	0.79	33437	2.0	0.60	4.2	1.9	140.2	5600	
2900	1RA1566-8HJ6	742	345	96.4	96.7	0.84	0.80	37310	2.0	0.60	4.2	1.9	152.6	7000	
3300	1RA1630-8HJ6	744	400	96.6	96.8	0.82	0.79	42382	2.0	0.60	4.3	2.9	205.7	5900	
3800	1RA1632-8HJ6	744	460	96.6	96.8	0.82	0.78	48783	2.0	0.60	4.4	2.9	220.6	5900	
4200	1RA1634-8HJ6	744	510	96.7	96.9	0.82	0.78	53919	2.1	0.65	4.5	2.9	229.3	6700	
4600	1RA1636-8HJ6	744	560	96.8	97.0	0.82	0.78	59030	2.1	0.65	4.6	2.9	245.9	8600	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
6 kV, 50 Hz															
10-pole															
500	1RA1450-3HA6	592	64	94.7	94.8	0.80	0.76	8067	2.0	0.85	4.3	0.8	29.5	6700	
560	1RA1452-3HA6	592	72	94.7	94.8	0.80	0.75	9032	2.0	0.85	4.3	0.8	32.8	6700	
630	1RA1454-3HA6	592	80	94.7	94.8	0.80	0.74	10160	2.0	0.90	4.4	0.8	35.1	6700	
710	1RA1456-3HA6	592	88	94.8	94.9	0.81	0.76	11463	2.0	0.90	4.4	0.8	37.5	6900	
800	1RA1500-3HA6	593	98	94.8	95.0	0.83	0.81	12890	1.7	0.65	4.0	1.0	53.2	4000	
900	1RA1502-3HA6	593	110	95.1	95.3	0.83	0.81	14494	1.7	0.70	4.2	1.0	59.2	5500	
1000	1RA1504-3HA6	594	122	95.3	95.4	0.83	0.79	16083	1.9	0.80	4.6	1.0	64.2	6500	
1120	1RA1506-3HA6	593	136	95.3	95.5	0.83	0.81	18025	1.9	0.80	4.6	1.0	72.2	6800	
1250	1RA1560-3HJ6	594	154	95.9	96.0	0.81	0.76	20097	2.1	0.55	4.2	1.6	116.2	12100	
1400	1RA1560-3HK6	594	174	95.8	96.0	0.81	0.75	22520	1.9	0.55	4.1	1.6	116.2	8500	
1600	1RA1562-3HJ6	593	196	95.9	96.1	0.82	0.78	25759	1.9	0.55	4.1	1.6	130.2	8500	
1800	1RA1564-3HJ6	593	220	95.9	96.2	0.82	0.78	28983	1.9	0.55	4.1	1.6	143.2	8500	
2000	1RA1566-3HJ6	593	245	96.0	96.2	0.82	0.77	32187	2.0	0.60	4.1	1.6	156.2	8500	
2240	1RA1630-3HJ6	594	270	96.1	96.3	0.83	0.79	35995	2.0	0.50	4.1	2.3	222.3	8900	
2500	1RA1632-3HJ6	594	300	96.3	96.5	0.83	0.79	40167	2.0	0.50	4.2	2.3	243.3	10900	
2800	1RA1634-3HJ6	595	335	96.4	96.6	0.83	0.79	44979	2.1	0.55	4.3	2.3	267.2	11200	
3150	1RA1636-3HJ6	595	380	96.4	96.6	0.83	0.79	50601	2.1	0.55	4.3	2.3	296.9	11200	
		Type of construction													
		See page 1/10													

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
12-pole															
400	1RA1450-5HA6	492	54	93.9	93.9	0.77	0.71	7761	2.0	0.65	4.0	0.7	32.2	4500	
450	1RA1452-5HA6	492	60	93.9	94.0	0.77	0.70	8728	2.1	0.70	4.1	0.7	35.2	4500	
500	1RA1454-5HA6	492	66	94.0	94.1	0.77	0.70	9697	2.1	0.70	4.1	0.7	37.7	4500	
560	1RA1456-5HA6	492	74	94.1	94.1	0.77	0.69	10863	2.1	0.75	4.2	0.7	40.7	4500	
630	1RA1500-5HA6	493	82	94.7	94.8	0.78	0.73	12194	1.7	0.60	3.7	0.9	53.2	9400	
710	1RA1502-5HA6	493	92	94.8	94.9	0.78	0.75	13756	1.7	0.60	3.7	0.9	59.2	9400	
800	1RA1504-5HA6	494	104	94.8	94.8	0.78	0.72	15478	1.8	0.65	3.9	0.9	66.2	9400	
900	1RA1506-5HA6	494	116	94.9	94.9	0.78	0.71	17409	1.9	0.70	4.0	0.9	73.2	11000	
1000	1RA1560-5HJ6	494	132	95.2	95.2	0.77	0.70	19336	1.9	0.60	3.7	1.3	135.2	21700	
1120	1RA1560-5HK6	493	148	95.2	95.3	0.77	0.70	21678	1.8	0.55	3.5	1.3	135.2	20900	
1250	1RA1562-5HJ6	494	164	95.3	95.4	0.77	0.70	24180	1.8	0.55	3.7	1.3	152.2	23800	
1400	1RA1564-5HJ6	493	182	95.4	95.5	0.78	0.72	27109	1.8	0.55	3.7	1.3	167.2	24600	
1600	1RA1566-5HJ6	493	205	95.4	95.5	0.78	0.71	30981	1.8	0.60	3.7	1.3	183.2	24600	
1800	1RA1630-5HJ6	495	220	95.6	95.9	0.82	0.77	34741	1.8	0.60	3.9	2.0	248.8	10100	
2000	1RA1632-5HJ6	495	245	95.8	96.0	0.82	0.76	38570	1.9	0.65	4.2	2.0	272.5	12400	
2240	1RA1634-5HJ6	495	275	95.9	96.1	0.82	0.78	43242	1.9	0.65	4.2	2.0	299.2	14200	
2500	1RA1636-5HJ6	495	305	96.0	96.2	0.82	0.76	48213	2.0	0.70	4.3	2.0	333.7	15200	
		Type of construction													
		See page 1/10													

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
6 kV, 50 Hz															
14-pole															
450	1RA1500-7HA6	423	64	94.2	94.0	0.72	0.62	10157	1.8	0.65	3.5	0.8	54.2	15200	
500	1RA1502-7HA6	423	70	94.2	94.2	0.72	0.64	11294	1.8	0.65	3.5	0.8	60.2	15200	
560	1RA1504-7HA6	423	80	94.2	94.0	0.72	0.63	12643	1.9	0.70	3.7	0.8	66.2	15200	
630	1RA1506-7HA6	423	90	94.3	94.1	0.72	0.62	14223	1.9	0.75	3.7	0.8	74.2	19200	
710	1RA1560-7HJ6	423	94	94.7	94.8	0.77	0.71	16041	2.0	0.50	3.7	1.2	145.2	13100	
800	1RA1560-7HK6	423	106	94.7	94.8	0.77	0.69	18079	1.9	0.50	3.7	1.2	145.2	10500	
900	1RA1562-7HJ6	423	118	94.8	94.9	0.77	0.69	20329	1.9	0.55	3.9	1.2	164.2	10500	
1000	1RA1564-7HJ6	422	130	94.9	95.1	0.78	0.71	22609	1.9	0.55	3.9	1.2	180.2	12600	
1120	1RA1566-7HJ6	422	144	94.9	95.2	0.79	0.73	25346	1.9	0.55	3.9	1.2	197.2	13300	
1250	1RA1630-7HJ6	425	162	95.5	95.6	0.78	0.71	28108	1.9	0.50	3.8	1.7	281.1	13900	
1400	1RA1632-7HJ6	425	180	95.6	95.7	0.78	0.69	31466	1.9	0.55	4.0	1.7	308.8	13900	
1600	1RA1634-7HJ6	424	205	95.6	95.7	0.79	0.74	36021	1.9	0.55	4.0	1.7	339.3	13900	
1800	1RA1636-7HJ6	425	230	95.8	95.9	0.79	0.72	40485	2.0	0.60	4.1	1.7	377.8	16700	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
16-pole															
400	1RA1500-9HA6	370	60	94.0	93.9	0.68	0.57	10313	1.9	0.55	3.3	0.6	53.2	11000	
450	1RA1502-9HA6	370	66	94.2	94.1	0.69	0.59	11605	1.9	0.55	3.3	0.6	60.2	11000	
500	1RA1504-9HA6	370	74	94.2	94.1	0.69	0.59	12891	1.9	0.55	3.4	0.6	66.2	11000	
560	1RA1506-9HA6	370	82	94.2	94.1	0.70	0.61	14446	1.9	0.55	3.4	0.6	74.2	11000	
630	1RA1560-9HJ6	370	90	94.3	94.2	0.71	0.62	16265	2.0	0.50	3.4	1.0	146.2	19800	
710	1RA1560-9HK6	370	102	94.5	94.4	0.71	0.60	18336	1.9	0.50	3.4	1.0	146.2	21100	
800	1RA1562-9HJ6	370	114	94.6	94.6	0.72	0.62	20665	1.9	0.50	3.4	1.0	164.2	21100	
900	1RA1564-9HJ6	369	126	94.6	94.7	0.73	0.65	23274	1.9	0.50	3.4	1.0	181.2	21100	
1000	1RA1566-9HJ6	370	140	94.8	94.8	0.73	0.63	25839	2.0	0.55	3.5	1.0	198.2	28600	
1120	1RA1630-9HJ6	371	156	94.8	94.8	0.73	0.65	28838	1.8	0.55	3.4	1.5	282.2	18500	
1250	1RA1632-9HJ6	371	174	95.0	95.1	0.73	0.64	32168	1.9	0.55	3.5	1.5	308.8	22200	
1400	1RA1634-9HJ6	371	194	95.0	95.0	0.73	0.63	36018	2.0	0.65	3.7	1.5	339.2	22200	
1600	1RA1636-9HJ6	371	220	95.3	95.3	0.73	0.64	41164	2.0	0.65	3.7	1.5	378.8	30100	

Type of construction

See page 1/10

Pole number

9 16-pole: additional order code **H1A** required

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

For shaft heights 355 to 450 mm and pole numbers 2 to 8, the following data also apply to 1RP1 motors.

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
6.6 kV, 60 Hz															
2-pole															
280	1RA1312-2HA1	3568	29.0	94.0	94.2	0.90	0.90	750	2.5	0.70	5.8	1.0	2.9	17	
315	1RA1312-2HB1	3562	32.5	94.1	94.3	0.90	0.90	845	2.3	0.65	5.3	1.0	2.9	14	
355	1RA1312-2HC1	3565	36.5	94.3	94.5	0.90	0.89	951	2.5	0.70	5.7	1.0	2.9	15	
400	1RA1312-2HP1	3564	41.0	94.3	94.7	0.90	0.88	1072	2.5	0.75	5.7	1.0	2.9	16	
450	1RA1314-2HA1	3557	46.5	94.4	94.6	0.90	0.90	1209	2.3	0.70	5.5	1.0	3.3	12	
500	1RA1314-2HB1	3556	51.5	94.4	94.6	0.90	0.89	1343	2.5	0.75	5.7	1.0	3.3	10	
560	1RA1350-2HD1	3563	58	94.4	94.1	0.88	0.88	1501	2.6	0.60	5.6	1.0	3.8	22	
630	1RA1352-2HD1	3562	64	94.5	94.3	0.90	0.90	1689	2.6	0.65	5.8	1.0	4.3	22	
710	1RA1354-2HD1	3560	72	94.8	94.7	0.90	0.90	1905	2.6	0.65	5.8	1.0	4.6	22	
800	1RA1356-2HD1	3559	82	94.9	94.8	0.91	0.91	2147	2.8	0.70	6.2	1.0	4.9	22	
840	1RA1356-2HE1	3556	86	94.9	94.8	0.92	0.92	2256	2.7	0.65	5.9	1.0	4.9	20	
900	1RA1400-2HD1	3571	92	94.7	94.4	0.90	0.90	2407	2.5	0.55	5.8	1.4	7.2	39	
1000	1RA1402-2HD1	3572	102	95.0	94.7	0.91	0.91	2674	2.6	0.60	6.0	1.4	7.6	40	
1120	1RA1404-2HD1	3572	112	95.2	95.0	0.92	0.92	2994	2.7	0.65	6.3	1.4	8.4	41	
1250	1RA1406-2HD1	3573	124	95.4	95.3	0.92	0.92	3341	2.9	0.70	6.7	1.4	9.1	41	
1320	1RA1406-2HE1	3571	132	95.4	95.3	0.92	0.92	3530	2.7	0.65	6.3	1.4	9.1	37	
1400	1RA1450-2HJ1	3577	146	95.4	95.0	0.88	0.87	3738	2.8	0.60	6.4	2.2	14.9	94	
1600	1RA1450-2HK1	3572	166	95.4	95.2	0.88	0.88	4277	2.3	0.60	5.2	2.2	14.9	81	
1800	1RA1452-2HJ1	3570	184	95.7	95.5	0.89	0.89	4815	2.3	0.60	5.2	2.2	16.0	82	
2000	1RA1454-2HJ1	3573	205	95.9	95.8	0.89	0.89	5346	2.5	0.60	5.4	2.2	17.5	88	
2240	1RA1456-2HJ1	3575	225	96.1	96.0	0.90	0.89	5985	2.7	0.60	6.0	2.2	18.8	90	
2500	1RA1500-2HJ1	3573	255	95.5	95.8	0.90	0.90	6681	2.3	0.55	5.5	2.8	30.7	95	
2800	1RA1502-2HJ1	3572	285	95.7	96.1	0.90	0.91	7486	2.3	0.55	5.5	2.8	32.8	95	
3150	1RA1504-2HJ1	3573	315	95.8	96.3	0.91	0.91	8420	2.4	0.60	5.5	2.8	36.0	95	
3550	1RA1506-2HJ1	3574	355	96.1	96.5	0.91	0.92	9486	2.5	0.60	5.6	2.8	39.3	105	
3900	1RA1560-2HJ1	3570	390	96.4	96.5	0.90	0.90	10433	2.2	0.45	4.9	2.8	41.1	75	
4300	1RA1562-2HJ1	3573	425	96.7	96.8	0.91	0.91	11493	2.4	0.50	5.4	2.8	43.3	85	
4750	1RA1564-2HJ1	3574	470	96.8	97.0	0.91	0.91	12691	2.5	0.50	5.5	2.8	48.0	90	
5000	1RA1566-2HJ1	3579	495	97.0	97.1	0.91	0.91	13343	2.8	0.55	6.0	2.8	50.9	100	
5000	1RA1630-2HJ1	3581	510	97.0	97.0	0.89	0.91	13335	2.1	0.35	5.0	3.0	63.8	110	
5800	1RA1632-2HJ1	3580	580	97.1	97.2	0.90	0.91	15470	2.2	0.35	5.0	3.0	69.2	110	
6500	1RA1634-2HJ1	3582	650	97.2	97.3	0.90	0.92	17332	2.3	0.35	5.4	3.0	74.8	115	
7350	1RA1636-2HJ1	3583	730	97.4	97.5	0.91	0.92	19593	2.4	0.40	5.7	3.0	81.6	125	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6.6 kV, 60 Hz															
4-pole															
560	1RA1350-4HA1	1780	60	94.9	94.8	0.86	0.83	3005	2.6	1.00	5.7	1.2	6.8	150	
630	1RA1352-4HA1	1777	66	94.9	95.0	0.88	0.87	3386	2.4	1.00	5.5	1.2	7.5	175	
710	1RA1354-4HA1	1778	74	95.0	95.1	0.88	0.88	3816	2.4	1.00	5.5	1.2	8.2	190	
800	1RA1356-4HA1	1779	83	95.2	95.3	0.88	0.88	4295	2.6	1.00	5.7	1.2	9.1	200	
900	1RA1400-4HA1	1782	94	95.0	95.0	0.88	0.86	4823	2.4	1.10	5.6	1.8	12.9	165	
1000	1RA1402-4HA1	1782	104	95.2	95.2	0.88	0.87	5359	2.4	1.10	5.7	1.8	13.9	175	
1120	1RA1404-4HA1	1784	116	95.5	95.4	0.88	0.86	5996	2.6	1.20	6.1	1.8	15.6	195	
1250	1RA1406-4HA1	1785	130	95.6	95.6	0.88	0.87	6691	2.7	1.20	6.4	1.8	17.4	210	
1400	1RA1450-4HA1	1782	144	95.5	95.7	0.89	0.89	7503	2.6	0.90	5.8	2.4	19.0	225	
1600	1RA1450-4HB1	1777	164	95.4	95.7	0.89	0.89	8599	2.3	0.80	5.2	2.4	19.0	155	
1800	1RA1452-4HA1	1778	184	95.6	95.9	0.89	0.89	9668	2.4	0.80	5.5	2.4	21.0	165	
2000	1RA1454-4HA1	1780	205	95.8	96.1	0.89	0.89	10730	2.4	0.80	5.5	2.4	23.0	170	
2240	1RA1456-4HA1	1779	225	95.9	96.2	0.90	0.90	12025	2.4	0.70	5.5	2.4	25.0	185	
6-pole															
450	1RA1350-6HA1	1185	49.5	94.3	94.3	0.84	0.80	3626	2.8	0.90	5.5	0.8	9.7	130	
500	1RA1352-6HA1	1186	54	94.6	94.6	0.85	0.81	4027	2.8	0.90	5.8	0.8	11.2	155	
560	1RA1354-6HA1	1185	61	94.8	94.8	0.85	0.83	4513	2.8	1.00	5.8	0.8	12.1	210	
630	1RA1356-6HA1	1186	68	95.1	95.1	0.85	0.82	5073	2.9	1.00	6.0	0.8	13.6	300	
710	1RA1400-6HA1	1186	77	95.3	95.3	0.85	0.83	5716	2.6	0.90	5.5	1.2	18.0	300	
800	1RA1402-6HA1	1187	86	95.4	95.6	0.85	0.81	6434	2.8	0.95	5.8	1.2	19.8	325	
900	1RA1404-6HA1	1187	97	95.5	95.6	0.85	0.83	7240	2.8	0.95	5.8	1.2	22.0	355	
1000	1RA1406-6HA1	1188	108	95.7	95.7	0.85	0.83	8041	2.9	1.00	6.0	1.2	24.4	435	
1120	1RA1450-6HA1	1189	118	95.7	96.1	0.86	0.84	8996	2.3	0.90	5.2	1.7	30.0	800	
1250	1RA1450-6HB1	1188	132	95.8	96.2	0.86	0.83	10047	2.3	0.90	5.2	1.7	30.0	625	
1400	1RA1452-6HA1	1189	148	96.0	96.3	0.86	0.84	11249	2.3	0.90	5.2	1.7	32.0	655	
1600	1RA1454-6HA1	1188	170	96.1	96.4	0.86	0.84	12860	2.3	0.90	5.2	1.7	35.0	675	
1800	1RA1456-6HA1	1188	190	96.1	96.5	0.86	0.84	14467	2.3	0.90	5.2	1.7	38.0	695	
		Type of construction													
		See page 1/10													

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6.6 kV, 60 Hz															
8-pole															
315	1RA1350-8HA1	886	36.5	93.6	93.8	0.81	0.77	3396	2.3	0.90	5.0	0.6	9.7	260	
355	1RA1352-8HA1	885	41.0	93.7	94.0	0.81	0.79	3830	2.3	0.90	5.0	0.6	11.2	285	
400	1RA1354-8HA1	886	45.5	94.0	94.2	0.82	0.78	4313	2.3	0.90	5.0	0.6	12.1	360	
450	1RA1356-8HA1	886	51	94.2	94.4	0.82	0.78	4849	2.4	1.00	5.0	0.6	13.6	430	
500	1RA1400-8HA1	888	57	94.5	94.7	0.81	0.77	5379	2.3	0.80	4.8	0.8	18.0	545	
560	1RA1402-8HA1	887	63	94.6	94.9	0.82	0.79	6032	2.2	0.80	4.8	0.8	19.8	670	
630	1RA1404-8HA1	888	71	94.8	95.0	0.82	0.78	6778	2.2	0.90	4.8	0.8	22.0	780	
710	1RA1406-8HA1	887	79	94.9	95.2	0.83	0.79	7644	2.3	0.90	4.8	0.8	24.4	900	
800	1RA1450-8HA1	891	89	95.4	95.6	0.82	0.77	8571	2.1	0.80	4.6	1.2	30.0	1115	
900	1RA1450-8HB1	889	100	95.3	95.6	0.82	0.79	9664	2.0	0.80	4.5	1.2	30.0	840	
1000	1RA1452-8HA1	891	112	95.6	95.8	0.82	0.76	10724	2.2	0.80	4.5	1.2	32.0	850	
1120	1RA1454-8HA1	890	124	95.8	95.9	0.83	0.77	12015	2.2	0.80	4.5	1.2	35.0	915	
1250	1RA1456-8HA1	890	138	95.8	96.0	0.83	0.78	13413	2.2	0.80	4.5	1.2	38.0	985	

Type of construction

■ See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

For shaft heights 355 to 450 mm and pole numbers 2 to 8, the following data also apply to 1RP1 motors.

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
2-pole															
355	1RA1352-2HD8	2974	24	93.8	93.5	0.88	0.86	1140	3.6	0.90	7.0	0.8	4.3	42	
400	1RA1352-2HE8	2970	28	93.8	93.7	0.88	0.87	1286	3.2	0.80	6.9	0.8	4.3	38	
450	1RA1352-2HF8	2964	32	93.8	93.8	0.88	0.88	1450	2.8	0.70	6.1	0.8	4.3	32	
500	1RA1352-2HG8	2958	34	93.8	93.9	0.89	0.89	1614	2.5	0.65	5.5	0.8	4.3	19	
560	1RA1354-2HD8	2962	38	94.0	94.1	0.89	0.89	1806	2.8	0.80	6.3	0.8	4.6	19	
630	1RA1356-2HD8	2962	42	94.3	94.4	0.90	0.90	2031	3.0	0.85	6.6	0.8	4.9	19	
710	1RA1400-2HD8	2973	48	94.3	94.1	0.89	0.89	2280	2.8	0.65	6.3	1.2	7.2	22	
800	1RA1402-2HD8	2973	54	94.4	94.3	0.90	0.90	2570	2.9	0.75	6.8	1.2	7.6	22	
900	1RA1404-2HD8	2973	60	94.8	94.7	0.91	0.91	2892	2.9	0.75	6.8	1.2	8.4	31	
1000	1RA1406-2HD8	2975	66	95.1	95.0	0.91	0.91	3210	3.4	0.85	7.0	1.2	9.1	36	
1120	1RA1450-2HA8	2977	76	95.2	95.1	0.89	0.89	3593	2.7	0.60	6.1	2.1	12.6	81	
1250	1RA1450-2HB8	2973	86	95.2	95.2	0.89	0.89	4015	2.4	0.60	5.3	2.1	12.6	70	
1400	1RA1452-2HA8	2976	96	95.4	95.4	0.89	0.89	4493	2.5	0.70	5.6	2.1	13.4	70	
1600	1RA1454-2HA8	2975	108	95.6	95.7	0.89	0.89	5137	2.5	0.70	5.6	2.1	14.7	75	
1800	1RA1456-2HA8	2974	120	95.8	95.9	0.90	0.90	5780	2.5	0.70	5.6	2.1	16.1	75	
2000	1RA1500-2HJ8	2978	132	95.6	95.3	0.91	0.90	6415	2.5	0.65	5.7	2.8	30.7	70	
2240	1RA1502-2HJ8	2975	148	95.7	95.5	0.91	0.90	7192	2.5	0.65	5.0	2.8	32.8	85	
2500	1RA1504-2HJ8	2976	164	95.9	95.7	0.92	0.91	8023	2.6	0.65	5.3	2.8	36.0	90	
2800	1RA1506-2HJ8	2978	182	96.1	96.0	0.92	0.91	8980	2.7	0.70	5.6	2.8	39.3	125	
3200	1RA1560-2HJ8	2971	215	96.1	96.3	0.90	0.90	10285	2.3	0.50	5.0	2.8	41.1	125	
3550	1RA1562-2HJ8	2975	235	96.4	96.5	0.90	0.90	11396	2.6	0.55	5.6	2.8	43.3	140	
4150	1RA1564-2HJ8	2976	270	96.6	96.8	0.91	0.91	13317	2.6	0.55	5.8	2.8	48.0	155	
4500	1RA1566-2HJ8	2978	295	96.8	96.9	0.91	0.91	14433	2.8	0.60	6.0	2.8	50.9	160	
5000	1RA1630-2HJ8	2978	335	96.8	96.9	0.89	0.90	16037	2.0	0.35	4.6	3.0	63.8	130	
5600	1RA1632-2HJ8	2979	370	96.9	97.0	0.90	0.91	17955	2.2	0.40	5.0	3.0	69.2	130	
6300	1RA1634-2HJ8	2979	415	97.1	97.2	0.90	0.91	20196	2.2	0.40	5.0	3.0	74.8	160	
6950	1RA1636-2HJ8	2981	460	97.3	97.4	0.90	0.91	22268	2.3	0.40	5.3	3.0	81.6	175	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
4-pole															
355	1RA1354-4HA8	1488	25.0	94.4	94.4	0.86	0.84	2279	3.2	1.20	7.0	1.0	8.2	135	
400	1RA1354-4HB8	1485	28.5	94.3	94.4	0.86	0.85	2572	3.0	1.20	6.5	1.0	8.2	120	
450	1RA1354-4HC8	1483	32.0	94.4	94.5	0.86	0.86	2897	3.0	1.20	6.5	1.0	8.2	95	
500	1RA1354-4HP8	1483	35.5	94.5	94.6	0.86	0.84	3219	3.0	1.20	6.5	1.0	8.2	105	
560	1RA1356-4HA8	1483	39.5	94.7	94.8	0.86	0.85	3605	3.0	1.20	6.5	1.0	9.1	105	
630	1RA1358-4HA8	1485	44.5	94.9	94.8	0.86	0.82	4053	3.2	1.30	6.8	1.0	9.5	105	
710	1RA1400-4HA8	1483	49.5	94.7	94.8	0.87	0.85	4572	2.6	1.00	6.0	1.5	12.9	225	
800	1RA1402-4HA8	1484	56	94.9	94.9	0.87	0.85	5148	2.7	1.10	6.2	1.5	13.9	230	
900	1RA1404-4HA8	1484	62	95.1	95.2	0.88	0.86	5793	2.8	1.20	6.4	1.5	15.6	280	
1000	1RA1406-4HA8	1485	69	95.4	95.3	0.88	0.85	6431	3.0	1.30	6.6	1.5	17.4	345	
1120	1RA1450-4HA8	1485	79	95.3	95.3	0.86	0.83	7203	2.8	0.90	6.2	2.0	19.0	345	
1250	1RA1450-4HB8	1482	88	95.2	95.3	0.86	0.85	8055	2.8	0.90	5.8	2.0	19.0	255	
1400	1RA1452-4HA8	1482	97	95.3	95.5	0.87	0.87	9022	2.8	1.00	6.0	2.0	21.0	275	
1600	1RA1454-4HA8	1483	110	95.6	95.7	0.87	0.85	10303	2.9	1.00	6.2	2.0	23.0	280	
1800	1RA1456-4HA8	1483	124	95.7	95.8	0.88	0.86	11591	2.9	1.00	6.2	2.0	25.0	300	
2000	1RA1500-4HA8	1485	138	95.7	95.8	0.88	0.86	12864	2.5	0.80	5.3	2.8	38.8	180	
2240	1RA1502-4HA8	1486	154	95.8	96.0	0.88	0.86	14395	2.8	1.00	5.7	2.8	42.9	205	
2500	1RA1504-4HA8	1486	170	95.8	96.0	0.89	0.87	16066	2.8	1.00	6.0	2.8	47.2	230	
2800	1RA1506-4HA8	1488	190	96.0	96.2	0.89	0.86	17976	3.1	1.10	6.5	2.8	52.4	260	
3150	1RA1560-4HJ8	1490	215	96.5	96.6	0.88	0.85	20191	2.8	0.75	6.0	3.1	84.3	1100	
3550	1RA1562-4HJ8	1490	240	96.6	96.7	0.88	0.85	22753	2.8	0.75	6.0	3.1	89.8	1100	
4300	1RA1564-4HJ8	1489	290	96.7	96.9	0.88	0.86	27588	2.8	0.75	6.0	3.1	94.6	1100	
4400	1RA1566-4HJ8	1489	295	96.7	96.9	0.89	0.86	28224	2.8	0.80	6.0	3.1	96.7	1100	
4500	1RA1630-4HJ8	1490	305	96.8	96.7	0.88	0.87	28840	2.9	0.60	6.0	3.7	131.3	1650	
5200	1RA1630-4HK8	1489	350	96.9	96.9	0.88	0.86	33342	2.9	0.60	6.0	3.7	131.3	1350	
5800	1RA1632-4HJ8	1489	390	97.0	97.0	0.88	0.86	37199	2.9	0.60	6.0	3.7	142.9	1350	
6100	1RA1634-4HJ8	1489	410	97.0	97.0	0.89	0.87	39113	2.9	0.60	6.0	3.7	154.2	1500	
6800	1RA1636-4HJ8	1489	455	97.1	97.2	0.89	0.87	43610	2.9	0.60	6.0	3.7	168.3	1500	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.
Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
6-pole															
315	1RA1352-6HA8	989	23.5	93.8	93.9	0.82	0.76	3043	3.0	1.30	6.3	0.7	11.2	280	
355	1RA1352-6HB8	986	26.5	93.7	94.0	0.82	0.78	3438	3.0	1.30	6.2	0.7	11.2	190	
400	1RA1354-6HA8	987	30.0	94.0	94.0	0.82	0.76	3871	3.2	1.30	6.2	0.7	12.1	205	
450	1RA1356-6HA8	987	33.5	94.1	94.2	0.82	0.75	4355	3.2	1.30	6.2	0.7	13.6	225	
500	1RA1400-6HA8	989	36.5	94.5	94.7	0.84	0.81	4828	2.8	0.90	5.6	1.0	18.0	205	
560	1RA1402-6HA8	989	40.5	94.6	94.9	0.84	0.81	5406	2.8	0.90	5.6	1.0	19.8	230	
630	1RA1404-6HA8	989	45.5	94.9	95.1	0.84	0.82	6082	2.8	1.00	5.8	1.0	22.0	300	
710	1RA1406-6HA8	990	51	95.0	95.2	0.84	0.80	6850	3.0	1.10	6.0	1.0	24.4	345	
800	1RA1450-6HA8	992	58	95.1	95.5	0.83	0.78	7702	2.9	1.00	6.0	1.4	30.0	1145	
900	1RA1450-6HB8	990	65	95.1	95.5	0.84	0.80	8680	2.6	1.00	5.8	1.4	30.0	985	
1000	1RA1450-6HC8	988	71	95.0	95.5	0.85	0.82	9665	2.3	1.00	5.4	1.4	30.0	800	
1120	1RA1452-6HA8	989	80	95.2	95.6	0.85	0.82	10818	2.4	1.10	5.4	1.4	32.0	800	
1250	1RA1454-6HA8	988	89	95.4	95.8	0.85	0.83	12081	2.4	1.10	5.4	1.4	35.0	1005	
1400	1RA1456-6HA8	989	99	95.6	96.0	0.85	0.81	13516	2.6	1.20	5.8	1.4	38.0	1140	
1600	1RA1500-6HA8	992	114	95.9	95.9	0.84	0.80	15409	2.5	1.00	5.5	1.6	55.2	940	
1800	1RA1502-6HA8	992	128	96.0	96.1	0.85	0.80	17332	2.6	1.00	5.7	1.6	61.5	1070	
2000	1RA1504-6HA8	992	140	96.0	96.1	0.86	0.82	19258	2.6	1.10	5.7	1.6	68.2	1180	
2240	1RA1506-6HA8	992	156	96.2	96.3	0.86	0.82	21565	2.6	1.10	5.7	1.6	75.8	1335	
2700	1RA1560-6HJ8	992	190	96.3	96.5	0.85	0.82	25990	2.4	0.65	5.4	2.4	124.6	2000	
2900	1RA1562-6HJ8	992	205	96.4	96.6	0.85	0.82	27921	2.4	0.65	5.4	2.4	129.0	2000	
3200	1RA1564-6HJ8	992	220	96.5	96.7	0.86	0.83	30810	2.4	0.65	5.4	2.4	140.2	2500	
3550	1RA1566-6HJ8	992	245	96.6	96.8	0.86	0.83	34176	2.4	0.65	5.4	2.4	152.6	2800	
4000	1RA1630-6HJ8	993	280	96.7	96.7	0.85	0.81	38469	2.5	0.80	6.0	3.6	205.7	4600	
4500	1RA1632-6HJ8	993	315	96.8	96.8	0.85	0.82	43287	2.5	0.80	6.0	3.6	220.6	4600	
5000	1RA1634-6HJ8	992	345	96.8	96.9	0.86	0.84	48140	2.5	0.80	6.0	3.6	229.3	4600	
5500	1RA1636-6HJ8	992	380	96.9	97.0	0.86	0.83	52938	2.5	0.80	6.0	3.6	245.9	4900	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque T_B/T_{rated} [-]	Locked-rotor torque T_{LR}/T_{rated} [-]	Locked-rotor current I_{LR}/I_{rated} [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
8-pole															
355	1RA1400-8HA8	740	28.0	93.2	93.5	0.78	0.73	4581	2.2	0.90	4.5	0.7	18.0	720	
400	1RA1402-8HA8	740	31.5	93.4	93.7	0.78	0.74	5162	2.2	0.90	4.5	0.7	19.8	720	
450	1RA1404-8HA8	739	35.0	93.5	94.0	0.79	0.76	5815	2.2	0.90	4.5	0.7	22.0	765	
500	1RA1406-8HA8	740	39.0	93.8	94.1	0.79	0.75	6456	2.3	0.90	4.7	0.7	24.4	900	
560	1RA1450-8HA8	742	43.0	94.4	94.6	0.80	0.73	7210	2.3	1.00	5.0	1.0	30.0	1325	
630	1RA1450-8HB8	740	47.5	94.4	94.6	0.81	0.76	8133	2.3	1.00	5.0	1.0	30.0	1050	
710	1RA1452-8HA8	741	53	94.7	94.9	0.81	0.73	9152	2.5	1.20	5.0	1.0	32.0	1475	
800	1RA1454-8HA8	741	60	94.8	95.1	0.81	0.74	10315	2.5	1.20	5.0	1.0	35.0	1545	
900	1RA1456-8HA8	741	67	94.9	95.2	0.81	0.74	11605	2.5	1.20	5.0	1.0	38.0	1615	
1000	1RA1500-8HA8	743	74	95.5	95.6	0.82	0.76	12846	2.4	1.00	5.0	1.3	55.2	2920	
1120	1RA1500-8HB8	742	81	95.6	95.6	0.83	0.78	14417	2.3	1.00	4.7	1.3	55.2	2065	
1250	1RA1502-8HA8	742	91	95.6	95.7	0.83	0.80	16099	2.3	1.00	4.7	1.3	61.5	2310	
1400	1RA1504-8HA8	742	102	95.8	95.9	0.83	0.78	18009	2.3	1.00	5.0	1.3	68.2	2635	
1600	1RA1506-8HA8	742	116	96.0	96.0	0.83	0.78	20582	2.3	1.00	5.0	1.3	75.8	2955	
1800	1RA1560-8HJ8	742	130	95.9	96.3	0.83	0.80	23155	1.9	0.60	4.0	1.9	124.6	3500	
2000	1RA1562-8HJ8	743	142	96.0	96.3	0.84	0.81	25717	1.9	0.60	4.1	1.9	129.0	3600	
2300	1RA1564-8HJ8	743	164	96.2	96.5	0.84	0.80	29563	2.0	0.60	4.2	1.9	140.2	4200	
2600	1RA1566-8HJ8	743	186	96.3	96.6	0.84	0.8	33423	2.0	0.60	4.2	1.9	152.6	5100	
3000	1RA1630-8HJ8	744	220	96.4	96.6	0.82	0.79	38518	2.0	0.60	4.5	2.9	205.7	5300	
3400	1RA1632-8HJ8	744	245	96.4	96.6	0.83	0.80	43666	2.0	0.60	4.5	2.9	220.6	5300	
3750	1RA1634-8HJ8	744	270	96.5	96.7	0.83	0.79	48142	2.1	0.65	4.5	2.9	229.3	6000	
4100	1RA1636-8HJ8	744	295	96.6	96.8	0.83	0.79	52606	2.2	0.70	4.8	2.9	245.9	7200	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
10-pole															
450	1RA1450-3HA8	594	34	93.2	93.2	0.80	0.73	7241	1.9	0.90	5.0	0.8	29.5	1100	
500	1RA1452-3HA8	592	38	93.2	93.5	0.80	0.78	8065	1.9	0.90	5.0	0.8	32.8	1100	
560	1RA1454-3HA8	593	44	93.6	93.6	0.80	0.74	9016	2.2	1.05	5.0	0.8	35.1	1300	
610	1RA1456-3HA8	593	46	93.8	93.8	0.80	0.74	9820	2.3	1.05	5.1	0.8	37.5	1500	
710	1RA1500-3HA8	593	54	94.3	94.6	0.82	0.81	11436	1.7	0.65	4.0	1.0	53.2	3800	
800	1RA1502-3HA8	594	60	94.6	94.7	0.82	0.80	12873	1.8	0.75	4.3	1.0	59.2	4500	
900	1RA1504-3HA8	594	66	94.9	94.8	0.82	0.76	14460	2.1	0.90	4.9	1.0	64.2	5500	
1000	1RA1506-3HA8	594	74	95.0	94.9	0.82	0.76	16067	2.1	0.90	5.0	1.0	72.2	5500	
1120	1RA1560-3HJ8	594	82	95.5	95.7	0.82	0.77	17998	2.1	0.60	4.3	1.6	116.2	5800	
1250	1RA1560-3HK8	593	92	95.4	95.7	0.82	0.79	20121	1.9	0.50	3.9	1.6	116.2	4300	
1400	1RA1562-3HJ8	594	104	95.5	95.7	0.82	0.77	22505	2.0	0.50	4.2	1.6	130.2	4300	
1600	1RA1564-3HJ8	594	118	95.6	95.9	0.82	0.79	25746	2.0	0.50	4.2	1.6	143.2	5900	
1800	1RA1566-3HJ8	594	132	95.8	96.0	0.82	0.77	28939	2.1	0.55	4.3	1.6	156.2	6300	
2000	1RA1630-3HJ8	594	146	95.9	96.0	0.83	0.79	32144	2.0	0.55	4.2	2.3	222.3	7600	
2240	1RA1632-3HJ8	595	162	96.0	96.1	0.83	0.78	35971	2.0	0.60	4.5	2.3	243.3	8600	
2500	1RA1634-3HJ8	595	180	96.1	96.3	0.83	0.79	40160	2.0	0.60	4.5	2.3	267.2	9900	
2800	1RA1636-3HJ8	594	200	96.2	96.4	0.84	0.81	45009	2.0	0.60	4.5	2.3	296.9	10600	
		Type of construction													
		See page 1/10													

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
10 kV, 50 Hz															
12-pole															
560	1RA1500-5HA8	494	44	94.1	94.0	0.77	0.72	10828	1.8	0.65	3.8	0.9	53.2	5700	
630	1RA1502-5HA8	494	50	94.2	94.2	0.77	0.73	12189	1.8	0.65	3.8	0.9	59.2	6000	
710	1RA1504-5HA8	494	56	94.4	94.3	0.77	0.72	13734	1.8	0.65	3.9	0.9	66.2	7000	
800	1RA1506-5HA8	494	64	94.6	94.4	0.77	0.70	15466	2.0	0.70	4.1	0.9	73.2	8000	
900	1RA1560-5HJ8	494	72	95.0	94.9	0.76	0.69	17388	2.0	0.60	3.9	1.3	135.2	17600	
1000	1RA1560-5HK8	494	80	95.0	95.0	0.76	0.69	19324	1.9	0.60	3.8	1.3	135.2	12600	
1120	1RA1562-5HJ8	494	90	95.1	95.1	0.76	0.69	21643	1.9	0.60	3.8	1.3	152.2	14700	
1250	1RA1564-5HJ8	494	98	95.2	95.2	0.77	0.71	24170	1.9	0.60	3.8	1.3	167.2	17000	
1400	1RA1566-5HJ8	494	108	95.3	95.3	0.78	0.72	27076	1.9	0.60	3.8	1.3	183.2	17700	
1600	1RA1630-5HJ8	495	120	95.3	95.4	0.81	0.77	30875	1.8	0.60	4.1	2.0	248.8	8400	
1800	1RA1632-5HJ8	495	134	95.5	95.6	0.81	0.77	34741	1.8	0.60	4.1	2.0	272.5	11000	
2000	1RA1634-5HJ8	495	150	95.5	95.7	0.81	0.79	38625	1.8	0.60	4.1	2.0	299.2	12000	
2240	1RA1636-5HJ8	495	166	95.8	95.8	0.81	0.75	43181	2.1	0.75	4.5	2.0	333.7	13600	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
14-pole															
400	1RA1502-7HA8	423	34	93.6	93.3	0.72	0.65	9022	1.9	0.65	3.7	0.8	60.2	8300	
450	1RA1502-7HB8	423	38	93.6	93.3	0.72	0.64	10155	1.9	0.65	3.7	0.8	60.2	8300	
500	1RA1504-7HA8	424	42	94.0	93.8	0.72	0.62	11275	2.0	0.75	3.8	0.8	66.2	11300	
560	1RA1506-7HA8	423	48	94.0	93.8	0.73	0.63	12634	2.0	0.75	3.8	0.8	74.2	11300	
630	1RA1560-7HJ8	424	50	94.3	94.2	0.76	0.67	14203	2.2	0.50	4.0	1.2	145.2	7800	
710	1RA1560-7HK8	423	58	94.4	94.4	0.76	0.67	16022	2.1	0.50	3.8	1.2	145.2	7100	
800	1RA1562-7HJ8	423	64	94.6	94.7	0.77	0.68	18053	2.1	0.55	3.9	1.2	164.2	8700	
900	1RA1564-7HJ8	423	70	94.7	94.8	0.78	0.70	20319	2.1	0.55	3.9	1.2	180.2	9700	
1000	1RA1566-7HJ8	423	78	94.8	94.9	0.78	0.70	22582	2.1	0.55	3.9	1.2	197.2	10000	
1120	1RA1630-7HJ8	425	88	94.7	94.8	0.78	0.71	25197	1.9	0.50	3.7	1.7	281.1	8500	
1250	1RA1632-7HJ8	425	98	95.1	95.2	0.78	0.72	28121	1.9	0.50	3.7	1.7	308.8	10800	
1400	1RA1634-7HJ8	425	108	95.1	95.1	0.78	0.70	31488	1.9	0.60	4.0	1.7	339.3	10800	
1600	1RA1636-7HJ8	424	122	95.1	95.3	0.79	0.73	36012	1.9	0.60	4.0	1.7	377.8	10800	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
16-pole															
355	1RA1500-9HA8	370	32	92.9	92.6	0.69	0.58	9155	1.9	0.60	3.3	0.6	53.2	5600	
400	1RA1502-9HA8	370	36	93.1	92.8	0.69	0.59	10319	1.9	0.60	3.4	0.6	60.2	6400	
450	1RA1504-9HA8	370	40	93.2	93.0	0.70	0.60	11612	1.9	0.60	3.4	0.6	66.2	6500	
500	1RA1506-9HA8	370	44	93.5	93.4	0.71	0.61	12902	1.9	0.60	3.4	0.6	74.2	8500	
560	1RA1560-9HJ8	370	50	94.0	93.8	0.70	0.59	14450	2.1	0.50	3.4	1.0	146.2	24800	
630	1RA1560-9HK8	370	56	94.0	93.8	0.70	0.59	16274	1.9	0.50	3.3	1.0	146.2	17400	
710	1RA1562-9HJ8	370	62	94.2	94.0	0.71	0.60	18341	1.9	0.55	3.4	1.0	164.2	19200	
800	1RA1564-9HJ8	369	68	94.3	94.2	0.72	0.62	20682	1.9	0.55	3.4	1.0	181.2	19200	
900	1RA1566-9HJ8	369	76	94.3	94.3	0.73	0.63	23280	1.9	0.55	3.4	1.0	198.2	19200	
1000	1RA1630-9HJ8	371	86	94.2	94.0	0.72	0.63	25727	1.8	0.50	3.3	1.5	282.2	14200	
1120	1RA1632-9HJ8	371	96	94.4	94.3	0.72	0.63	28815	1.8	0.50	3.3	1.5	308.8	16300	
1250	1RA1634-9HJ8	371	104	94.4	94.4	0.73	0.64	32168	1.8	0.50	3.3	1.5	339.3	16300	
1400	1RA1636-9HJ8	371	118	94.5	94.4	0.73	0.62	36009	2.0	0.60	3.6	1.5	378.8	16300	

Type of construction

See page 1/10

Pole number

9 16-pole: additional order code **H1A** required

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV / 6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

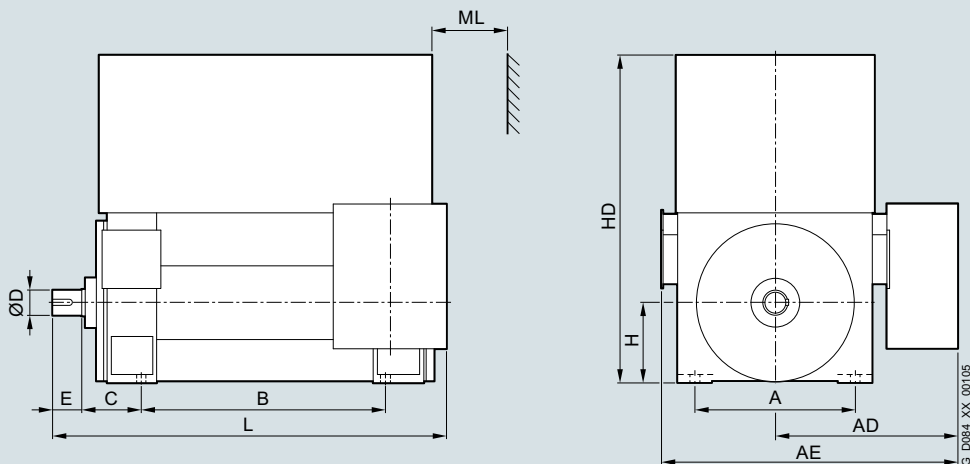
¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings



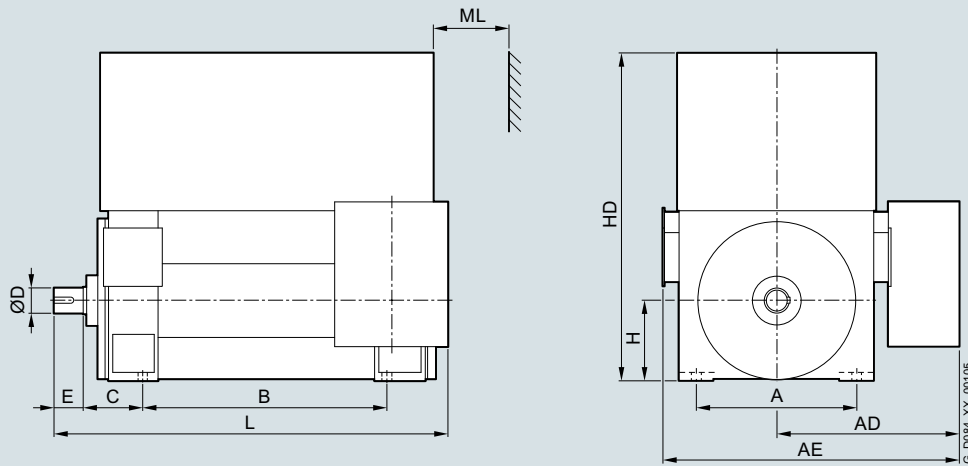
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings (for shaft height 315)													
2-pole													
1RA1312-2....	1400	270	560	760	1155	1060	180	80	130	315	1080	1580	190
1RA1314-2....	1450	290	560	760	1155	1060	180	80	130	315	1080	1580	190

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings



Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
2-pole													
1RA1350-2....	2150	400	710	765	1275	1180	224	85	130	355	1550	1740	190
1RA1352-2....	2200	415	710	765	1275	1180	224	85	130	355	1550	1740	190
1RA1354-2....	2300	433	710	765	1275	1180	224	85	130	355	1550	1740	190
1RA1356-2....	2350	447	710	765	1275	1180	224	85	130	355	1550	1740	190
1RA1400-2....	2850	528	800	815	1370	1250	250	85	130	400	1740	1860	225
1RA1402-2....	2950	547	800	815	1370	1250	250	85	130	400	1740	1860	225
1RA1404-2....	3050	579	800	815	1370	1250	250	85	130	400	1740	1860	225
1RA1406-2....	3200	608	800	815	1370	1250	250	85	130	400	1740	1860	225
1RA1450-2.... ¹⁾	3900	688	950	870	1480	1400	250	95	130	450	1910	2035	285
1RA1452-2.... ¹⁾	4050	718	950	870	1480	1400	250	95	130	450	1910	2035	285
1RA1454-2.... ¹⁾	4250	758	950	870	1480	1400	250	95	130	450	1910	2035	285
1RA1456-2.... ¹⁾	4450	808	950	870	1480	1400	250	95	130	450	1910	2035	285

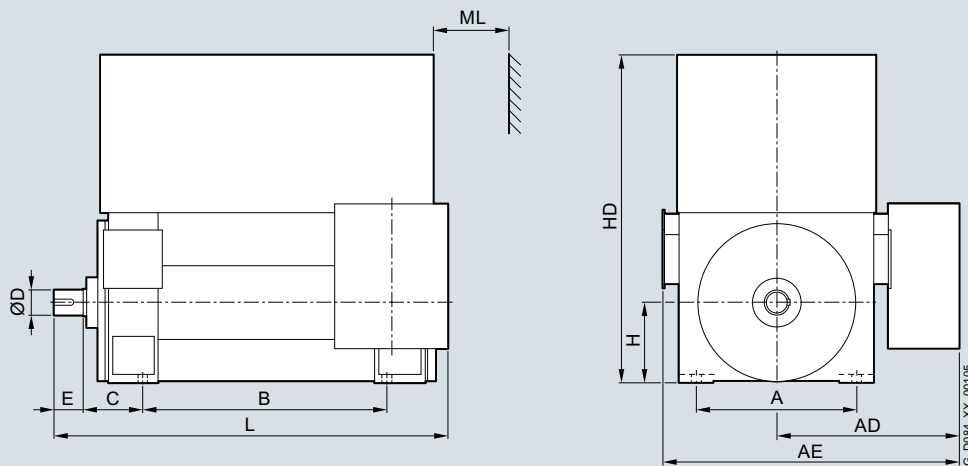
¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



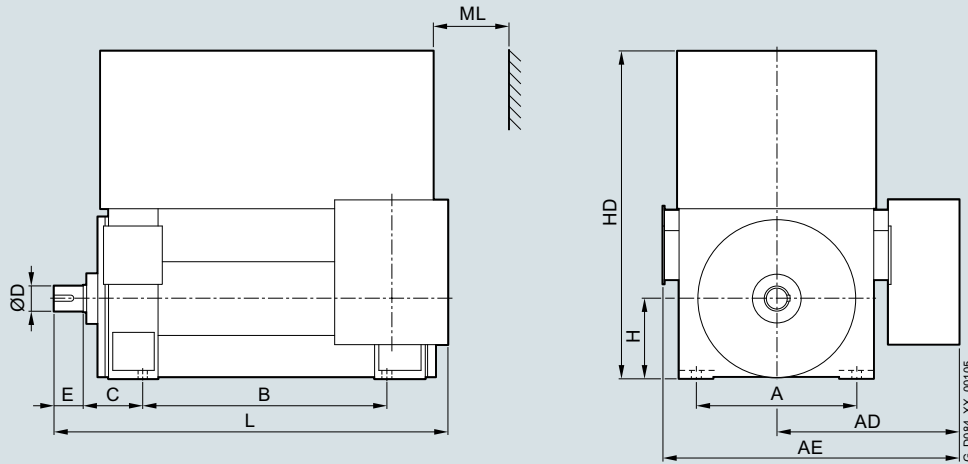
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
4-pole													
1RA1350-4....	2200	422	710	765	1275	1180	224	95	130	355	1550	1740	190
1RA1352-4....	2350	455	710	765	1275	1180	224	95	130	355	1550	1740	190
1RA1354-4....	2400	488	710	765	1275	1180	224	95	130	355	1550	1740	190
1RA1356-4....	2550	526	710	765	1275	1180	224	95	130	355	1550	1740	190
1RA1400-4....	3000	614	800	815	1370	1250	250	110	165	400	1740	1900	225
1RA1402-4....	3100	649	800	815	1370	1250	250	110	165	400	1740	1900	225
1RA1404-4....	3300	709	800	815	1370	1250	250	110	165	400	1740	1900	225
1RA1406-4....	3500	768	800	815	1370	1250	250	110	165	400	1740	1900	225
1RA1450-4....	4100	829	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1452-4....	4350	899	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1454-4....	4600	949	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1456-4....	4850	1019	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1500-4....	5300	1190	1060	945	1615	1500	280	150	200	500	1890	2280	300
1RA1502-4....	5550	1270	1060	945	1615	1500	280	150	200	500	1890	2280	300
1RA1504-4....	5800	1360	1060	945	1615	1500	280	150	200	500	1890	2280	300
1RA1506-4....	6250	1460	1060	1115	1785	1500	280	150	200	500	1890	2355	300
1RA1560-4....	8800	2044	1250	1090	1915	1700	315	170	240	560	2250	2530	335
1RA1562-4....	9100	2136	1250	1270	2090	1700	315	170	240	560	2250	2555	335
1RA1564-4....	9450	2214	1250	1270	2090	1700	315	170	240	560	2250	2555	335
1RA1566-4....	9600	2249	1250	1270	2090	1700	315	170	240	560	2250	2555	335
1RA1630-4....	11700	2586	1400	1570	2510	1900	315	200	280	630	2470	2820	365
1RA1632-4....	12250	2741	1400	1570	2510	1900	315	200	280	630	2470	2820	365
1RA1634-4....	12850	2875	1400	1570	2510	1900	315	200	280	630	2470	2820	365
1RA1636-4....	13450	3056	1400	1570	2510	1900	315	200	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



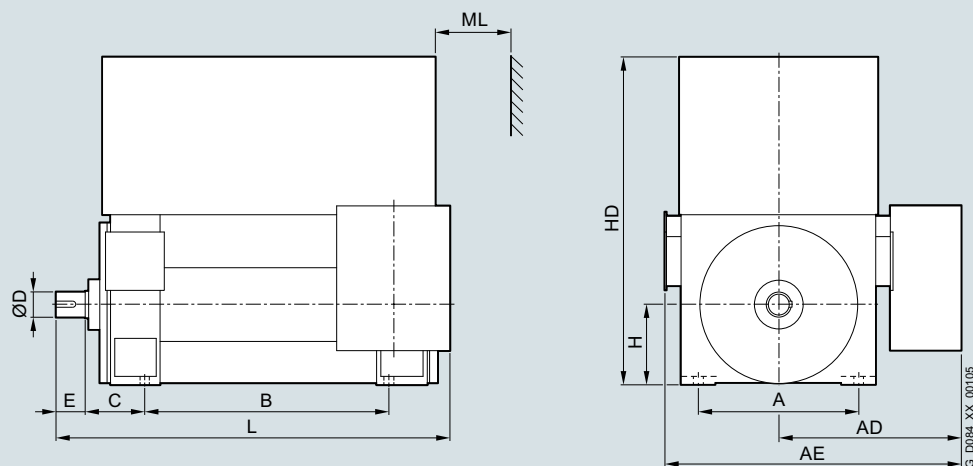
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
6-pole													
1RA1350-6....	2350	535	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1352-6....	2500	590	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1354-6....	2600	622	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1356-6....	2750	680	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1400-6....	3150	759	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1402-6....	3300	811	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1404-6....	3500	875	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1406-6....	3700	943	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1450-6....	4300	1008	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1452-6....	4500	1078	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1454-6....	4700	1138	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1456-6....	4950	1208	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1500-6....	5650	1444	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1502-6....	5950	1554	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1504-6....	6350	1684	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1506-6....	6750	1824	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1560-6....	8900	2441	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1562-6....	9100	2525	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1564-6....	9550	2684	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1566-6....	10100	2862	1250	1270	2090	1700	315	190	280	560	2250	2555	335
1RA1630-6....	12400	3216	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1632-6....	12850	3382	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1634-6....	13250	3477	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1636-6....	13850	3660	1400	1570	2510	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



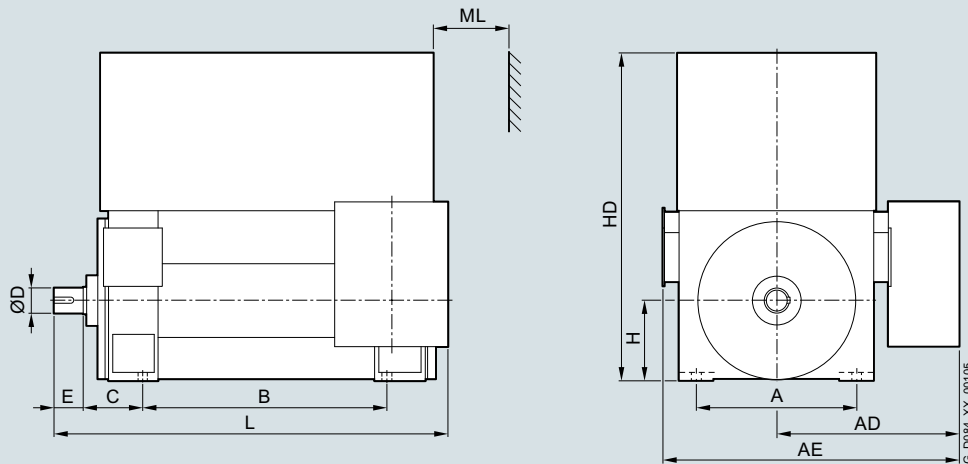
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
8-pole													
1RA1350-8....	2350	535	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1352-8....	2500	590	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1354-8....	2600	622	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1356-8....	2750	680	710	765	1275	1180	224	110	165	355	1550	1775	190
1RA1400-8....	3150	759	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1402-8....	3300	811	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1404-8....	3500	875	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1406-8....	3700	943	800	815	1370	1250	250	130	200	400	1740	1935	225
1RA1450-8....	4300	1008	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1452-8....	4500	1078	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1454-8....	4700	1138	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1456-8....	4950	1208	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1500-8....	5650	1444	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1502-8....	5950	1554	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1504-8....	6350	1684	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1506-8....	6750	1824	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1560-8....	8900	2441	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1562-8....	9100	2525	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1564-8....	9550	2684	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1566-8....	10100	2862	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1630-8....	12400	3216	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1632-8....	12850	3382	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1634-8....	13250	3477	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1636-8....	13850	3660	1400	1570	2510	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



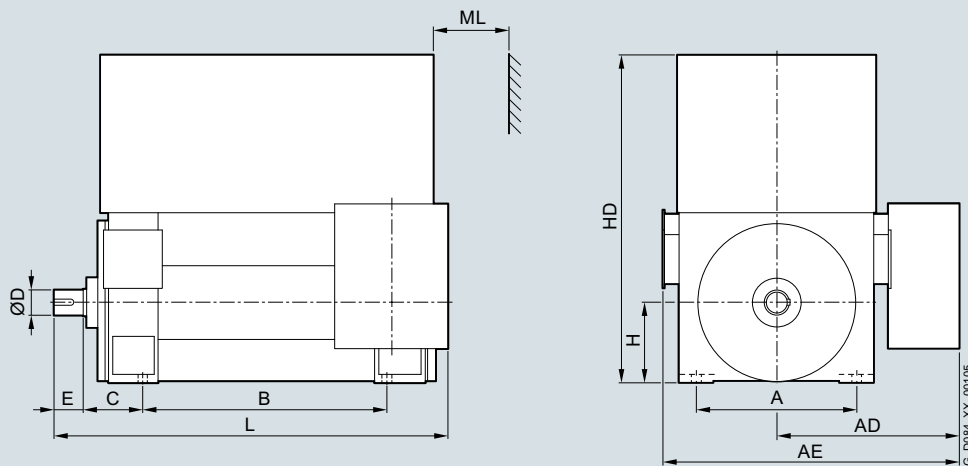
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
10-pole													
1RA1450-3....	4350	1045	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1452-3....	4550	1102	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1454-3....	4700	1159	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1456-3....	4900	1226	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1500-3....	5600	1448	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1502-3....	5900	1552	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1504-3....	6250	1664	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1506-3....	6650	1791	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1560-3....	8450	2249	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1560-3....	8450	2249	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1562-3....	9000	2449	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1564-3....	9450	2609	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1566-3....	9950	2799	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1630-3....	11550	3227	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1632-3....	12200	3440	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1634-3....	11750	3690	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1636-3....	13650	3996	1400	1570	2510	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



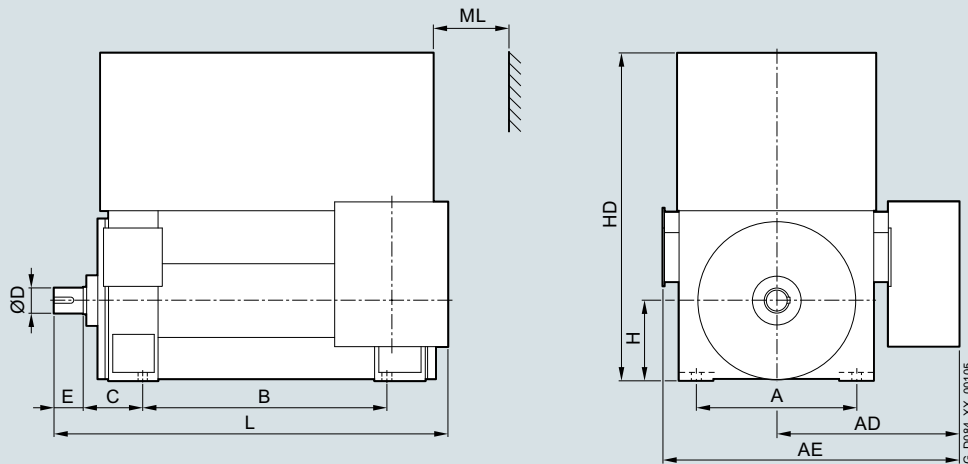
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
12-pole													
1RA1450-5....	4350	1108	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1452-5....	4550	1175	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1454-5....	4700	1231	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1456-5....	4900	1309	950	870	1480	1400	250	130	200	450	1910	2115	285
1RA1500-5....	5650	1458	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1502-5....	5950	1561	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1504-5....	6250	1682	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1506-5....	6650	1807	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1560-5....	8400	2399	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1560-5....	8400	2399	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1562-5....	9000	2619	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1564-5....	9450	2809	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1566-5....	10000	3009	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1630-5....	11550	3393	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1632-5....	12150	3629	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1634-5....	12800	3884	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1636-5....	13650	4224	1400	1570	2510	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



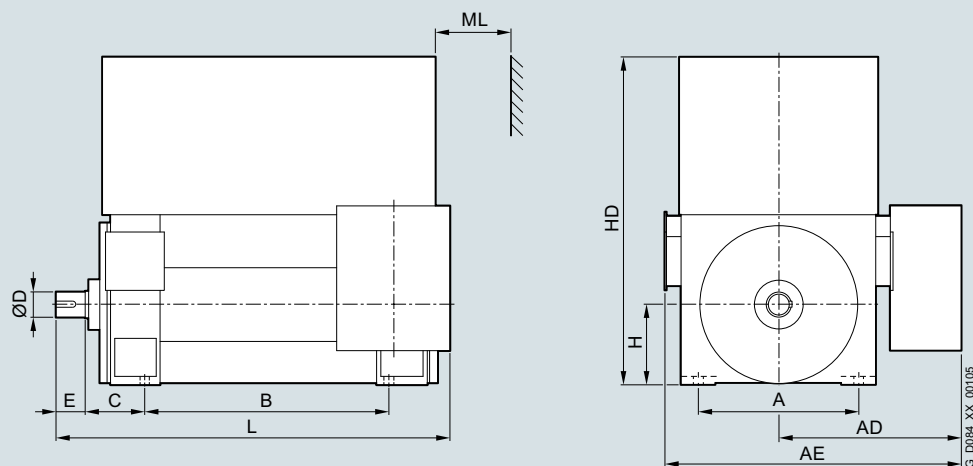
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
14-pole													
1RA1500-7....	5600	1461	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1502-7....	5950	1582	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1504-7....	6200	1693	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1506-7....	6650	1826	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1560-7....	8350	2469	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1560-7....	8350	2469	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1562-7....	8900	2699	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1564-7....	9350	2899	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1566-7....	9900	3119	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1630-7....	11500	3578	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1632-7....	12100	3831	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1634-7....	12700	4111	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1636-7....	13550	4477	1400	1570	2510	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



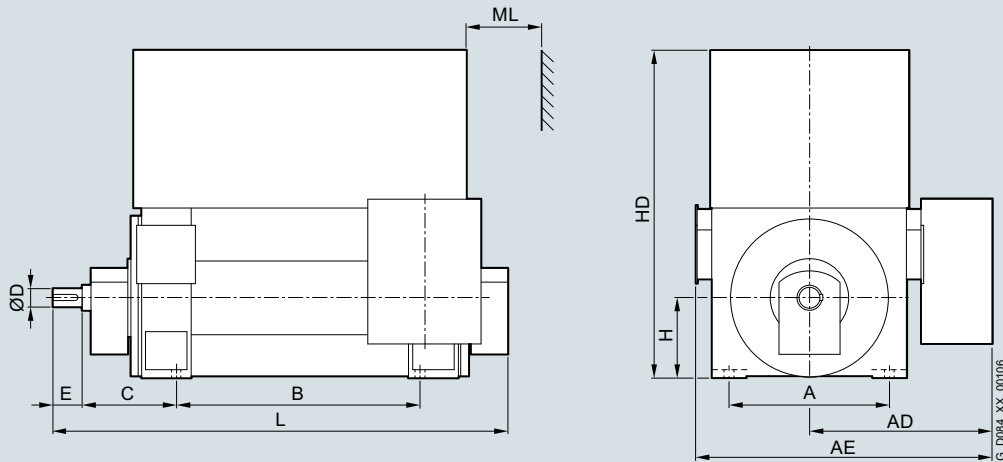
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
16-pole													
1RA1500-9....	5600	1466	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1502-9....	5950	1578	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1504-9....	6200	1689	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1506-9....	6650	1823	1060	945	1615	1500	280	160	240	500	1890	2320	300
1RA1560-9....	8250	2419	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1560-9....	8300	2419	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1562-9....	8800	2619	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1564-9....	9350	2899	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1566-9....	9850	3119	1250	1090	1915	1700	315	190	280	560	2250	2530	335
1RA1630-9....	11450	3578	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1632-9....	12050	3831	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1634-9....	12650	4111	1400	1570	2510	1900	315	220	280	630	2470	2820	365
1RA1636-9....	13500	4487	1400	1570	2510	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



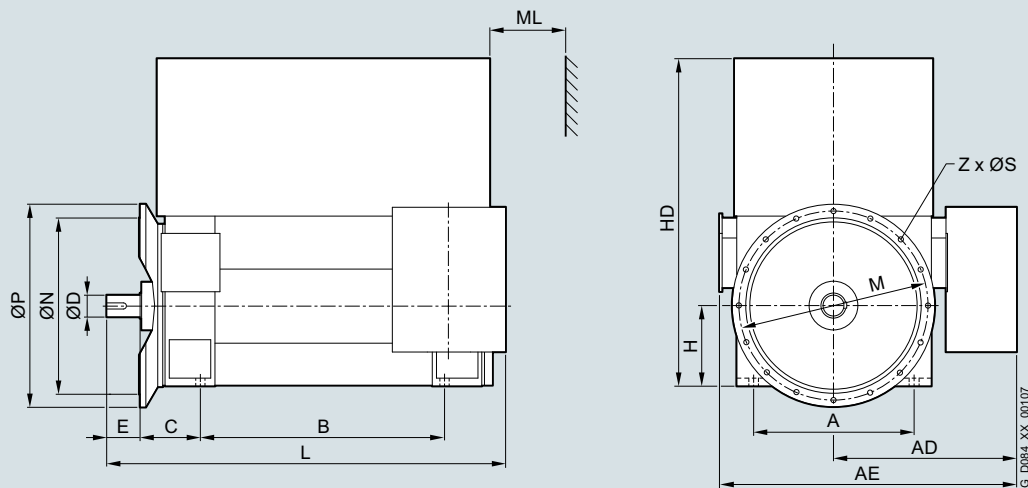
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, sleeve bearings													
2-pole													
1RA1400-2....	2850	455	800	815	1370	1250	425	85	130	400	1740	2150	225
1RA1402-2....	2900	476	800	815	1370	1250	425	85	130	400	1740	2150	225
1RA1404-2....	3050	517	800	815	1370	1250	425	85	130	400	1740	2150	225
1RA1406-2....	3200	547	800	815	1370	1250	425	85	130	400	1740	2150	225
1RA1450-2....	3950	650	950	870	1480	1400	450	95	130	450	1910	2375	285
1RA1452-2....	4100	680	950	870	1480	1400	450	95	130	450	1910	2375	285
1RA1454-2....	4300	728	950	870	1480	1400	450	95	130	450	1910	2375	285
1RA1456-2....	4550	778	950	870	1480	1400	450	95	130	450	1910	2375	285
1RA1500-2....	5450	1145	1060	945	1615	1500	475	110	165	500	1890	2600	300
1RA1502-2....	5600	1175	1060	945	1615	1500	475	110	165	500	1890	2600	300
1RA1504-2....	5900	1258	1060	945	1615	1500	475	110	165	500	1890	2600	300
1RA1506-2....	6250	1338	1060	1115	1785	1500	475	110	165	500	1890	2600	300
1RA1560-2....	7950	1441	1250	1090	1915	1700	530	140	200	560	2250	2725	355
1RA1562-2....	8300	1488	1250	1090	1915	1700	530	140	200	560	2250	2725	355
1RA1564-2....	8950	1610	1250	1270	2090	1700	530	140	200	560	2250	2725	355
1RA1566-2....	9250	1675	1250	1270	2090	1700	530	140	200	560	2250	2725	355
1RA1630-2....	11250	1899	1400	1570	2510	1900	530	160	240	630	2470	3140	365
1RA1632-2....	11750	1989	1400	1570	2510	1900	530	160	240	630	2470	3140	365
1RA1634-2....	12200	2092	1400	1570	2510	1900	530	160	240	630	2470	3140	365
1RA1636-2....	12950	2207	1400	1570	2510	1900	530	160	240	630	2470	3140	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM B35 type of construction, anti-friction bearings																		
2-pole																		
1RA1350-2....	2200	400	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RA1352-2....	2300	415	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RA1354-2....	2400	433	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RA1356-2....	2450	447	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RA1400-2....	2900	528	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RA1402-2....	3000	547	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RA1404-2....	3100	579	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RA1406-2....	3300	608	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RA1450-2.... ¹⁾	4050	688	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8
1RA1452-2.... ¹⁾	4150	718	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8
1RA1454-2.... ¹⁾	4350	758	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8
1RA1456-2.... ¹⁾	4600	808	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8

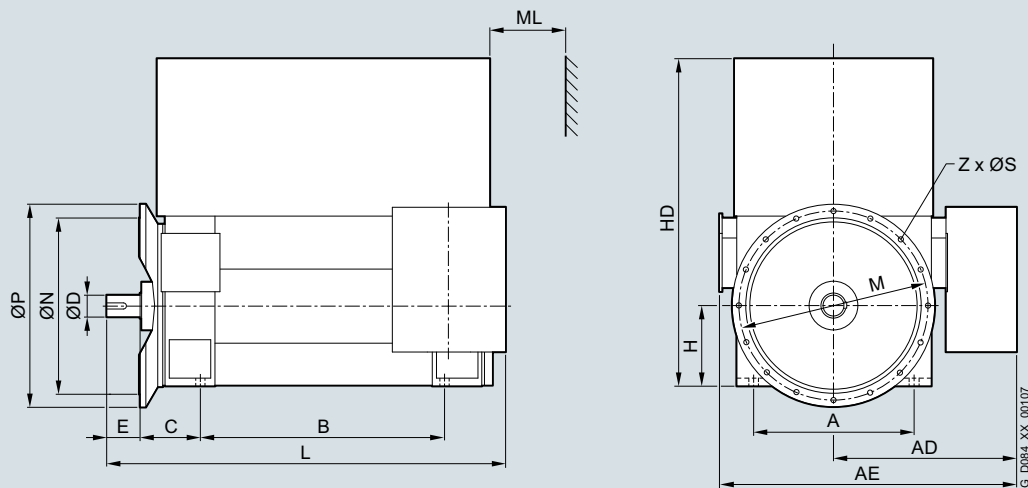
¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

4-pole

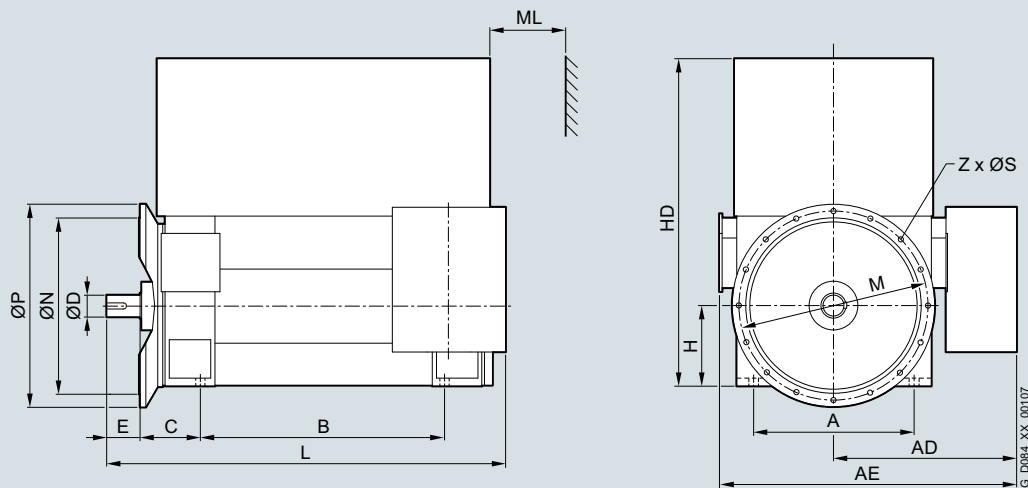
1RA1350-4....	2300	422	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RA1352-4....	2400	455	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RA1354-4....	2500	488	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RA1356-4....	2600	526	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RA1400-4....	3050	614	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RA1402-4....	3150	649	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RA1404-4....	3350	709	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RA1406-4....	3550	768	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RA1450-4....	4250	829	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1452-4....	4500	899	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1454-4....	4700	949	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1456-4....	5000	1019	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1500-4....	5400	1190	1060	945	1615	1500	280	150	200	500	1890	2280	300	1180	1120	1250	26	16
1RA1502-4....	5650	1270	1060	945	1615	1500	280	150	200	500	1890	2280	300	1180	1120	1250	26	16
1RA1504-4....	5950	1360	1060	945	1615	1500	280	150	200	500	1890	2280	300	1180	1120	1250	26	16
1RA1506-4....	6350	1460	1060	1115	1785	1500	280	150	200	500	1890	2355	300	1180	1120	1250	26	16
1RA1560-4....	8900	2044	1250	1090	1915	1700	315	170	240	560	2250	2530	335	1320	1250	1400	26	16
1RA1562-4....	9250	2136	1250	1270	2090	1700	315	170	240	560	2250	2555	335	1320	1250	1400	26	16
1RA1564-4....	9550	2214	1250	1270	2090	1700	315	170	240	560	2250	2555	335	1320	1250	1400	26	16
1RA1566-4....	9700	2249	1250	1270	2090	1700	315	170	240	560	2250	2555	335	1320	1250	1400	26	16
1RA1630-4....	11950	2586	1400	1570	2510	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-4....	12500	2741	1400	1570	2510	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-4....	13100	2875	1400	1570	2510	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-4....	13650	3056	1400	1570	2510	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

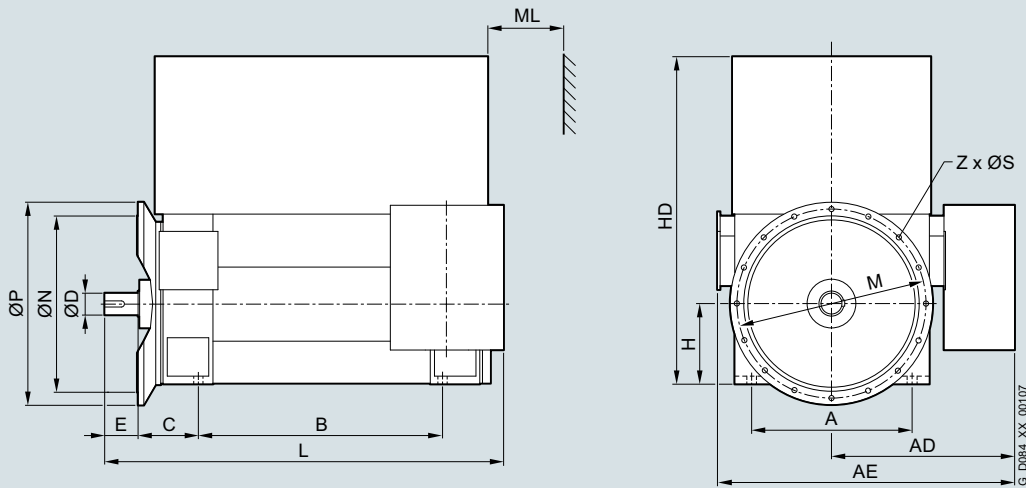
6-pole

1RA1350-6....	2400	535	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1352-6....	2550	590	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1354-6....	2650	622	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1356-6....	2800	680	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1400-6....	3250	759	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1402-6....	3400	811	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1404-6....	3600	875	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1406-6....	3800	943	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1450-6....	4450	1008	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1452-6....	4650	1078	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1454-6....	4850	1138	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1456-6....	5100	1208	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1500-6....	5750	1444	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1502-6....	6100	1554	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1504-6....	6450	1684	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1506-6....	6900	1824	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1560-6....	9050	2441	1250	1090	1915	1700	315	190	280	560	2250	2530	335	1320	1250	1400	26	16
1RA1562-6....	9300	2525	1250	1090	1915	1700	315	190	280	560	2250	2530	335	1320	1250	1400	26	16
1RA1564-6....	9750	2684	1250	1090	1915	1700	315	190	280	560	2250	2530	335	1320	1250	1400	26	16
1RA1566-6....	10250	2862	1250	1270	2090	1700	315	190	280	560	2250	2555	335	1320	1250	1400	26	16
1RA1630-6....	12600	3216	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-6....	13100	3382	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-6....	13450	3477	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-6....	14050	3660	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters
Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

8-pole

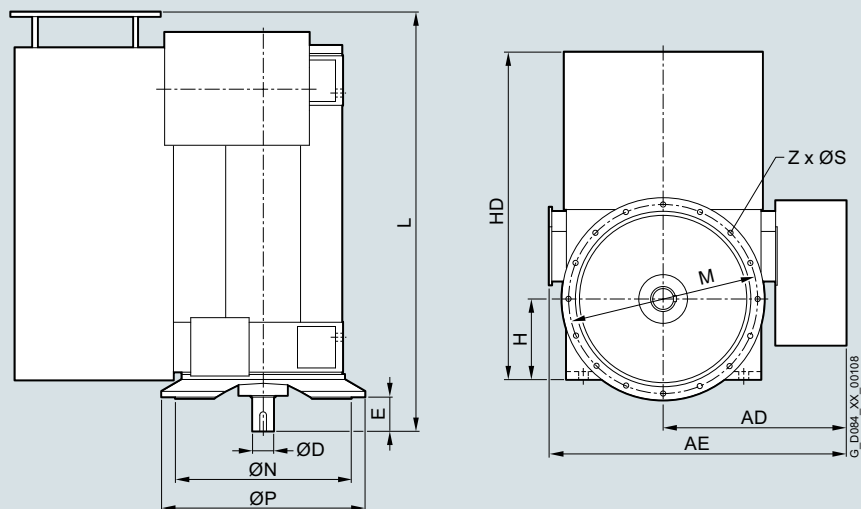
1RA1350-8....	2400	535	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1352-8....	2550	590	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1354-8....	2650	622	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1356-8....	2800	680	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RA1400-8....	3250	759	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1402-8....	3400	811	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1404-8....	3600	875	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1406-8....	3800	943	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RA1450-8....	4450	1008	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1452-8....	4650	1078	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1454-8....	4850	1138	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1456-8....	5100	1208	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RA1500-8....	5750	1444	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1502-8....	6100	1554	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1504-8....	6450	1684	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1506-8....	6900	1824	1060	945	1615	1500	280	160	240	500	1890	2320	300	1180	1120	1250	26	16
1RA1560-8....	9050	2441	1250	1090	1915	1700	315	190	280	560	2250	2530	335	1320	1250	1400	26	16
1RA1562-8....	9300	2525	1250	1090	1915	1700	315	190	280	560	2250	2530	335	1320	1250	1400	26	16
1RA1564-8....	9750	2684	1250	1090	1915	1700	315	190	280	560	2250	2530	335	1320	1250	1400	26	16
1RA1566-8....	10250	2862	1250	1090	1915	1700	315	190	280	560	2250	2530	335	1320	1250	1400	26	16
1RA1630-8....	12600	3216	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-8....	13100	3382	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-8....	13450	3477	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-8....	14050	3660	1400	1570	2510	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



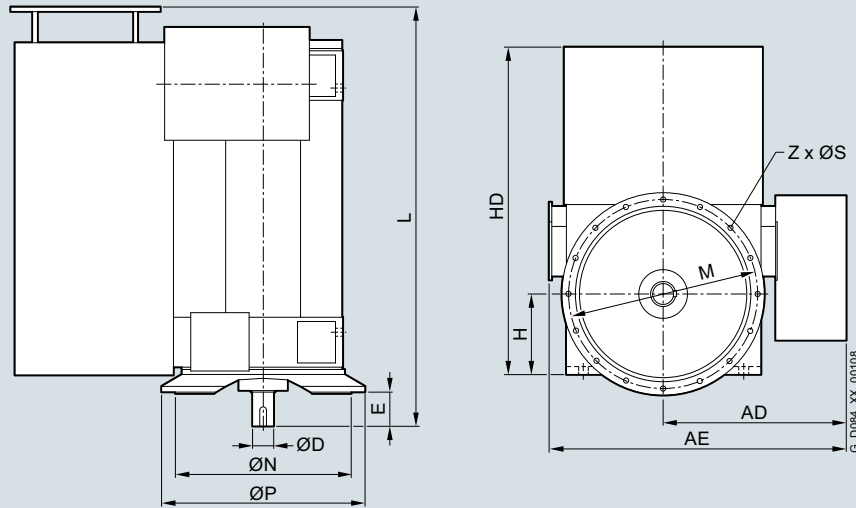
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
4-pole															
1RA1350-4....	2300	422	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1352-4....	2400	455	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1354-4....	2500	488	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1356-4....	2600	526	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1400-4....	3100	614	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1402-4....	3200	649	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1404-4....	3400	709	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1406-4....	3600	768	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1450-4....	4300	823	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-4....	4550	893	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-4....	4750	943	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-4....	5050	1013	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-4....	5500	1181	935	1605	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-4....	5700	1261	935	1605	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-4....	6000	1351	935	1605	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-4....	6400	1451	935	1605	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-4....	8950	2021	1090	1915	170	240	560	2250	2735	335	1320	1250	1400	26	16
1RA1562-4....	9300	2113	1270	2090	170	240	560	2250	2735	335	1320	1250	1400	26	16
1RA1564-4....	9650	2191	1270	2090	170	240	560	2250	2735	335	1320	1250	1400	26	16
1RA1566-4....	9800	2226	1270	2090	170	240	560	2250	2735	335	1320	1250	1400	26	16
1RA1630-4....	12200	2586	1570	2510	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-4....	12750	2741	1570	2510	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-4....	13350	2875	1570	2510	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-4....	13950	3056	1570	2510	200	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



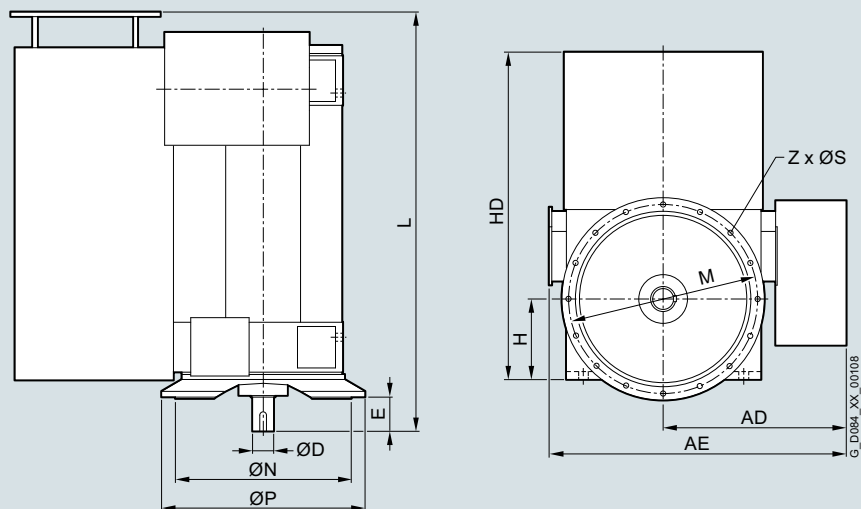
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
6-pole															
1RA1350-6....	2400	535	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1352-6....	2550	590	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1354-6....	2650	622	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1356-6....	2800	680	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1400-6....	3250	759	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1402-6....	3400	811	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1404-6....	3600	875	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1406-6....	3800	943	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1450-6....	4500	1003	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-6....	4700	1073	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-6....	4900	1133	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-6....	5150	1203	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-6....	5800	1437	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-6....	6150	1547	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-6....	6500	1677	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-6....	6950	1817	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-6....	9100	2418	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1562-6....	9300	2502	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1564-6....	9750	2661	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1566-6....	10350	2839	1270	2090	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1630-6....	12900	3216	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-6....	13400	3382	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-6....	13750	3477	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-6....	14350	3660	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



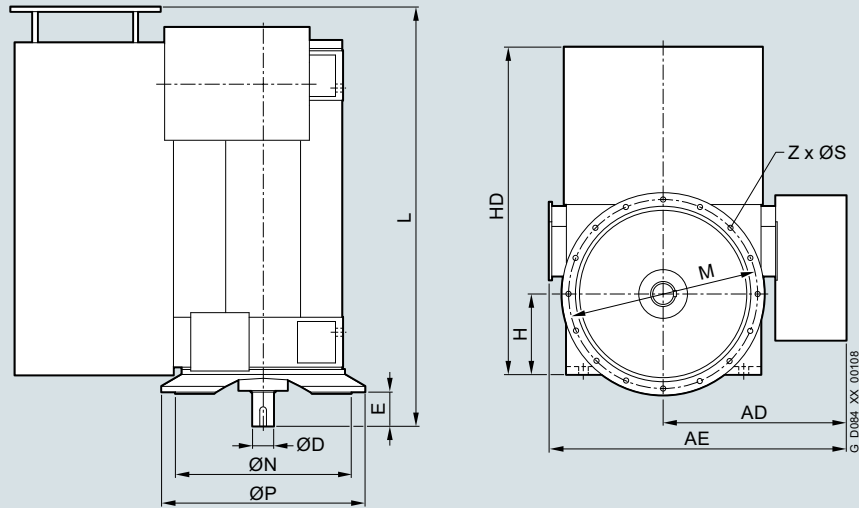
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
8-pole															
1RA1350-8....	2400	535	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1352-8....	2550	590	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1354-8....	2650	622	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1356-8....	2800	680	765	1275	95	130	355	1550	1890	190	840	780	900	22	8
1RA1400-8....	3250	759	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1402-8....	3400	811	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1404-8....	3600	875	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1406-8....	3800	943	815	1370	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1450-8....	4500	1003	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-8....	4700	1073	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-8....	4900	1133	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-8....	5150	1203	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-8....	5800	1437	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-8....	6150	1547	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-8....	6500	1677	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-8....	6950	1817	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-8....	9100	2418	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1562-8....	9300	2502	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1564-8....	9750	2661	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1566-8....	10350	2839	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1630-8....	12900	3216	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-8....	13400	3382	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-8....	13750	3477	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-8....	14350	3660	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



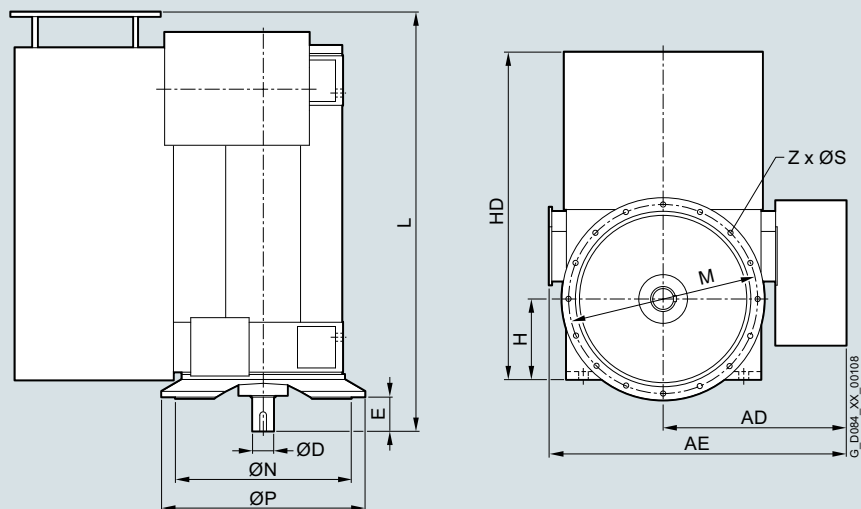
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
10-pole															
1RA1450-3....	4550	1045	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-3....	4750	1102	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-3....	4900	1159	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-3....	5100	1226	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-3....	5800	1448	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-3....	6100	1552	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-3....	6450	1664	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-3....	6850	1791	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-3....	8600	2149	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1560-3....	8600	2149	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1562-3....	9100	2340	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1564-3....	9550	2493	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1566-3....	10050	2673	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1630-3....	12100	3227	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-3....	12700	3440	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-3....	12300	3690	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-3....	14200	3996	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



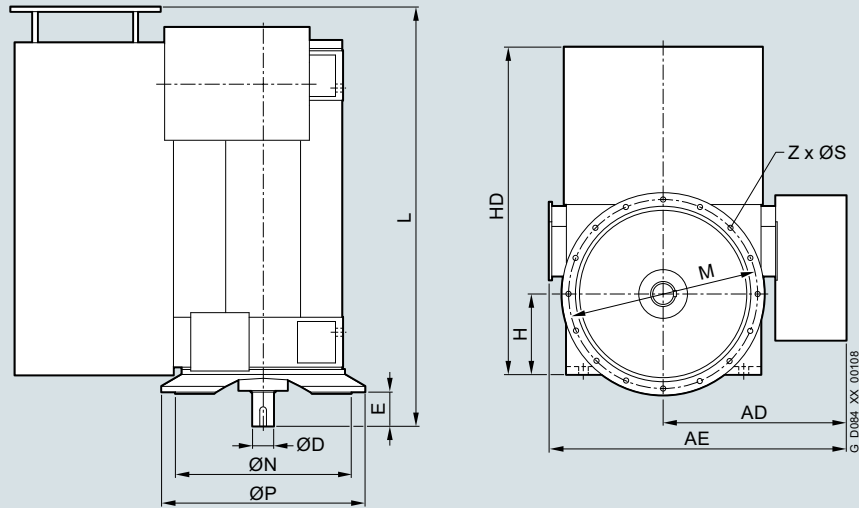
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
12-pole															
1RA1450-5....	4550	1108	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-5....	4700	1175	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-5....	4900	1231	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-5....	5100	1309	860	1455	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-5....	5800	1458	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-5....	6150	1561	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-5....	6450	1682	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-5....	6850	1807	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-5....	8550	2294	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1560-5....	8550	2294	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1562-5....	9150	2503	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1564-5....	9550	2685	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1566-5....	10100	2874	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1630-5....	12100	3393	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-5....	12700	3629	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-5....	13300	3884	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-5....	14150	4224	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



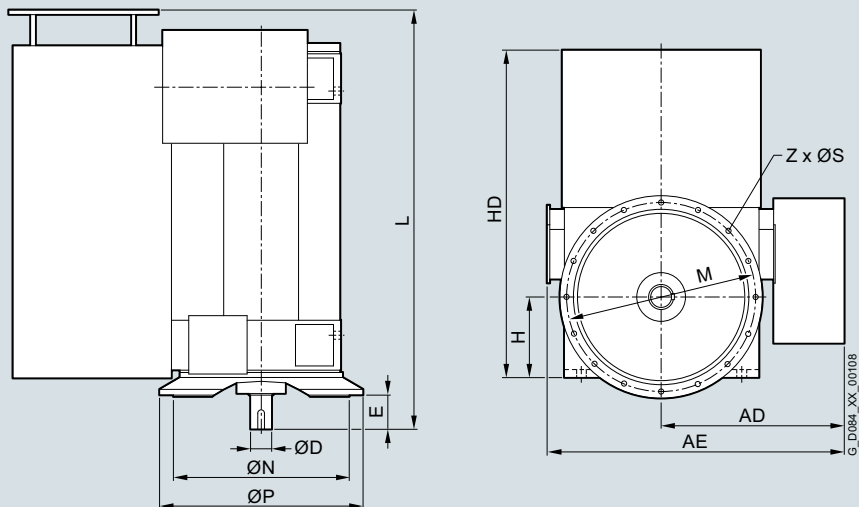
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
14-pole															
1RA1500-7....	5800	1461	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-7....	6150	1582	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-7....	6400	1693	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-7....	6800	1826	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-7....	8550	2469	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1560-7....	8550	2469	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1562-7....	9100	2699	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1564-7....	9600	2899	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1566-7....	10100	3119	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1630-7....	12050	3578	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-7....	12650	3831	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-7....	13250	4111	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-7....	14100	4477	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



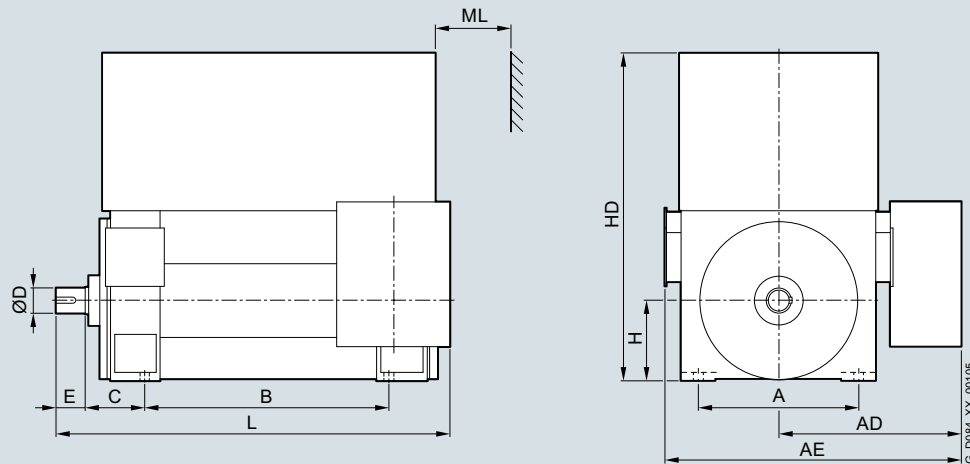
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
16-pole															
1RA1500-9....	5750	1466	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-9....	6100	1578	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-9....	6400	1689	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-9....	6800	1823	935	1605	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-9....	8550	2419	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1560-9....	8550	2419	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1562-9....	9000	2619	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1564-9....	9550	2899	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1566-9....	10100	3119	1090	1915	190	280	560	2250	2735	335	1320	1250	1400	26	16
1RA1630-9....	12000	3578	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-9....	12600	3831	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-9....	13200	4111	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-9....	14050	4487	1570	2510	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



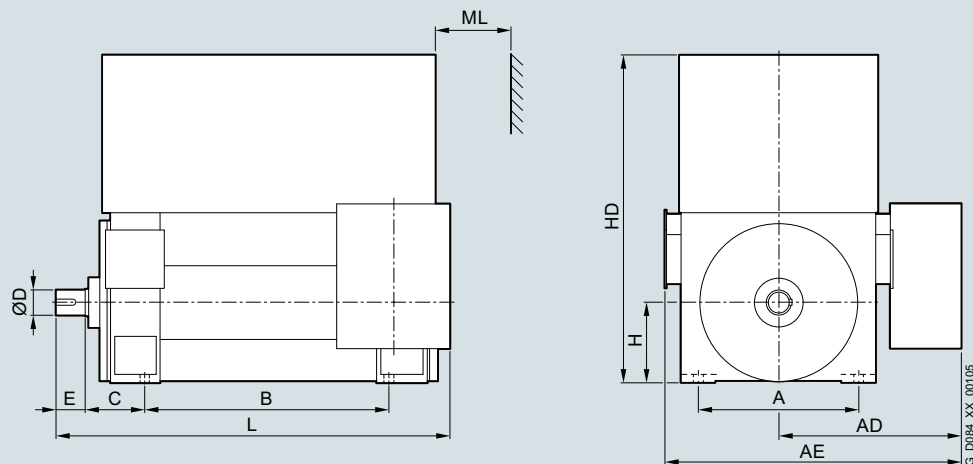
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
2-pole													
1RA1352-2....	2300	415	710	935	1445	1180	224	85	130	355	1550	1845	190
1RA1354-2....	2400	433	710	935	1445	1180	224	85	130	355	1550	1845	190
1RA1356-2....	2450	447	710	935	1445	1180	224	85	130	355	1550	1845	190
1RA1400-2....	2900	528	800	985	1545	1250	250	85	130	400	1740	1960	225
1RA1402-2....	3000	547	800	985	1545	1250	250	85	130	400	1740	1960	225
1RA1404-2....	3150	579	800	985	1545	1250	250	85	130	400	1740	1960	225
1RA1406-2....	3300	608	800	985	1545	1250	250	85	130	400	1740	1960	225
1RA1450-2....	3950	688	950	1040	1600	1400	250	95	130	450	1910	2140	285
1RA1452-2....	4050	718	950	1040	1600	1400	250	95	130	450	1910	2140	285
1RA1454-2....	4250	758	950	1040	1600	1400	250	95	130	450	1910	2140	285
1RA1456-2....	4500	808	950	1040	1600	1400	250	95	130	450	1910	2140	285

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



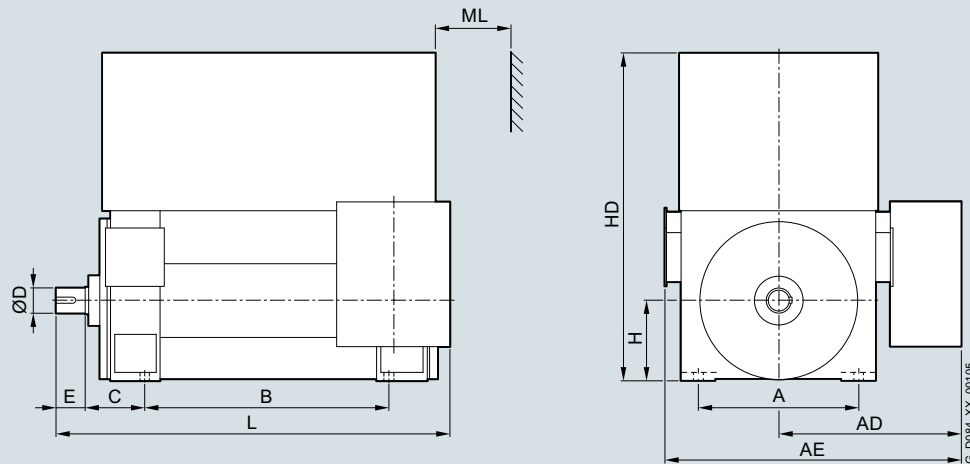
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
4-pole													
1RA1354-4....	2400	455	710	935	1445	1180	224	95	130	355	1550	1845	190
1RA1356-4....	2500	488	710	935	1445	1180	224	95	130	355	1550	1845	190
1RA1358-4....	2650	526	710	935	1445	1180	224	95	130	355	1550	1845	190
1RA1400-4....	3000	614	800	985	1545	1250	250	110	165	400	1740	1995	225
1RA1402-4....	3100	649	800	985	1545	1250	250	110	165	400	1740	1995	225
1RA1404-4....	3300	709	800	985	1545	1250	250	110	165	400	1740	1995	225
1RA1406-4....	3500	768	800	985	1545	1250	250	110	165	400	1740	1995	225
1RA1450-4....	4150	829	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1452-4....	4400	899	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1454-4....	4600	949	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1456-4....	4900	1019	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1500-4....	5350	1190	1060	1115	1785	1500	280	150	200	500	1890	2355	300
1RA1502-4....	5600	1270	1060	1115	1785	1500	280	150	200	500	1890	2355	300
1RA1504-4....	5850	1360	1060	1115	1785	1500	280	150	200	500	1890	2355	300
1RA1506-4....	6200	1460	1060	1115	1785	1500	280	150	200	500	1890	2355	300
1RA1560-4....	8750	2044	1250	1200	2025	1700	315	170	240	560	2250	2545	335
1RA1562-4....	9100	2136	1250	1200	2025	1700	315	170	240	560	2250	2545	335
1RA1564-4....	9400	2214	1250	1200	2025	1700	315	170	240	560	2250	2545	335
1RA1566-4....	9550	2249	1250	1200	2025	1700	315	170	240	560	2250	2545	335
1RA1630-4....	11400	2586	1400	1330	2270	1900	315	200	280	630	2470	2820	365
1RA1632-4....	12000	2741	1400	1330	2270	1900	315	200	280	630	2470	2820	365
1RA1634-4....	12500	2875	1400	1330	2270	1900	315	200	280	630	2470	2820	365
1RA1636-4....	13250	3056	1400	1330	2270	1900	315	200	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



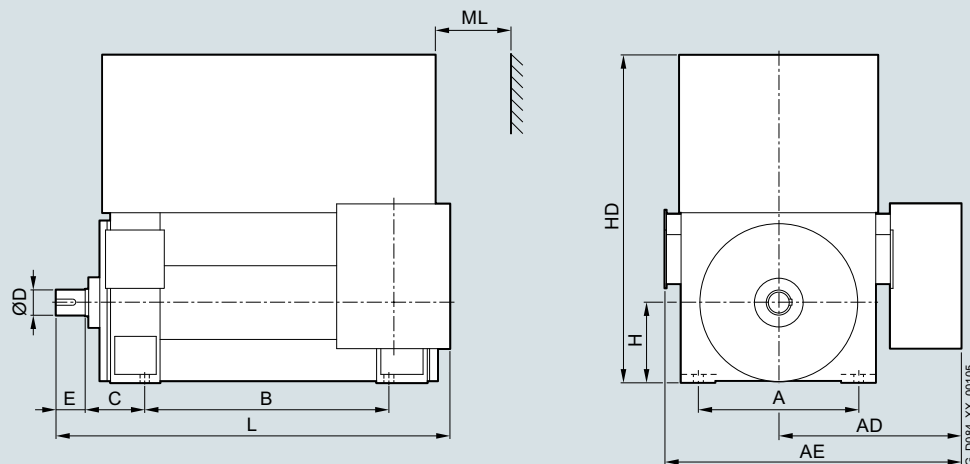
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
6-pole													
1RA1352-6....	2600	551	710	935	1445	1180	224	110	165	355	1550	1880	190
1RA1354-6....	2650	565	710	935	1445	1180	224	110	165	355	1550	1880	190
1RA1356-6....	2750	598	710	935	1445	1180	224	110	165	355	1550	1880	190
1RA1400-6....	3200	696	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1402-6....	3350	738	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1404-6....	3550	806	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1406-6....	3750	863	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1450-6....	4350	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1452-6....	4550	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1454-6....	4750	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1456-6....	4950	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1500-6....	5700	1444	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1502-6....	6000	1554	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1504-6....	6350	1684	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1506-6....	6750	1824	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1560-6....	8800	2441	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1562-6....	9050	2525	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1564-6....	9500	2684	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1566-6....	10000	2862	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1630-6....	12150	3216	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1632-6....	12700	3382	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1634-6....	12950	3477	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1636-6....	13550	3660	1400	1330	2270	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



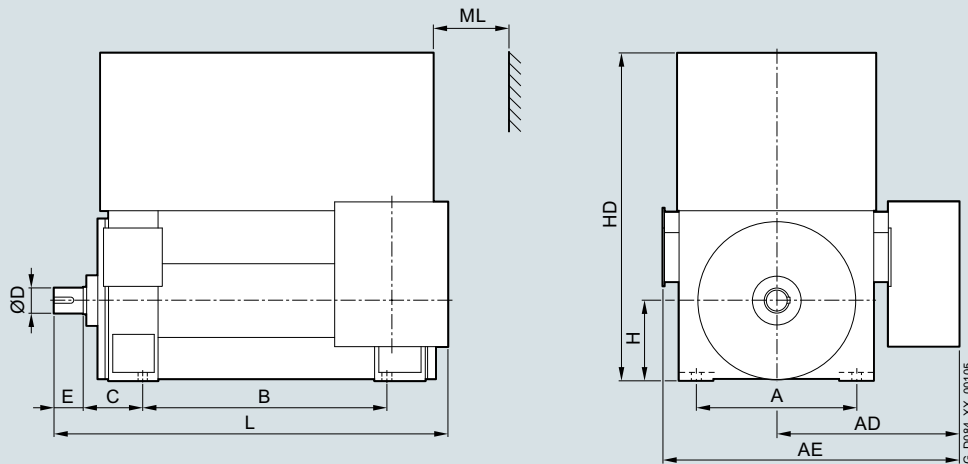
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
8-pole													
1RA1400-8....	3200	696	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1402-8....	3350	738	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1404-8....	3550	806	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1406-8....	3750	863	800	985	1545	1250	250	130	200	400	1740	2030	225
1RA1450-8....	4350	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1452-8....	4550	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1454-8....	4750	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1456-8....	4950	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1500-8....	5700	1444	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1502-8....	6000	1554	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1504-8....	6350	1684	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1506-8....	6750	1824	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1560-8....	8800	2441	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1562-8....	9050	2525	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1564-8....	9500	2684	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1566-8....	10000	2862	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1630-8....	12150	3216	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1632-8....	12700	3382	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1634-8....	12950	3477	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1636-8....	13550	3660	1400	1330	2270	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



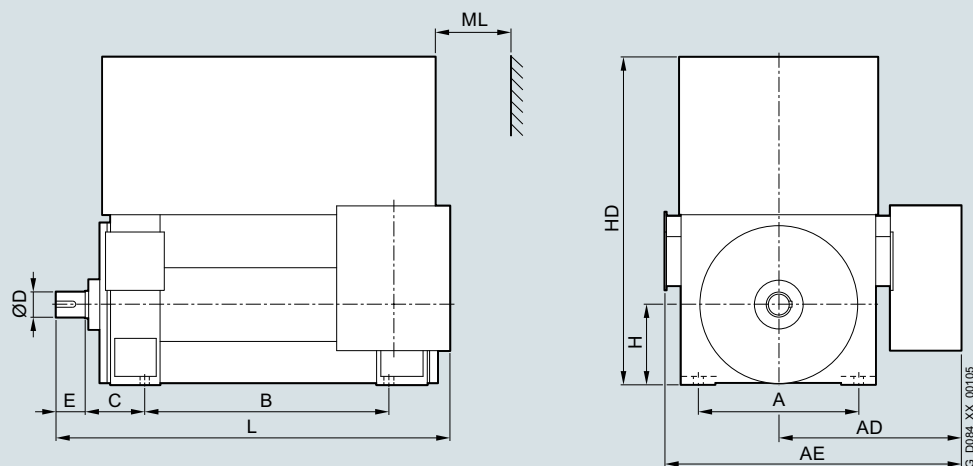
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
10-pole													
1RA1450-3....	4250	1045	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1452-3....	4450	1102	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1454-3....	4650	1159	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1456-3....	4850	1226	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RA1500-3....	5550	1448	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1502-3....	5850	1552	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1504-3....	6200	1664	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1506-3....	6600	1791	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1560-3....	8350	2249	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1560-3....	8350	2249	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1562-3....	8850	2449	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1564-3....	9350	2609	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1566-3....	9850	2799	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1630-3....	11450	3227	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1632-3....	12000	3440	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1634-3....	12650	3690	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1636-3....	13450	3996	1400	1330	2270	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



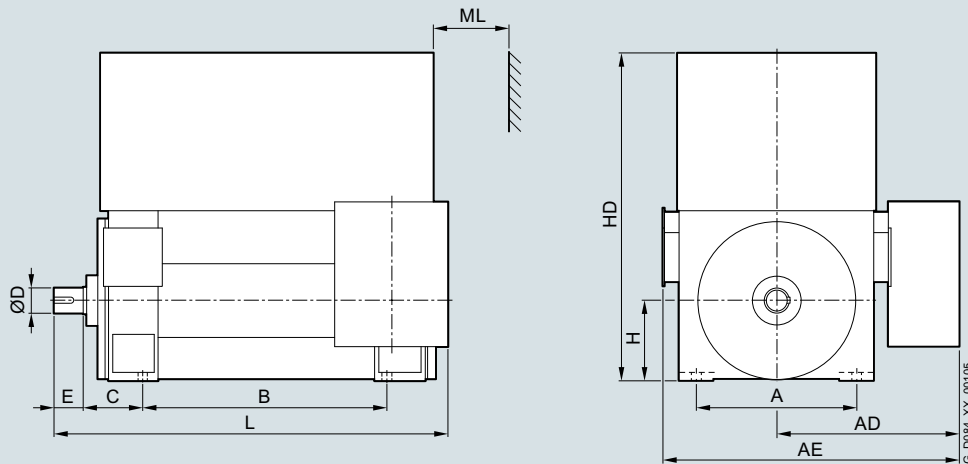
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
12-pole													
1RA1500-5....	5500	1458	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1502-5....	5850	1561	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1504-5....	6200	1682	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1506-5....	6600	1807	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1560-5....	8350	2399	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1560-5....	8350	2399	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1562-5....	8900	2619	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1564-5....	9350	2809	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1566-5....	9900	3009	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1630-5....	11450	3393	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1632-5....	12050	3629	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1634-5....	12650	3884	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1636-5....	13450	4224	1400	1330	2270	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



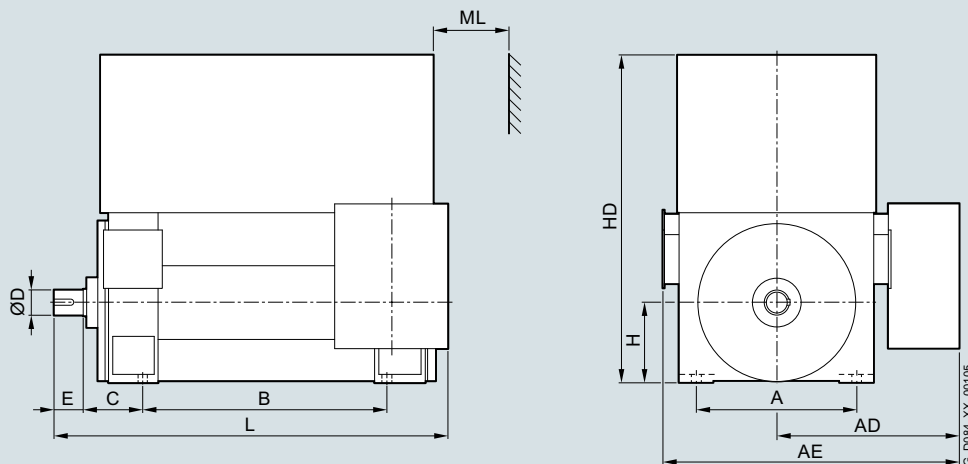
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
14-pole													
1RA1500-7....	5850	1582	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1502-7....	5850	1582	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1504-7....	6200	1693	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1506-7....	6550	1826	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1560-7....	8250	2469	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1560-7....	8300	2469	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1562-7....	8850	2699	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1564-7....	9300	2899	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1566-7....	9800	3119	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1630-7....	11350	3578	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1632-7....	11950	3831	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1634-7....	12550	4111	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1636-7....	13350	4477	1400	1330	2270	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



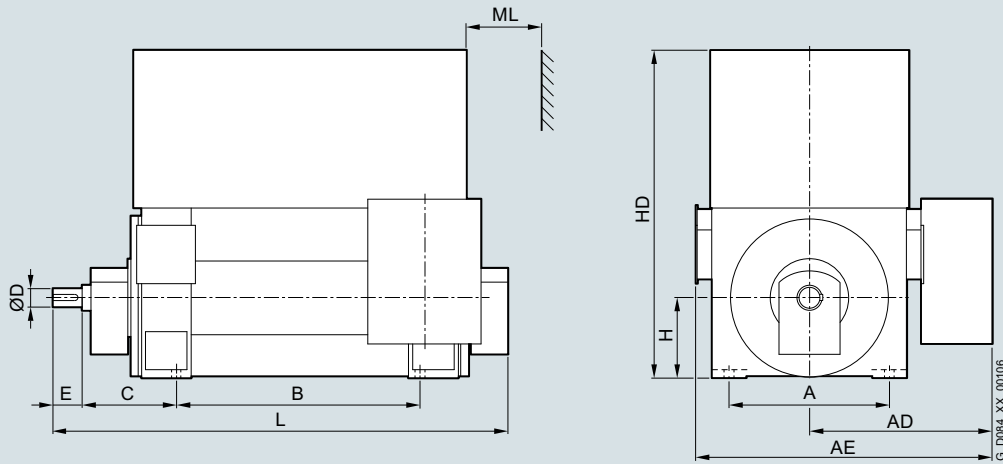
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
16-pole													
1RA1500-9....	5500	1466	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1502-9....	5800	1578	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1504-9....	6150	1689	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1506-9....	6550	1823	1060	1115	1785	1500	280	160	240	500	1890	2395	300
1RA1560-9....	8200	2419	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1560-9....	8250	2419	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1562-9....	8750	2619	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1564-9....	9250	2899	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1566-9....	9800	3119	1250	1200	2025	1700	315	190	280	560	2250	2545	335
1RA1630-9....	11300	3578	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1632-9....	11850	3831	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1634-9....	12450	4111	1400	1330	2270	1900	315	220	280	630	2470	2820	365
1RA1636-9....	13300	4487	1400	1330	2270	1900	315	220	280	630	2470	2820	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



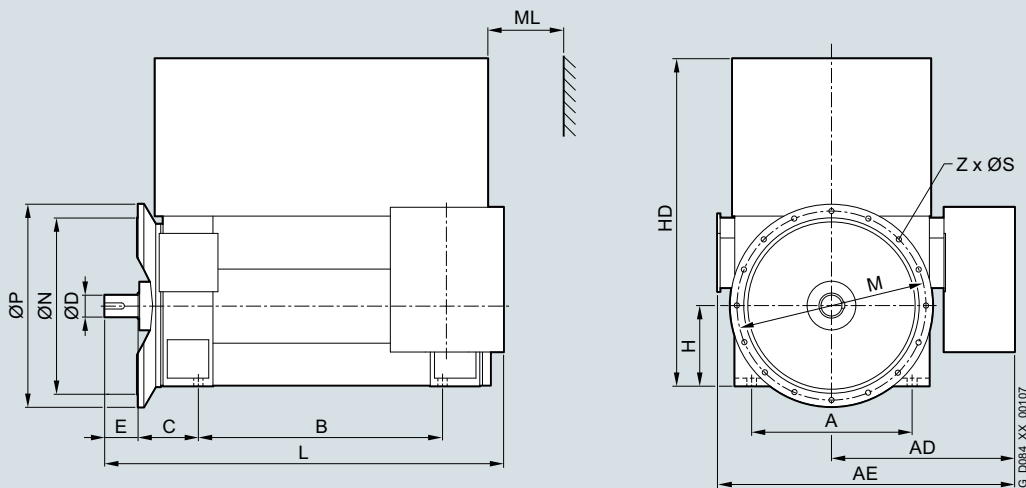
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, sleeve bearings													
2-pole													
1RA1400-2....	2900	455	800	985	1545	1250	425	85	130	400	1740	2150	225
1RA1402-2....	3000	474	800	985	1545	1250	425	85	130	400	1740	2150	225
1RA1404-2....	3150	517	800	985	1545	1250	425	85	130	400	1740	2150	225
1RA1406-2....	3300	547	800	985	1545	1250	425	85	130	400	1740	2150	225
1RA1450-2....	4050	650	950	1040	1600	1400	450	95	130	450	1910	2375	285
1RA1452-2....	4150	680	950	1040	1600	1400	450	95	130	450	1910	2375	285
1RA1454-2....	4400	728	950	1040	1600	1400	450	95	130	450	1910	2375	285
1RA1456-2....	4600	778	950	1040	1600	1400	450	95	130	450	1910	2375	285
1RA1500-2....	5500	1145	1060	1115	1785	1500	475	110	165	500	1890	2600	300
1RA1502-2....	5650	1175	1060	1115	1785	1500	475	110	165	500	1890	2600	300
1RA1504-2....	5950	1258	1060	1115	1785	1500	475	110	165	500	1890	2600	300
1RA1506-2....	6300	1338	1060	1115	1785	1500	475	110	165	500	1890	2600	300
1RA1560-2....	7950	1441	1250	1200	2025	1700	530	140	200	560	2250	2725	355
1RA1562-2....	8350	1488	1250	1200	2025	1700	530	140	200	560	2250	2725	355
1RA1564-2....	8850	1610	1250	1200	2025	1700	530	140	200	560	2250	2725	355
1RA1566-2....	9200	1675	1250	1200	2025	1700	530	140	200	560	2250	2725	355
1RA1630-2....	11050	1899	1400	1330	2270	1900	530	160	240	630	2470	3140	365
1RA1632-2....	11500	1989	1400	1330	2270	1900	530	160	240	630	2470	3140	365
1RA1634-2....	12100	2092	1400	1330	2270	1900	530	160	240	630	2470	3140	365
1RA1636-2....	12750	2207	1400	1330	2270	1900	530	160	240	630	2470	3140	365

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



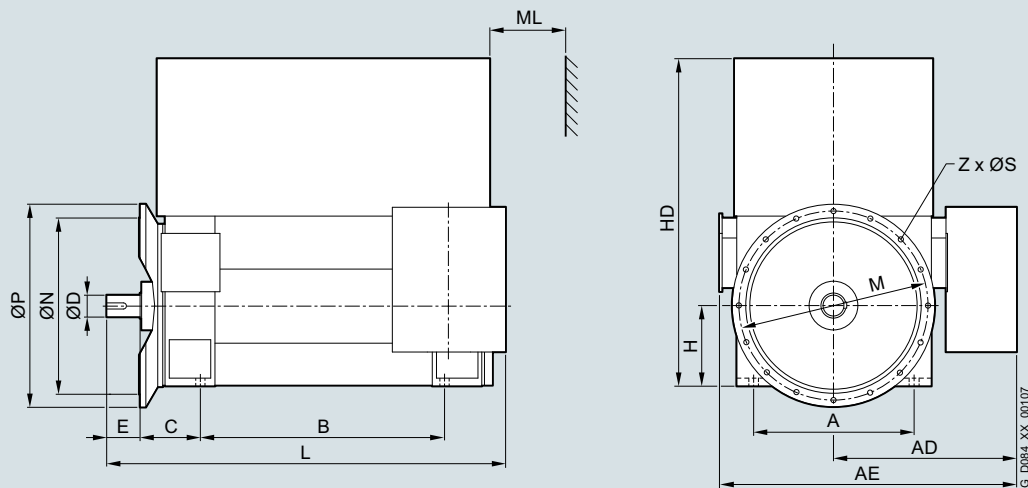
Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM B35 type of construction, anti-friction bearings																		
2-pole																		
1RA1352-2....	2350	415	710	935	1445	1180	224	85	130	355	1550	1845	190	840	780	900	22	8
1RA1354-2....	2450	433	710	935	1445	1180	224	85	130	355	1550	1845	190	840	780	900	22	8
1RA1356-2....	2500	447	710	935	1445	1180	224	85	130	355	1550	1845	190	840	780	900	22	8
1RA1400-2....	3000	528	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RA1402-2....	3100	547	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RA1404-2....	3200	579	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RA1406-2....	3350	608	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RA1450-2....	4100	688	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8
1RA1452-2....	4200	718	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8
1RA1454-2....	4400	758	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8
1RA1456-2....	4600	808	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



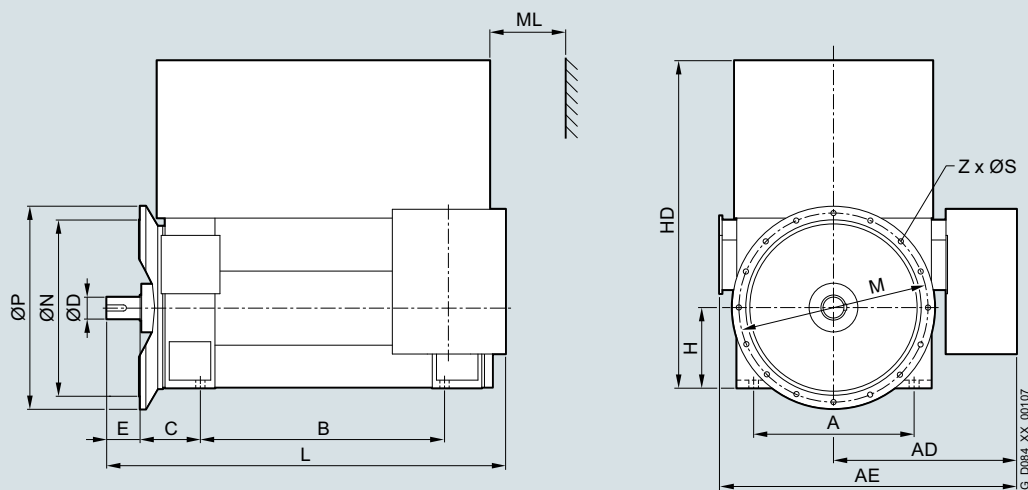
Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM B35 type of construction, anti-friction bearings																		
4-pole																		
1RA1354-4....	2550	455	710	935	1445	1180	224	95	130	355	1550	1845	190	840	780	900	22	8
1RA1356-4....	2600	488	710	935	1445	1180	224	95	130	355	1550	1845	190	840	780	900	22	8
1RA1358-4....	2750	526	710	935	1445	1180	224	95	130	355	1550	1845	190	840	780	900	22	8
1RA1400-4....	3150	614	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RA1402-4....	3250	649	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RA1404-4....	3450	709	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RA1406-4....	3650	768	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RA1450-4....	4300	829	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1452-4....	4500	899	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1454-4....	4750	949	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1456-4....	5000	1019	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1500-4....	5450	1190	1060	1115	1785	1500	280	150	200	500	1890	2355	300	1180	1120	1250	26	16
1RA1502-4....	5750	1270	1060	1115	1785	1500	280	150	200	500	1890	2355	300	1180	1120	1250	26	16
1RA1504-4....	6000	1360	1060	1115	1785	1500	280	150	200	500	1890	2355	300	1180	1120	1250	26	16
1RA1506-4....	6350	1460	1060	1115	1785	1500	280	150	200	500	1890	2355	300	1180	1120	1250	26	16
1RA1560-4....	8850	2044	1250	1200	2025	1700	315	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-4....	9200	2136	1250	1200	2025	1700	315	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-4....	9500	2214	1250	1200	2025	1700	315	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-4....	9650	2249	1250	1200	2025	1700	315	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-4....	11650	2586	1400	1330	2270	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-4....	12250	2741	1400	1330	2270	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-4....	12700	2875	1400	1330	2270	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-4....	13450	3056	1400	1330	2270	1900	315	200	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



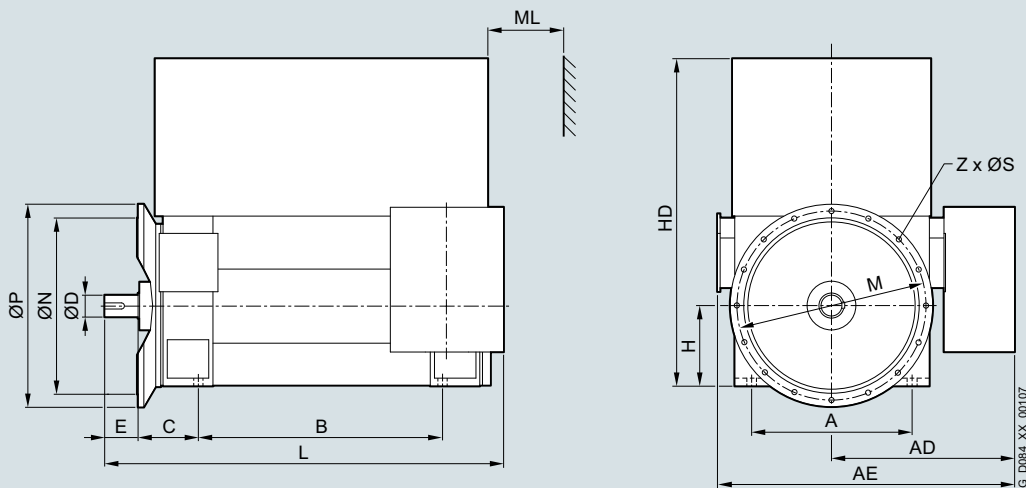
Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM B35 type of construction, anti-friction bearings																		
6-pole																		
1RA1352-6....	2700	551	710	935	1445	1180	224	110	165	355	1550	1880	190	840	780	900	22	8
1RA1354-6....	2700	565	710	935	1445	1180	224	110	165	355	1550	1880	190	840	780	900	22	8
1RA1356-6....	2850	598	710	935	1445	1180	224	110	165	355	1550	1880	190	840	780	900	22	8
1RA1400-6....	3300	696	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1402-6....	3400	738	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1404-6....	3650	806	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1406-6....	3850	863	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1450-6....	4500	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1452-6....	4700	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1454-6....	4900	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1456-6....	5100	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1500-6....	5800	1444	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1502-6....	6150	1554	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1504-6....	6450	1684	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1506-6....	6900	1824	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1560-6....	9000	2441	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-6....	9200	2525	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-6....	9650	2684	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-6....	10200	2862	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-6....	12400	3216	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-6....	12900	3382	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-6....	13200	3477	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-6....	13750	3660	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



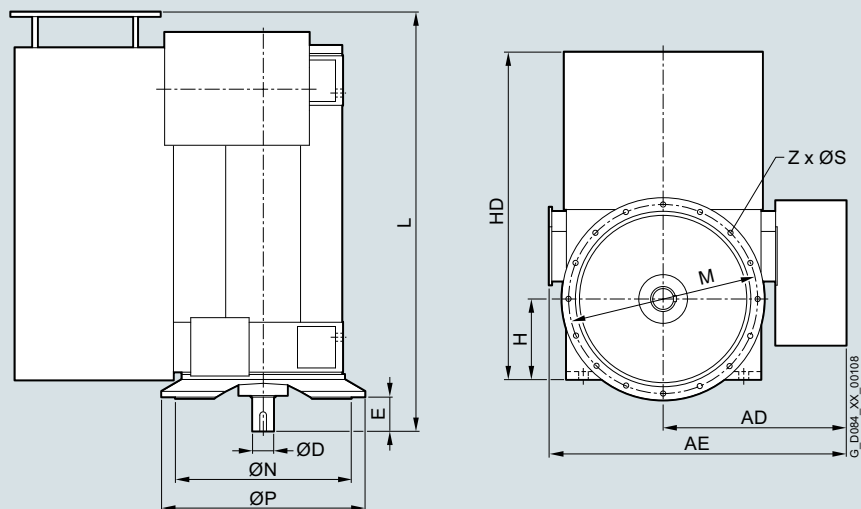
Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM B35 type of construction, anti-friction bearings																		
8-pole																		
1RA1400-8....	3300	696	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1402-8....	3400	738	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1404-8....	3650	806	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1406-8....	3850	863	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RA1450-8....	4500	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1452-8....	4700	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1454-8....	4900	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1456-8....	5100	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RA1500-8....	5800	1444	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1502-8....	6150	1554	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1504-8....	6450	1684	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1506-8....	6900	1824	1060	1115	1785	1500	280	160	240	500	1890	2395	300	1180	1120	1250	26	16
1RA1560-8....	9000	2441	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-8....	9200	2525	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-8....	9650	2684	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-8....	10200	2862	1250	1200	2025	1700	315	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-8....	12400	3216	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-8....	12900	3382	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-8....	13200	3477	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-8....	13750	3660	1400	1330	2270	1900	315	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



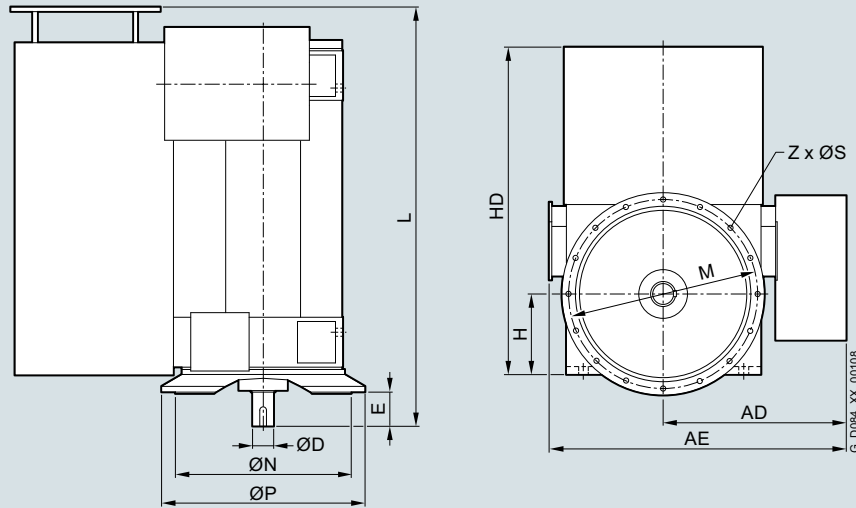
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
4-pole															
1RA1354-4....	2450	486	935	1445	95	130	355	1550	1890	190	840	780	900	22	8
1RA1356-4....	2550	525	935	1445	95	130	355	1550	1890	190	840	780	900	22	8
1RA1358-4....	2700	545	935	1445	95	130	355	1550	1890	190	840	780	900	22	8
1RA1400-4....	3050	614	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1402-4....	3150	649	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1404-4....	3350	709	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1406-4....	3550	768	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1450-4....	4300	823	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-4....	4500	893	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-4....	4750	943	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-4....	5000	1013	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-4....	5500	1181	1015	1685	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-4....	5750	1261	1015	1685	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-4....	6000	1351	1015	1685	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-4....	6350	1451	1015	1685	150	200	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-4....	8850	2021	1200	2025	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-4....	9200	2113	1200	2025	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-4....	9500	2191	1200	2025	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-4....	9700	2226	1200	2025	170	240	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-4....	11900	2586	1330	2270	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-4....	12500	2741	1330	2270	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-4....	13000	2875	1330	2270	200	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-4....	13700	3056	1330	2270	200	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



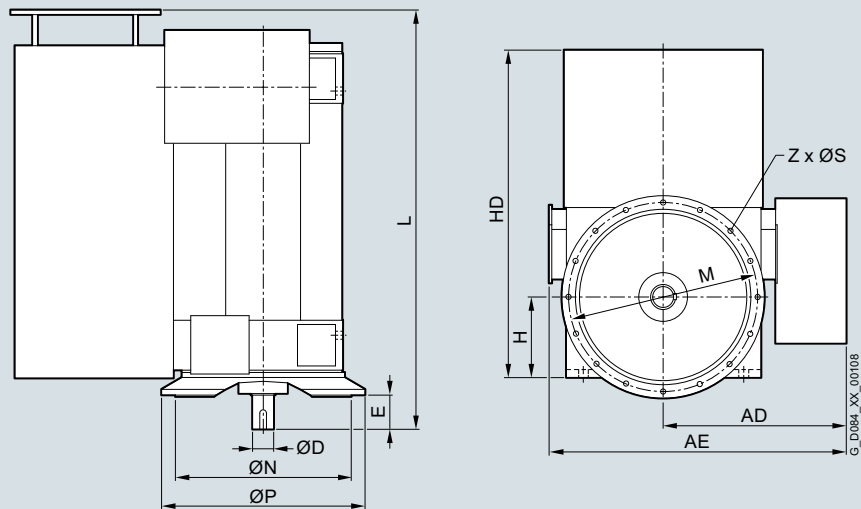
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
6-pole															
1RA1352-6....	2650	590	935	1445	95	130	355	1550	1890	190	840	780	900	22	8
1RA1354-6....	2700	622	935	1445	95	130	355	1550	1890	190	840	780	900	22	8
1RA1356-6....	2850	680	935	1445	95	130	355	1550	1890	190	840	780	900	22	8
1RA1400-6....	3300	759	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1402-6....	3450	811	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1404-6....	3650	875	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1406-6....	3850	943	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1450-6....	4500	1003	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-6....	4700	1073	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-6....	4900	1133	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-6....	5100	1203	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-6....	5800	1437	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-6....	6150	1547	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-6....	6450	1677	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-6....	6900	1817	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-6....	9000	2418	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-6....	9250	2502	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-6....	9700	2661	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-6....	10200	2839	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-6....	12700	3216	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-6....	13200	3382	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-6....	13450	3477	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-6....	14050	3660	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



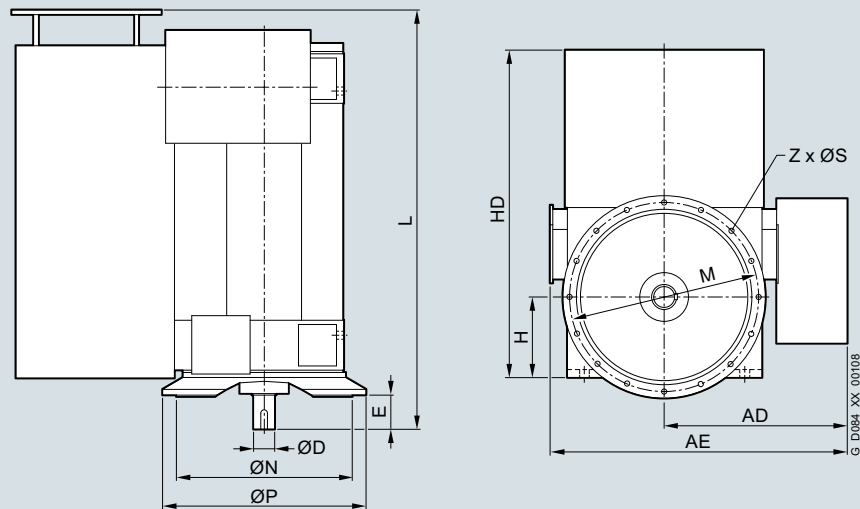
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
8-pole															
1RA1400-8....	3300	759	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1402-8....	3450	811	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1404-8....	3650	875	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1406-8....	3850	943	985	1545	120	165	400	1740	2060	225	940	880	1000	22	8
1RA1450-8....	4500	1003	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-8....	4700	1073	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-8....	4900	1133	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-8....	5100	1203	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-8....	5800	1437	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-8....	6150	1547	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-8....	6450	1677	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-8....	6900	1817	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-8....	9000	2418	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-8....	9250	2502	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-8....	9700	2661	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-8....	10200	2839	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-8....	12700	3216	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-8....	13200	3382	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-8....	13450	3477	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-8....	14050	3660	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



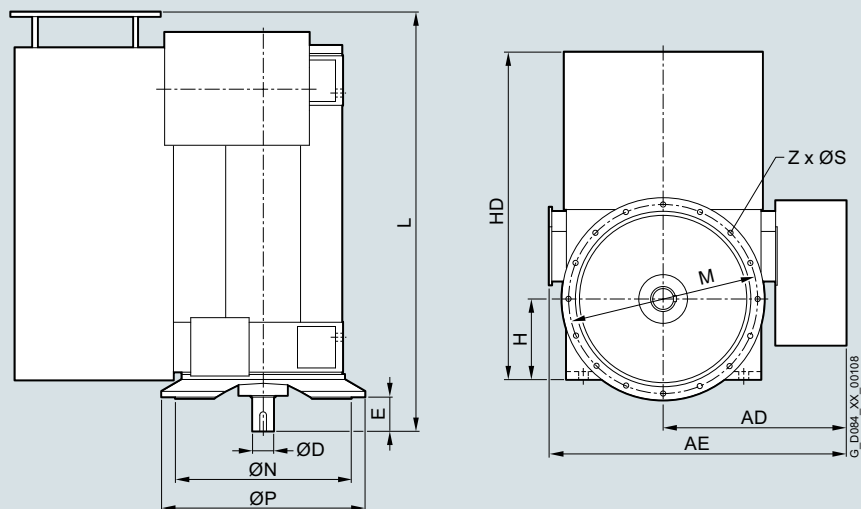
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
10-pole															
1RA1450-3....	4400	1045	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1452-3....	4600	1102	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1454-3....	4750	1159	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1456-3....	4950	1226	940	1535	130	200	450	1910	2290	285	1080	1000	1150	26	8
1RA1500-3....	5750	1448	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-3....	6050	1552	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-3....	6400	1664	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-3....	6750	1791	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-3....	8550	2227	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1560-3....	8550	2227	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-3....	9050	2427	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-3....	9550	2587	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-3....	10050	2777	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-3....	11950	3227	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-3....	12500	3440	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-3....	13150	3690	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-3....	14000	3996	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



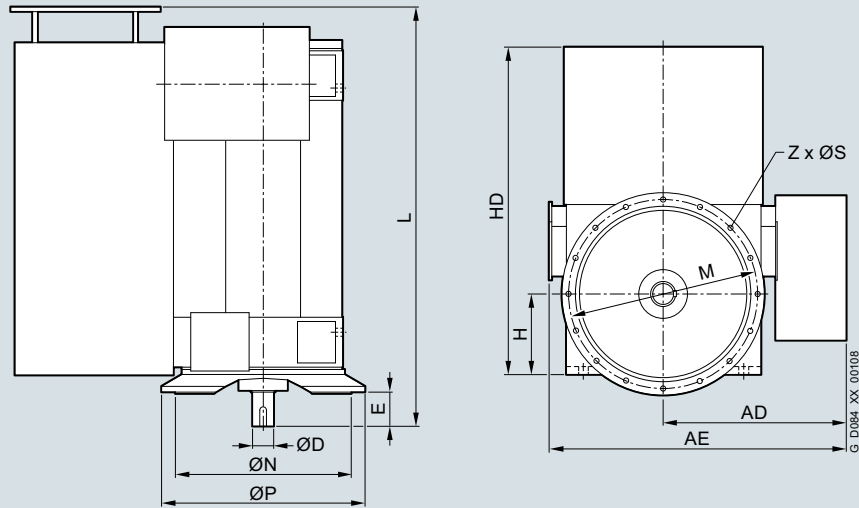
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
12-pole															
1RA1500-5....	5700	1458	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-5....	6050	1561	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-5....	6400	4390	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-5....	6800	4630	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-5....	8550	2377	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1560-5....	8550	2377	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-5....	9100	2597	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-5....	9600	2789	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-5....	10100	2987	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-5....	11950	3393	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-5....	12500	3629	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-5....	13150	3884	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-5....	13950	4220	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



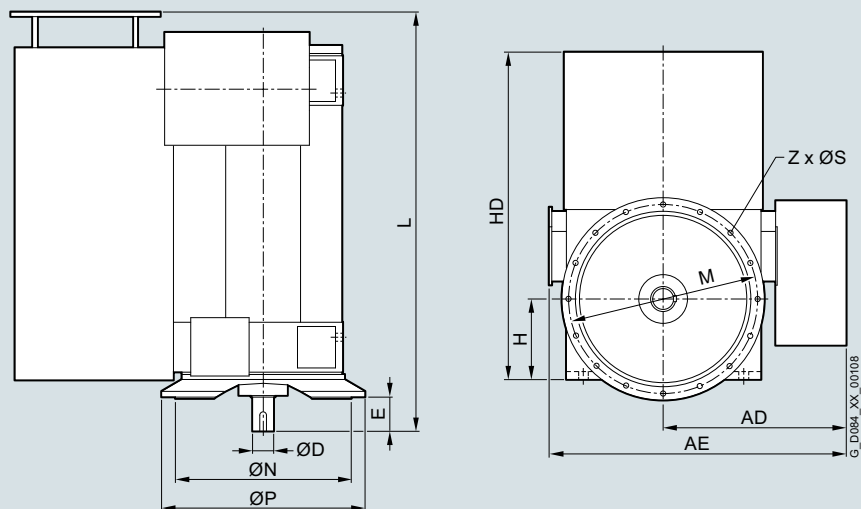
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
14-pole															
1RA1500-7....	6000	1582	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-7....	6000	1582	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-7....	6400	1693	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-7....	6750	1826	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-7....	8450	2469	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1560-7....	8500	2469	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-7....	9050	2699	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-7....	9550	2899	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-7....	10050	3119	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-7....	11850	3578	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-7....	12450	3831	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-7....	13100	4111	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-7....	13850	4477	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



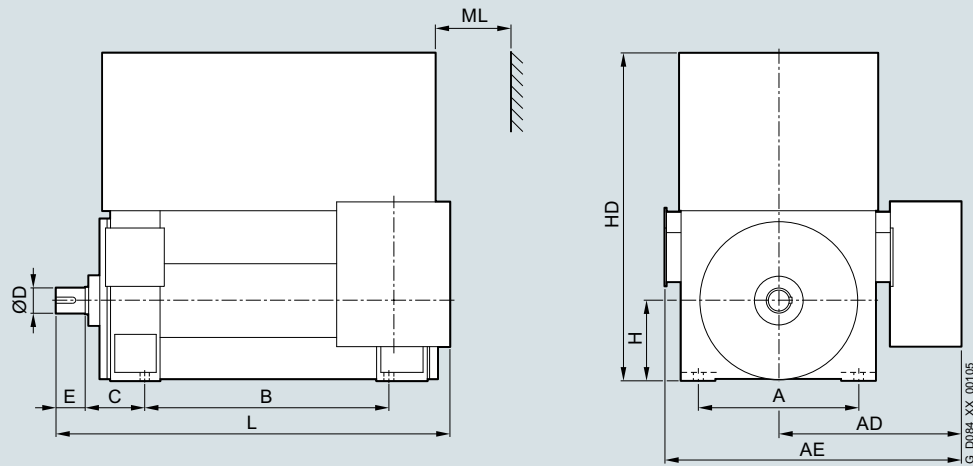
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
16-pole															
1RA1500-9....	5700	1466	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1502-9....	6000	1578	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1504-9....	6350	1689	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1506-9....	6750	1823	1015	1685	160	240	500	1890	2435	300	1180	1120	1250	26	16
1RA1560-9....	8500	2419	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1560-9....	8500	2419	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1562-9....	8950	2619	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1564-9....	9450	2899	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1566-9....	10000	3119	1200	2025	190	280	560	2250	2545	335	1320	1250	1400	26	16
1RA1630-9....	11800	3578	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1632-9....	12350	3831	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1634-9....	12950	4111	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16
1RA1636-9....	13800	4487	1330	2270	220	280	630	2470	2820	365	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings



Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
2-pole													
1RP1350-2....	2150	400	710	765	1275	1180	224	85	130	355	1550	1740	190
1RP1352-2....	2200	415	710	765	1275	1180	224	85	130	355	1550	1740	190
1RP1354-2....	2300	433	710	765	1275	1180	224	85	130	355	1550	1740	190
1RP1356-2....	2350	447	710	765	1275	1180	224	85	130	355	1550	1740	190
1RP1400-2....	2850	528	800	815	1370	1250	250	85	130	400	1740	1860	225
1RP1402-2....	2950	547	800	815	1370	1250	250	85	130	400	1740	1860	225
1RP1404-2....	3050	579	800	815	1370	1250	250	85	130	400	1740	1860	225
1RP1406-2....	3200	608	800	815	1370	1250	250	85	130	400	1740	1860	225
1RP1450-2.... ¹⁾	3900	688	950	870	1480	1400	250	95	130	450	1910	2035	285
1RP1452-2.... ¹⁾	4050	718	950	870	1480	1400	250	95	130	450	1910	2035	285
1RP1454-2.... ¹⁾	4250	758	950	870	1480	1400	250	95	130	450	1910	2035	285
1RP1456-2.... ¹⁾	4450	808	950	870	1480	1400	250	95	130	450	1910	2035	285
4-pole													
1RP1350-4....	2200	422	710	765	1275	1180	224	95	130	355	1550	1740	190
1RP1352-4....	2350	455	710	765	1275	1180	224	95	130	355	1550	1740	190
1RP1354-4....	2400	488	710	765	1275	1180	224	95	130	355	1550	1740	190
1RP1356-4....	2550	526	710	765	1275	1180	224	95	130	355	1550	1740	190
1RP1400-4....	3000	614	800	815	1370	1250	250	110	165	400	1740	1900	225
1RP1402-4....	3100	649	800	815	1370	1250	250	110	165	400	1740	1900	225
1RP1404-4....	3300	709	800	815	1370	1250	250	110	165	400	1740	1900	225
1RP1406-4....	3500	768	800	815	1370	1250	250	110	165	400	1740	1900	225
1RP1450-4....	4100	829	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1452-4....	4350	899	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1454-4....	4600	949	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1456-4....	4850	1019	950	870	1480	1400	250	130	200	450	1910	2115	285

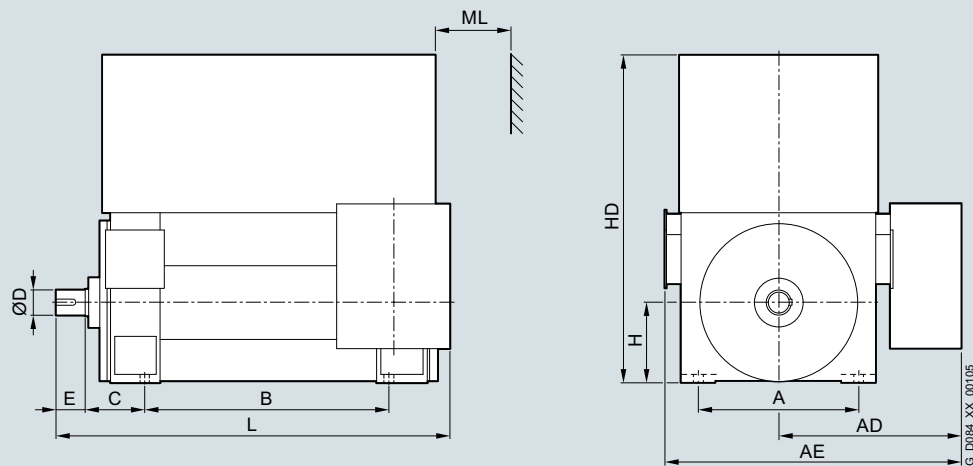
¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)

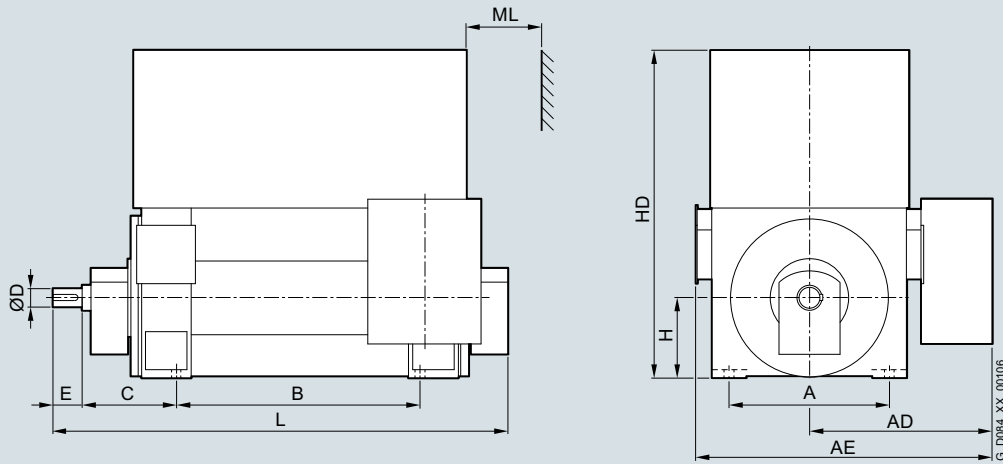


Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
6-pole													
1RP1350-6....	2350	535	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1352-6....	2500	590	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1354-6....	2600	622	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1356-6....	2750	680	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1400-6....	3150	759	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1402-6....	3300	811	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1404-6....	3500	875	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1406-6....	3700	943	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1450-6....	4300	1008	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1452-6....	4500	1078	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1454-6....	4700	1138	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1456-6....	4950	1208	950	870	1480	1400	250	130	200	450	1910	2115	285
8-pole													
1RP1350-8....	2350	535	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1352-8....	2500	590	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1354-8....	2600	622	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1356-8....	2750	680	710	765	1275	1180	224	110	165	355	1550	1775	190
1RP1400-8....	3150	759	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1402-8....	3300	811	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1404-8....	3500	875	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1406-8....	3700	943	800	815	1370	1250	250	130	200	400	1740	1935	225
1RP1450-8....	4300	1008	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1452-8....	4500	1078	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1454-8....	4700	1138	950	870	1480	1400	250	130	200	450	1910	2115	285
1RP1456-8....	4950	1208	950	870	1480	1400	250	130	200	450	1910	2115	285

Motors for operation on line or with SINAMICS PERFECT HARMONY converters
Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)

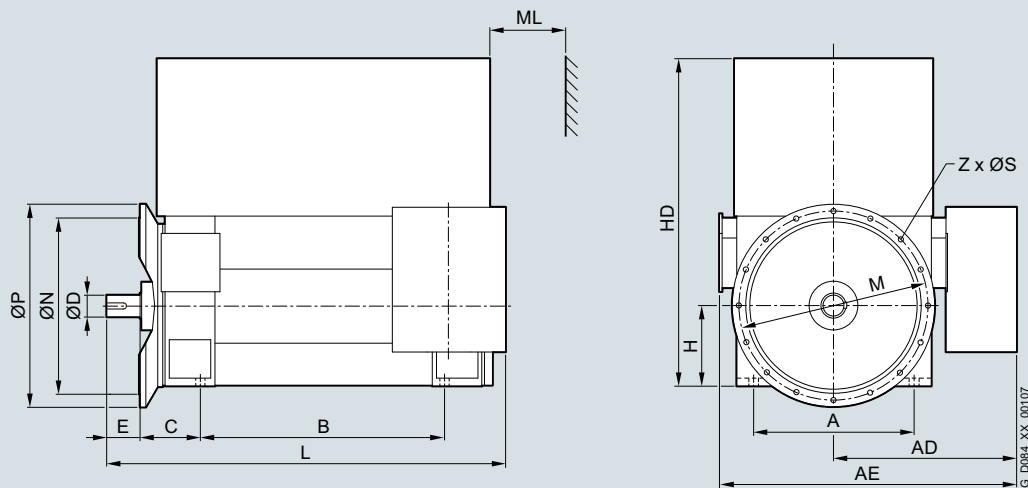


Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, sleeve bearings													
2-pole													
1RP1400-2....	2850	455	800	815	1370	1250	425	85	130	400	1740	2150	225
1RP1402-2....	2900	476	800	815	1370	1250	425	85	130	400	1740	2150	225
1RP1404-2....	3050	517	800	815	1370	1250	425	85	130	400	1740	2150	225
1RP1406-2....	3200	547	800	815	1370	1250	425	85	130	400	1740	2150	225
1RP1450-2....	3950	650	950	870	1480	1400	450	95	130	450	1910	2375	285
1RP1452-2....	4100	680	950	870	1480	1400	450	95	130	450	1910	2375	285
1RP1454-2....	4300	728	950	870	1480	1400	450	95	130	450	1910	2375	285
1RP1456-2....	4550	778	950	870	1480	1400	450	95	130	450	1910	2375	285

2

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1**Dimensional drawings** (continued)

Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM B35 type of construction, anti-friction bearings																		
2-pole																		
1RP1350-2....	2200	400	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RP1352-2....	2300	415	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RP1354-2....	2400	433	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RP1356-2....	2450	447	710	765	1275	1180	224	85	130	355	1550	1740	190	840	780	900	22	8
1RP1400-2....	2900	528	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RP1402-2....	3000	547	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RP1404-2....	3100	579	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RP1406-2....	3300	608	800	815	1370	1250	250	85	130	400	1740	1860	225	940	880	1000	22	8
1RP1450-2.... ¹⁾	4050	688	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8
1RP1452-2.... ¹⁾	4150	718	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8
1RP1454-2.... ¹⁾	4350	758	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8
1RP1456-2.... ¹⁾	4600	808	950	870	1480	1400	250	95	130	450	1910	2035	285	1080	1000	1150	26	8
4-pole																		
1RP1350-4....	2300	422	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RP1352-4....	2400	455	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RP1354-4....	2500	488	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RP1356-4....	2600	526	710	765	1275	1180	224	95	130	355	1550	1740	190	840	780	900	22	8
1RP1400-4....	3050	614	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RP1402-4....	3150	649	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RP1404-4....	3350	709	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RP1406-4....	3550	768	800	815	1370	1250	250	110	165	400	1740	1900	225	940	880	1000	22	8
1RP1450-4....	4250	829	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1452-4....	4500	899	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1454-4....	4700	949	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1456-4....	5000	1019	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8

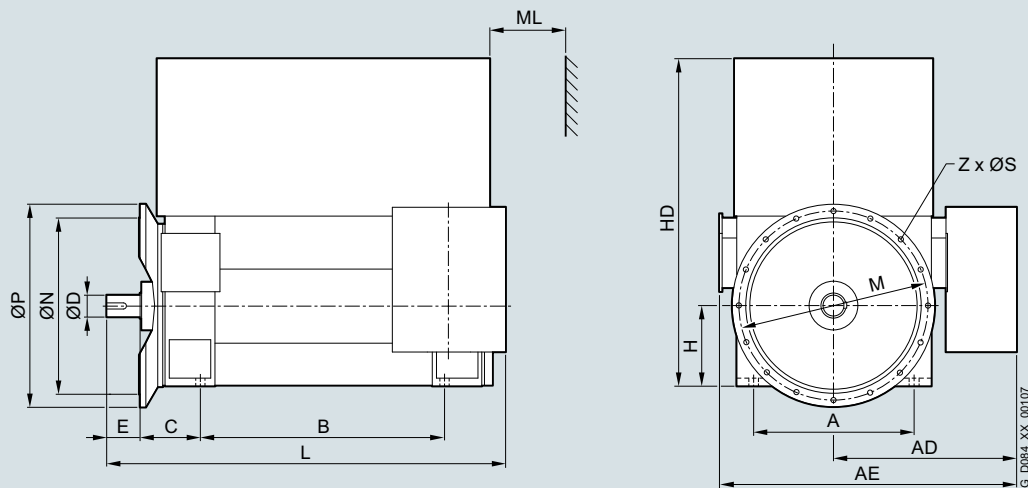
¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

6-pole

1RP1350-6....	2400	535	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1352-6....	2550	590	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1354-6....	2650	622	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1356-6....	2800	680	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1400-6....	3250	759	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1402-6....	3400	811	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1404-6....	3600	875	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1406-6....	3800	943	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1450-6....	4450	1008	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1452-6....	4650	1078	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1454-6....	4850	1138	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1456-6....	5100	1208	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8

8-pole

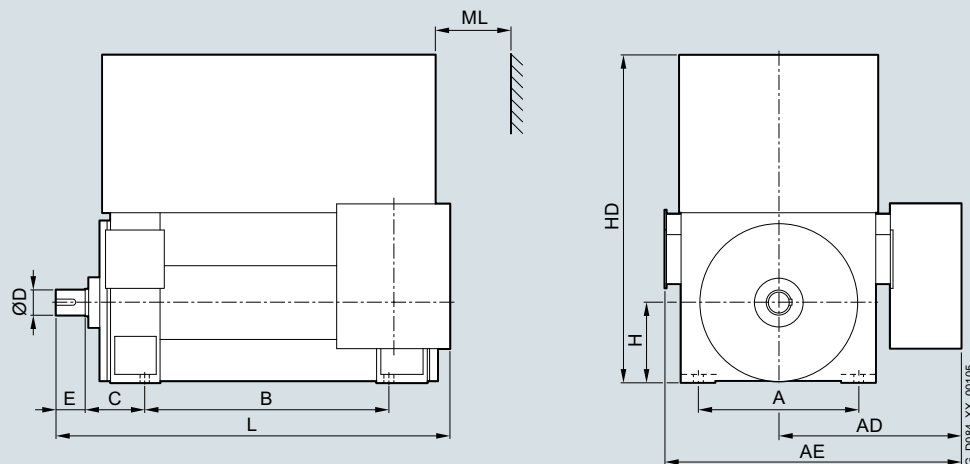
1RP1350-8....	2400	535	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1352-8....	2550	590	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1354-8....	2650	622	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1356-8....	2800	680	710	765	1275	1180	224	110	165	355	1550	1775	190	840	780	900	22	8
1RP1400-8....	3250	759	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1402-8....	3400	811	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1404-8....	3600	875	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1406-8....	3800	943	800	815	1370	1250	250	130	200	400	1740	1935	225	940	880	1000	22	8
1RP1450-8....	4450	1008	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1452-8....	4650	1078	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1454-8....	4850	1138	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8
1RP1456-8....	5100	1208	950	870	1480	1400	250	130	200	450	1910	2115	285	1080	1000	1150	26	8

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



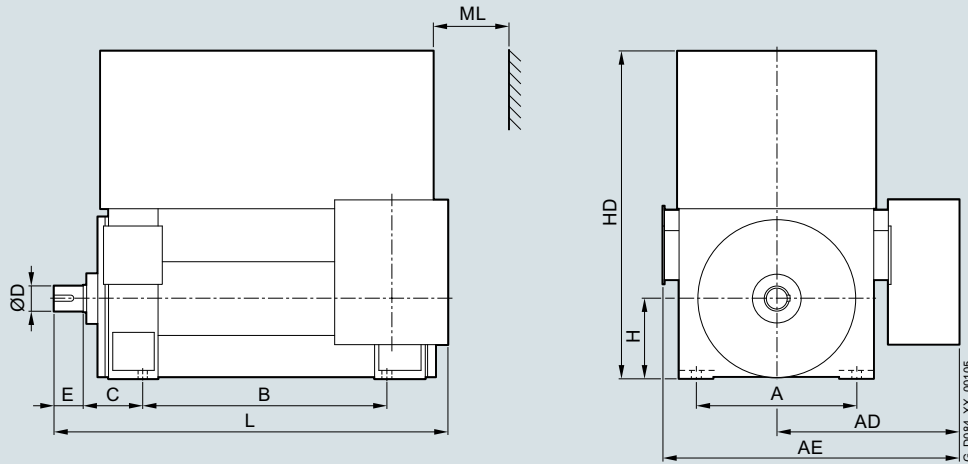
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
2-pole													
1RP1352-2....	2300	415	710	935	1445	1180	224	85	130	355	1550	1845	190
1RP1354-2....	2400	433	710	935	1445	1180	224	85	130	355	1550	1845	190
1RP1356-2....	2450	447	710	935	1445	1180	224	85	130	355	1550	1845	190
1RP1400-2....	2900	528	800	985	1545	1250	250	85	130	400	1740	1960	225
1RP1402-2....	3000	547	800	985	1545	1250	250	85	130	400	1740	1960	225
1RP1404-2....	3150	579	800	985	1545	1250	250	85	130	400	1740	1960	225
1RP1406-2....	3300	608	800	985	1545	1250	250	85	130	400	1740	1960	225
1RP1450-2....	3950	688	950	1040	1600	1400	250	95	130	450	1910	2140	285
1RP1452-2....	4050	718	950	1040	1600	1400	250	95	130	450	1910	2140	285
1RP1454-2....	4250	758	950	1040	1600	1400	250	95	130	450	1910	2140	285
1RP1456-2....	4500	808	950	1040	1600	1400	250	95	130	450	1910	2140	285
4-pole													
1RP1354-4....	2400	455	710	935	1445	1180	224	95	130	355	1550	1845	190
1RP1356-4....	2500	488	710	935	1445	1180	224	95	130	355	1550	1845	190
1RP1358-4....	2650	526	710	935	1445	1180	224	95	130	355	1550	1845	190
1RP1400-4....	3000	614	800	985	1545	1250	250	110	165	400	1740	1995	225
1RP1402-4....	3100	649	800	985	1545	1250	250	110	165	400	1740	1995	225
1RP1404-4....	3300	709	800	985	1545	1250	250	110	165	400	1740	1995	225
1RP1406-4....	3500	768	800	985	1545	1250	250	110	165	400	1740	1995	225
1RP1450-4....	4150	829	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1452-4....	4400	899	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1454-4....	4600	949	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1456-4....	4900	1019	950	1040	1600	1400	250	130	200	450	1910	2220	285

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



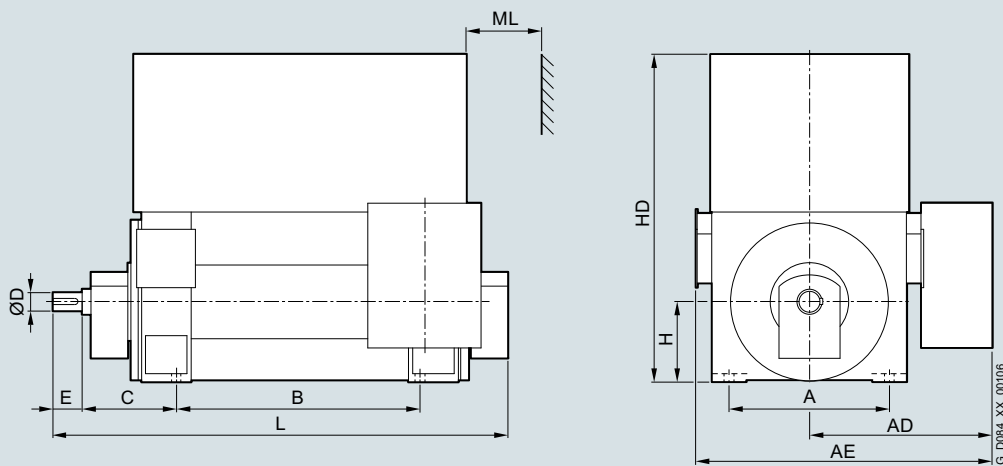
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
6-pole													
1RP1352-6....	2600	551	710	935	1445	1180	224	110	165	355	1550	1880	190
1RP1354-6....	2650	565	710	935	1445	1180	224	110	165	355	1550	1880	190
1RP1356-6....	2750	598	710	935	1445	1180	224	110	165	355	1550	1880	190
1RP1400-6....	3200	696	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1402-6....	3350	738	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1404-6....	3550	806	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1406-6....	3750	863	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1450-6....	4350	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1452-6....	4550	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1454-6....	4750	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1456-6....	4950	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285
8-pole													
1RP1400-8....	3200	696	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1402-8....	3350	738	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1404-8....	3550	806	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1406-8....	3750	863	800	985	1545	1250	250	130	200	400	1740	2030	225
1RP1450-8....	4350	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1452-8....	4550	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1454-8....	4750	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285
1RP1456-8....	4950	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



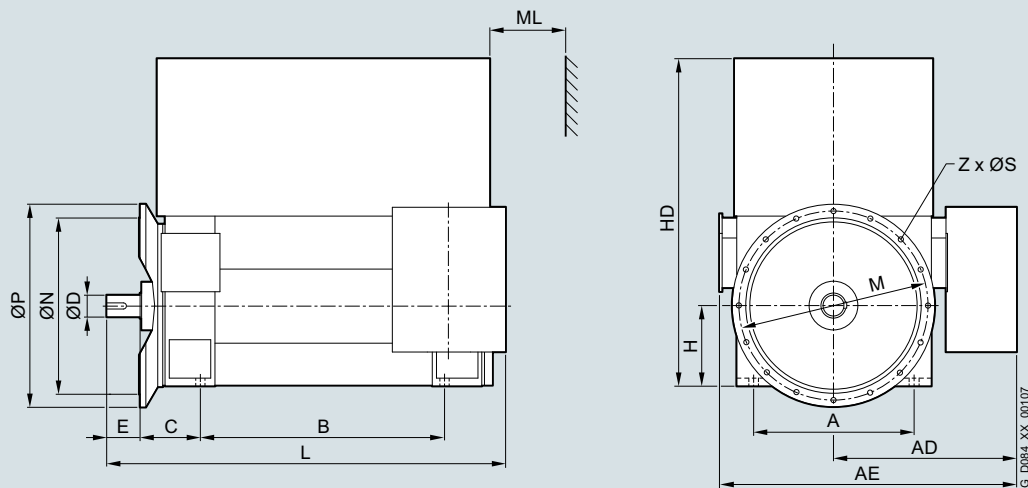
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, sleeve bearings													
2-pole													
1RP1400-2....	2900	455	800	985	1545	1250	425	85	130	400	1740	2150	225
1RP1402-2....	3000	474	800	985	1545	1250	425	85	130	400	1740	2150	225
1RP1404-2....	3150	517	800	985	1545	1250	425	85	130	400	1740	2150	225
1RP1406-2....	3300	547	800	985	1545	1250	425	85	130	400	1740	2150	225
1RP1450-2....	4050	650	950	1040	1600	1400	450	95	130	450	1910	2375	285
1RP1452-2....	4150	680	950	1040	1600	1400	450	95	130	450	1910	2375	285
1RP1454-2....	4400	728	950	1040	1600	1400	450	95	130	450	1910	2375	285
1RP1456-2....	4600	778	950	1040	1600	1400	450	95	130	450	1910	2375	285

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



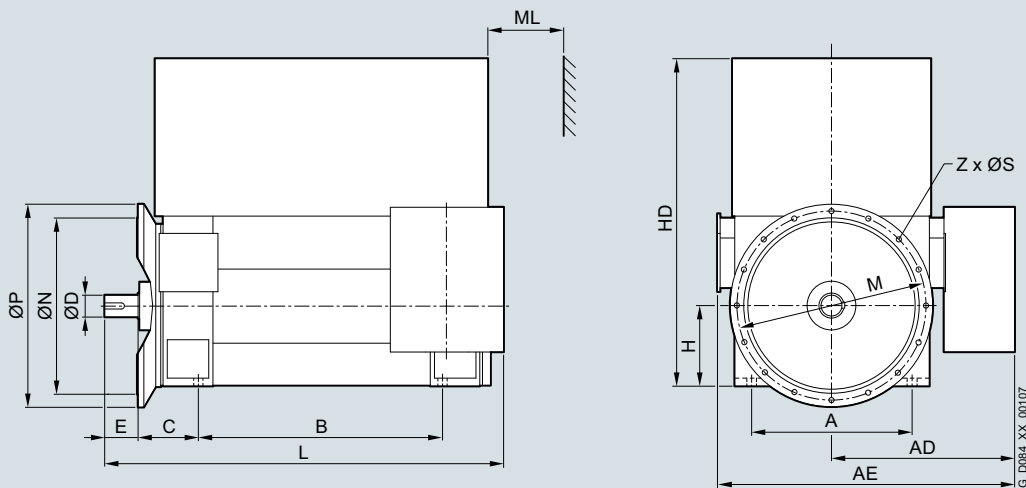
Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM B35 type of construction, anti-friction bearings																		
2-pole																		
1RP1352-2....	2350	415	710	935	1445	1180	224	85	130	355	1550	1845	190	840	780	900	22	8
1RP1354-2....	2450	433	710	935	1445	1180	224	85	130	355	1550	1845	190	840	780	900	22	8
1RP1356-2....	2500	447	710	935	1445	1180	224	85	130	355	1550	1845	190	840	780	900	22	8
1RP1400-2....	3000	528	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RP1402-2....	3100	547	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RP1404-2....	3200	579	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RP1406-2....	3350	608	800	985	1545	1250	250	85	130	400	1740	1960	225	940	880	1000	22	8
1RP1450-2....	4100	688	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8
1RP1452-2....	4200	718	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8
1RP1454-2....	4400	758	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8
1RP1456-2....	4600	808	950	1040	1600	1400	250	95	130	450	1910	2140	285	1080	1000	1150	26	8
4-pole																		
1RP1354-4....	2550	455	710	935	1445	1180	224	95	130	355	1550	1845	190	840	780	900	22	8
1RP1356-4....	2600	488	710	935	1445	1180	224	95	130	355	1550	1845	190	840	780	900	22	8
1RP1358-4....	2750	526	710	935	1445	1180	224	95	130	355	1550	1845	190	840	780	900	22	8
1RP1400-4....	3150	614	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RP1402-4....	3250	649	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RP1404-4....	3450	709	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RP1406-4....	3650	768	800	985	1545	1250	250	110	165	400	1740	1995	225	940	880	1000	22	8
1RP1450-4....	4300	829	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1452-4....	4500	899	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1454-4....	4750	949	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1456-4....	5000	1019	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Open-circuit cooled motors

SIMOTICS HV Series A-compact PLUS 1RA1, 1RP1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM B35 type of construction, anti-friction bearings																		
6-pole																		
1RP1352-6....	2700	551	710	935	1445	1180	224	110	165	355	1550	1880	190	840	780	900	22	8
1RP1354-6....	2700	565	710	935	1445	1180	224	110	165	355	1550	1880	190	840	780	900	22	8
1RP1356-6....	2850	598	710	935	1445	1180	224	110	165	355	1550	1880	190	840	780	900	22	8
1RP1400-6....	3300	696	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1402-6....	3400	738	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1404-6....	3650	806	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1406-6....	3850	863	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1450-6....	4500	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1452-6....	4700	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1454-6....	4900	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1456-6....	5100	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
8-pole																		
1RP1400-8....	3300	696	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1402-8....	3400	738	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1404-8....	3650	806	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1406-8....	3850	863	800	985	1545	1250	250	130	200	400	1740	2030	225	940	880	1000	22	8
1RP1450-8....	4500	1008	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1452-8....	4700	1078	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1454-8....	4900	1138	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8
1RP1456-8....	5100	1208	950	1040	1600	1400	250	130	200	450	1910	2220	285	1080	1000	1150	26	8

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Overview



Technical Data

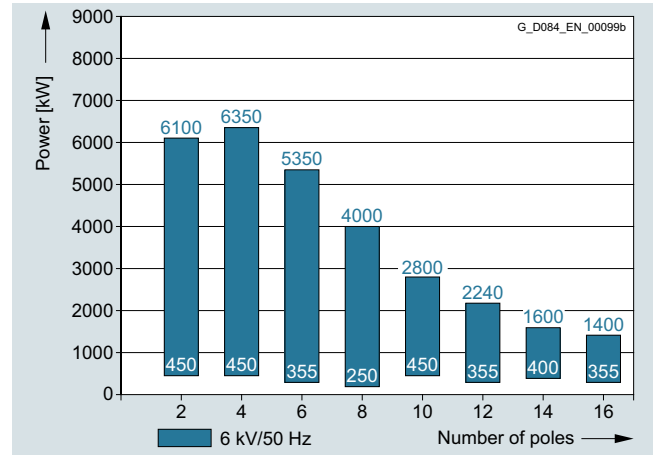
Overview of technical data

A-compact PLUS 1RQ1, 1SG1	
Rated voltage	6 kV, 6.6 kV, 10 kV
Rated frequency	50 Hz, 60 Hz
Motor type	Induction motor with squirrel-cage rotor
Type of construction	IM B3, IM B35, IM V1
Degree of protection	IP55
Cooling method	IC611
Stator winding insulation	Thermal class 155 (F), utilized to 130 (B)
Shaft height	355 ... 630 mm
Bearings	Anti-friction bearings, sleeve bearings
Cage material	Aluminum, copper
Standards	IEC, GB, JB
Frame design	Frame: Cast iron Top cover: Steel

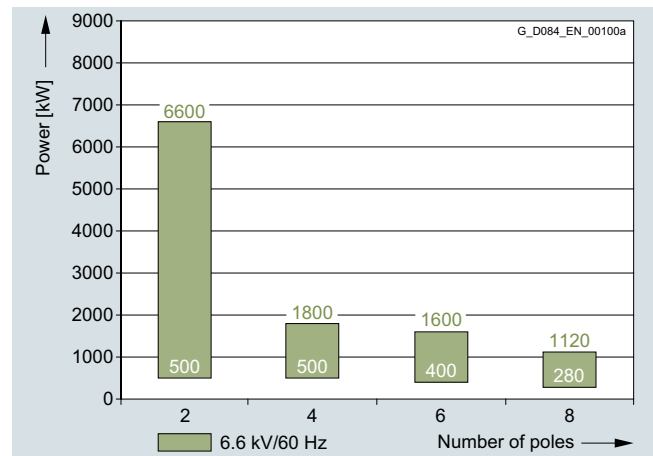
Technical Data (continued)

Power range

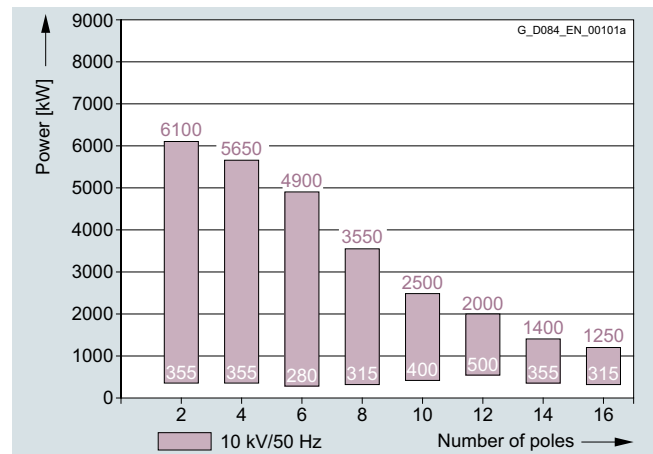
6 kV; 50 Hz



6.6 kV; 60 Hz



10 kV; 50 Hz



2

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data

The following data also apply to explosion-protected motors 1SG1 (Ex ec).

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
6 kV, 50 Hz															
2-pole															
450	1RQ1350-2JD6	2962	52	93.8	93.6	0.88	0.88	1451	2.7	0.70	5.8	1.9	4.0	36	
500	1RQ1352-2JD6	2964	58	94.1	93.9	0.89	0.89	1611	2.8	0.75	6.0	1.9	4.5	36	
560	1RQ1354-2JD6	2963	62	94.2	94.1	0.91	0.91	1805	3.0	0.80	6.5	1.9	4.9	36	
630	1RQ1356-2JD6	2964	70	94.6	94.4	0.91	0.90	2030	3.2	0.90	6.8	1.9	5.2	36	
670	1RQ1356-2JE6	2961	74	94.6	94.5	0.91	0.90	2161	3.0	0.90	6.4	1.9	5.2	31	
710	1RQ1400-2JD6	2969	80	94.4	94.2	0.90	0.90	2284	2.4	0.60	5.4	1.9	7.4	51	
800	1RQ1402-2JD6	2969	90	94.6	94.5	0.90	0.91	2574	2.4	0.65	5.5	1.9	7.9	55	
900	1RQ1404-2JD6	2972	100	95.0	94.9	0.91	0.91	2892	2.7	0.70	6.1	1.9	8.7	57	
1000	1RQ1406-2JD6	2973	110	95.3	95.1	0.91	0.91	3212	2.9	0.80	6.6	1.9	9.4	58	
1120	1RQ1450-2JA6	2978	128	94.8	94.3	0.89	0.88	3592	3.2	0.75	6.8	3.6	13.0	80	
1250	1RQ1450-2JB6	2974	142	94.9	94.5	0.89	0.89	4014	2.8	0.70	6.0	3.6	13.0	63	
1400	1RQ1452-2JA6	2973	158	95.1	94.8	0.90	0.90	4497	2.9	0.75	6.4	3.6	13.8	63	
1600	1RQ1454-2JA6	2975	180	95.4	95.2	0.90	0.89	5136	2.9	0.85	6.4	3.6	15.1	64	
1800	1RQ1456-2JA6	2976	200	95.7	95.5	0.90	0.89	5776	3.0	0.90	6.6	3.6	16.4	65	
2000	1RQ1500-2JJ6	2978	220	95.4	94.7	0.91	0.89	6413	2.7	0.65	5.5	5.0	31.3	95	
2240	1RQ1502-2JJ6	2978	250	95.6	95.0	0.91	0.90	7184	2.7	0.65	5.5	5.0	33.4	105	
2500	1RQ1504-2JJ6	2980	275	95.6	95.3	0.92	0.90	8013	3.0	0.75	6.0	5.0	36.6	110	
2800	1RQ1506-2JJ6	2981	305	95.9	95.6	0.92	0.91	8971	3.1	0.80	6.3	5.0	39.9	140	
3150	1RQ1560-2JJ6	2976	350	95.8	95.6	0.90	0.89	10110	2.7	0.55	5.8	7.3	41.4	135	
3550	1RQ1562-2JJ6	2978	395	96.1	96.0	0.90	0.89	11386	2.8	0.55	6.0	7.3	43.6	145	
4100	1RQ1564-2JJ6	2979	455	96.4	96.3	0.90	0.88	13142	3.0	0.60	6.0	7.3	48.3	150	
4500	1RQ1566-2JJ6	2980	500	96.6	96.5	0.90	0.89	14421	3.1	0.65	6.0	7.3	51.2	150	
4750	1RQ1630-2JJ6	2980	530	96.5	96.3	0.89	0.90	15220	2.2	0.40	5.1	8.6	64.2	160	
5300	1RQ1632-2JJ6	2981	590	96.7	96.6	0.89	0.90	16978	2.3	0.40	5.4	8.6	69.6	170	
5600	1RQ1634-2JJ6	2984	620	96.8	96.7	0.90	0.90	17924	2.6	0.45	6.0	8.6	75.2	190	
6100	1RQ1636-2JJ6	2986	670	97.0	96.9	0.90	0.90	19513	2.9	0.50	6.0	8.6	82.0	225	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
4-pole															
450	1RQ1350-4JA6	1480	53	94.3	94.3	0.86	0.83	2904	2.5	1.00	5.8	1.7	7.1	245	
500	1RQ1352-4JA6	1480	59	94.4	94.6	0.86	0.85	3226	2.5	1.20	6.0	1.7	7.9	275	
560	1RQ1354-4JA6	1481	66	94.6	94.9	0.86	0.84	3611	2.6	1.20	6.3	1.7	8.6	300	
630	1RQ1356-4JA6	1481	73	94.8	95.1	0.87	0.86	4064	2.6	1.20	6.3	1.7	9.4	330	
710	1RQ1400-4JA6	1483	84	94.8	94.8	0.86	0.85	4571	2.6	0.90	5.7	2.3	13.5	285	
800	1RQ1402-4JA6	1483	93	95.0	95.1	0.87	0.86	5151	2.6	0.95	5.8	2.3	14.5	300	
900	1RQ1404-4JA6	1483	104	95.2	95.3	0.88	0.88	5796	2.6	0.95	5.8	2.3	16.2	340	
1000	1RQ1406-4JA6	1484	114	95.4	95.4	0.88	0.88	6435	2.9	1.20	6.5	2.3	18.0	360	
1120	1RQ1450-4JA6	1480	128	95.1	95.4	0.88	0.88	7227	2.6	0.90	5.6	3.2	19.0	270	
1250	1RQ1452-4JA6	1484	142	95.6	95.6	0.88	0.86	8044	2.8	1.00	6.4	3.2	21.0	285	
1400	1RQ1454-4JA6	1481	156	95.6	95.8	0.90	0.89	9028	2.8	1.00	6.2	3.2	23.0	310	
1600	1RQ1456-4JA6	1482	178	95.7	95.9	0.90	0.89	10310	2.8	0.90	6.2	3.2	25.0	330	
1800	1RQ1500-4JA6	1485	205	95.5	95.5	0.88	0.87	11574	2.6	0.80	5.4	4.5	40.5	185	
2000	1RQ1502-4JA6	1486	225	95.7	95.8	0.89	0.88	12855	2.7	0.90	5.6	4.5	44.6	210	
2240	1RQ1504-4JA6	1486	255	95.8	95.9	0.89	0.88	14392	2.8	1.00	6.0	4.5	48.9	230	
2500	1RQ1506-4JA6	1488	280	96.1	96.1	0.90	0.88	16049	3.0	1.10	6.5	4.5	54.1	260	
2800	1RQ1560-4JJ6	1491	315	96.4	96.2	0.88	0.85	17934	3.1	0.75	6.0	6.7	87.1	1750	
3150	1RQ1560-4JK6	1489	355	96.4	96.4	0.88	0.86	20200	2.7	0.70	5.9	6.7	87.1	1450	
3550	1RQ1560-4JL6	1489	400	96.4	96.5	0.88	0.85	22773	2.7	0.65	5.8	6.7	87.1	1250	
4000	1RQ1562-4JJ6	1489	450	96.6	96.7	0.88	0.85	25663	2.7	0.65	5.8	6.7	92.6	1300	
4300	1RQ1564-4JJ6	1489	485	96.7	96.8	0.88	0.84	27572	2.8	0.65	5.9	6.7	97.4	1350	
4400	1RQ1566-4JJ6	1489	495	96.7	96.8	0.88	0.85	28215	2.8	0.7	6.0	6.7	99.5	1350	
4500	1RQ1630-4JJ6	1490	510	96.6	96.4	0.88	0.87	28846	3.0	0.60	6.0	9.3	135.4	1500	
5200	1RQ1630-4JK6	1489	590	96.7	96.6	0.88	0.87	33362	2.9	0.60	6.0	9.3	135.4	1200	
5650	1RQ1632-4JJ6	1489	640	96.7	96.7	0.88	0.86	36235	3.0	0.60	6.0	9.3	147.0	1250	
6200	1RQ1634-4JJ6	1490	700	96.9	96.8	0.88	0.86	39752	3.0	0.60	6.0	9.3	158.3	1350	
6350	1RQ1636-4JJ6	1489	710	96.9	96.8	0.89	0.87	40722	3.0	0.65	6.0	9.3	172.4	1450	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
6-pole															
355	1RQ1350-6JA6	985	43.5	93.9	94.1	0.84	0.82	3443	2.6	0.90	5.5	1.5	10.3	230	
400	1RQ1352-6JA6	985	48.5	94.2	94.4	0.84	0.83	3878	2.6	0.95	5.5	1.5	11.8	275	
450	1RQ1354-6JA6	987	55	94.4	94.5	0.83	0.80	4355	3.1	1.10	6.2	1.5	12.7	330	
500	1RQ1356-6JA6	989	61	94.6	94.4	0.83	0.75	4830	3.6	1.35	6.6	1.5	14.2	410	
560	1RQ1400-6JA6	988	68	94.7	94.7	0.84	0.79	5411	2.8	1.00	6.0	2.0	18.9	365	
630	1RQ1402-6JA6	988	76	94.9	94.9	0.84	0.81	6091	2.8	1.00	6.0	2.0	20.7	420	
710	1RQ1404-6JA6	989	85	95.1	95.1	0.84	0.79	6857	3.0	1.10	6.3	2.0	22.9	550	
800	1RQ1406-6JA6	989	96	95.3	95.3	0.84	0.79	7725	3.0	1.10	6.4	2.0	25.3	665	
900	1RQ1450-6JA6	991	108	95.4	95.9	0.84	0.79	8670	2.5	1.00	6.0	2.8	30.0	1355	
1000	1RQ1450-6JB6	990	118	95.4	95.9	0.85	0.81	9649	2.5	1.00	5.4	2.8	30.0	1030	
1120	1RQ1452-6JA6	989	130	95.5	96.0	0.86	0.83	10814	2.5	1.00	5.4	2.8	32.0	1100	
1250	1RQ1454-6JA6	990	148	95.6	96.1	0.85	0.81	12058	2.5	1.00	5.4	2.8	35.0	1100	
1400	1RQ1456-6JA6	989	162	95.7	96.3	0.87	0.84	13521	2.4	1.00	5.4	2.8	38.0	1100	
1600	1RQ1500-6JA6	991	186	95.8	96.0	0.86	0.83	15417	2.4	1.10	5.3	3.9	57.9	940	
1800	1RQ1502-6JA6	992	210	95.9	96.2	0.86	0.82	17334	2.5	1.10	5.4	3.9	64.2	1060	
2000	1RQ1504-6JA6	993	230	96.1	96.3	0.86	0.80	19244	2.7	1.20	5.8	3.9	70.9	1200	
2240	1RQ1506-6JA6	992	255	96.1	96.5	0.87	0.83	21562	2.7	1.20	5.8	3.9	78.5	1370	
2500	1RQ1560-6JJ6	993	295	96.3	96.3	0.84	0.79	24036	2.8	0.75	6.0	5.9	129.1	3900	
2800	1RQ1560-6JK6	992	330	96.3	96.4	0.84	0.80	26956	2.5	0.70	5.4	5.9	129.1	3000	
2950	1RQ1562-6JJ6	992	350	96.4	96.5	0.84	0.80	28400	2.5	0.70	5.4	5.9	133.5	3300	
3150	1RQ1564-6JJ6	992	370	96.5	96.6	0.85	0.82	30319	2.6	0.75	5.7	5.9	144.7	3400	
3450	1RQ1566-6JJ6	993	405	96.6	96.6	0.85	0.80	33180	2.8	0.80	6.0	5.9	157.1	3900	
3550	1RQ1630-6JJ6	994	415	96.6	96.5	0.85	0.82	34117	2.9	0.85	6.0	7.8	212.1	5200	
4000	1RQ1630-6JK6	994	470	96.7	96.6	0.85	0.80	38442	2.9	0.85	6.0	7.8	212.1	4600	
4550	1RQ1630-6JL6	992	530	96.7	96.7	0.85	0.82	43785	2.6	0.80	5.7	7.8	212.1	3900	
4750	1RQ1632-6JJ6	993	560	96.8	96.8	0.85	0.82	45691	2.7	0.80	6.0	7.8	227.0	4300	
5050	1RQ1634-6JJ6	993	590	96.8	96.9	0.85	0.82	48577	2.7	0.80	6.0	7.8	235.7	4300	
5350	1RQ1636-6JJ6	993	630	96.9	96.9	0.85	0.81	51442	2.8	0.85	6.0	7.8	252.3	4700	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
8-pole															
250	1RQ1350-8JA6	739	33.0	93.2	93.0	0.78	0.69	3231	2.8	1.10	5.0	1.1	10.3	365	
280	1RQ1352-8JA6	738	36.5	93.4	93.4	0.79	0.72	3621	2.8	1.10	5.0	1.1	11.8	405	
315	1RQ1354-8JA6	739	41.0	93.7	93.6	0.79	0.71	4072	3.0	1.20	5.5	1.1	12.7	500	
355	1RQ1356-8JA6	739	46.0	93.9	93.8	0.79	0.70	4586	3.0	1.20	5.5	1.1	14.2	590	
400	1RQ1400-8JA6	739	51	94.1	94.4	0.80	0.75	5171	2.4	1.00	5.0	1.5	18.9	775	
450	1RQ1402-8JA6	739	57	94.2	94.5	0.80	0.73	5813	2.4	1.00	5.0	1.5	20.7	940	
500	1RQ1404-8JA6	739	64	94.4	94.7	0.80	0.77	6466	2.4	1.00	5.0	1.5	22.9	1025	
560	1RQ1406-8JA6	740	71	94.6	94.8	0.80	0.73	7228	2.7	1.10	5.5	1.5	25.3	1285	
630	1RQ1450-8JA6	743	80	94.9	95.2	0.80	0.72	8103	2.3	0.90	5.0	2.1	30.0	1910	
710	1RQ1450-8JB6	741	89	94.9	95.2	0.81	0.75	9153	2.3	0.90	4.8	2.1	30.0	1465	
800	1RQ1452-8JA6	741	100	95.1	95.3	0.81	0.75	10309	2.3	0.90	4.8	2.1	32.0	1540	
900	1RQ1454-8JA6	741	112	95.2	95.5	0.80	0.74	11594	2.4	0.90	4.8	2.1	35.0	1570	
1000	1RQ1456-8JA6	741	124	95.3	95.6	0.81	0.74	12885	2.4	0.90	4.8	2.1	38.0	1685	
1120	1RQ1500-8JA6	742	134	95.7	95.8	0.84	0.79	14407	2.3	0.90	4.8	2.9	57.9	2055	
1250	1RQ1502-8JA6	742	150	95.9	96.0	0.84	0.79	16080	2.3	0.90	4.8	2.9	64.2	2320	
1400	1RQ1504-8JA6	743	168	96.0	96.1	0.84	0.79	17997	2.4	1.00	5.0	2.9	70.9	2630	
1600	1RQ1506-8JA6	743	192	96.2	96.2	0.83	0.76	20554	2.6	1.00	5.3	2.9	78.5	2980	
1850	1RQ1560-8JJ6	743	220	96.1	96.4	0.83	0.79	23795	2.0	0.60	4.1	4.4	129.1	4400	
2050	1RQ1562-8JJ6	743	245	96.1	96.4	0.83	0.80	26367	2.0	0.60	4.2	4.4	133.5	4400	
2300	1RQ1564-8JJ6	743	275	96.3	96.5	0.83	0.80	29571	2.1	0.60	4.3	4.4	144.7	6500	
2500	1RQ1566-8JJ6	744	300	96.5	96.6	0.83	0.78	32112	2.3	0.65	4.7	4.4	157.1	7300	
2900	1RQ1630-8JJ6	744	350	96.5	96.7	0.83	0.79	37229	2.1	0.60	4.5	5.9	212.1	7500	
3250	1RQ1632-8JJ6	744	390	96.6	96.7	0.83	0.78	41695	2.2	0.65	4.7	5.9	227.0	7500	
3550	1RQ1634-8JJ6	745	425	96.7	96.8	0.83	0.78	45537	2.3	0.65	4.9	5.9	235.7	8500	
4000	1RQ1636-8JJ6	745	480	96.8	96.9	0.83	0.79	51310	2.3	0.65	4.9	5.9	252.3	9600	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
10-pole															
450	1RQ1450-3JA6	592	56	94.4	94.5	0.81	0.77	7263	1.9	0.85	4.2	1.8	32.8	6700	
500	1RQ1452-3JA6	592	62	94.5	94.7	0.81	0.77	8070	1.9	0.90	4.3	1.8	35.8	6700	
560	1RQ1454-3JA6	592	70	94.6	94.7	0.81	0.76	9034	2.0	0.90	4.4	1.8	38.3	6700	
630	1RQ1456-3JA6	592	78	94.8	94.9	0.81	0.76	10168	2.0	0.90	4.4	1.8	41.3	7800	
710	1RQ1500-3JA6	594	86	94.8	94.9	0.83	0.80	11421	1.9	0.75	4.5	2.2	57.8	4500	
800	1RQ1502-3JA6	594	98	95.1	95.1	0.83	0.79	12864	2.0	0.80	4.7	2.2	64.8	5900	
900	1RQ1504-3JA6	594	110	95.3	95.2	0.83	0.77	14460	2.1	0.90	5.1	2.2	70.8	6500	
1000	1RQ1506-3JA6	594	122	95.3	95.3	0.83	0.79	16075	2.1	0.90	5.1	2.2	78.8	6900	
1120	1RQ1560-3JJ6	595	140	95.9	95.9	0.80	0.74	17986	2.3	0.60	4.6	3.4	120.7	12700	
1250	1RQ1560-3JK6	594	156	95.8	95.9	0.81	0.76	20104	2.0	0.55	4.2	3.4	120.7	9300	
1400	1RQ1562-3JJ6	594	172	95.9	96.1	0.82	0.78	22527	2.0	0.55	4.2	3.4	134.7	9300	
1600	1RQ1564-3JJ6	593	194	95.9	96.1	0.83	0.79	25754	2.0	0.55	4.2	3.4	147.7	9300	
1800	1RQ1566-3JJ6	594	215	96.0	96.2	0.83	0.78	28964	2.0	0.55	4.2	3.4	160.7	9300	
2000	1RQ1630-3JJ6	595	245	96.1	96.2	0.82	0.77	32101	2.2	0.55	4.6	4.5	239.8	9100	
2240	1RQ1632-3JJ6	595	275	96.3	96.4	0.82	0.77	35953	2.2	0.55	4.6	4.5	261.8	10500	
2500	1RQ1634-3JJ6	595	305	96.4	96.4	0.82	0.77	40113	2.3	0.60	4.8	4.5	286.8	10500	
2800	1RQ1636-3JJ6	595	340	96.4	96.5	0.82	0.77	44934	2.3	0.65	4.8	4.5	317.8	10500	
		Type of construction													
		See page 1/10													

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
12-pole															
355	1RQ1450-5JA6	493	48	93.8	93.8	0.77	0.71	6882	2.1	0.70	4.2	1.3	37.3	4500	
400	1RQ1452-5JA6	493	54	94.0	94.0	0.77	0.70	7755	2.1	0.70	4.3	1.3	40.8	5000	
450	1RQ1454-5JA6	492	60	94.1	94.1	0.77	0.71	8728	2.1	0.70	4.3	1.3	43.8	5000	
500	1RQ1456-5JA6	492	66	94.2	94.2	0.77	0.70	9699	2.1	0.75	4.3	1.3	46.8	5000	
560	1RQ1500-5JA6	494	74	94.7	94.6	0.76	0.70	10822	1.9	0.65	4.1	1.9	58.8	10200	
630	1RQ1502-5JA6	494	84	94.8	94.7	0.76	0.72	12184	1.9	0.65	4.1	1.9	64.8	10200	
710	1RQ1504-5JA6	494	94	94.8	94.6	0.76	0.69	13715	2.1	0.75	4.3	1.9	71.8	10200	
800	1RQ1506-5JA6	494	106	94.9	94.7	0.76	0.68	15453	2.1	0.75	4.3	1.9	79.8	10900	
900	1RQ1560-5JJ6	494	116	95.1	95.1	0.78	0.72	17406	1.8	0.55	3.7	3.2	139.7	22000	
1000	1RQ1560-5JK6	494	132	95.1	95.1	0.77	0.70	19340	1.9	0.60	3.7	3.2	139.7	21200	
1120	1RQ1562-5JJ6	494	146	95.3	95.3	0.77	0.70	21652	1.9	0.60	3.8	3.2	156.7	24500	
1250	1RQ1564-5JJ6	494	164	95.4	95.4	0.77	0.69	24165	2.0	0.65	3.9	3.2	171.7	25600	
1400	1RQ1566-5JJ6	494	184	95.5	95.4	0.77	0.68	27054	2.1	0.70	4.0	3.2	187.7	25600	
1600	1RQ1630-5JJ6	496	198	95.7	95.7	0.81	0.75	30806	2.1	0.70	4.4	4.4	267.8	10800	
1800	1RQ1632-5JJ6	496	225	95.8	95.8	0.81	0.74	34657	2.1	0.70	4.5	4.4	292.8	12300	
2000	1RQ1634-5JJ6	495	250	95.9	96.0	0.81	0.76	38586	2.1	0.70	4.5	4.4	320.8	14300	
2240	1RQ1636-5JJ6	496	275	96.0	96.0	0.81	0.74	43129	2.2	0.80	4.7	4.4	356.8	14500	
		Type of construction													
		See page 1/10													

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
14-pole															
400	1RQ1500-7JA6	423	58	94.2	94.0	0.71	0.63	9026	1.9	0.70	3.7	1.6	60.4	21900	
450	1RQ1502-7JA6	423	64	94.4	94.1	0.71	0.61	10150	2.0	0.70	3.8	1.6	66.4	21900	
500	1RQ1504-7JA6	423	70	94.4	94.2	0.72	0.62	11278	2.0	0.75	3.9	1.6	73.4	21900	
560	1RQ1506-7JA6	423	80	94.4	94.1	0.72	0.62	12634	2.0	0.80	3.9	1.6	81.4	21900	
630	1RQ1560-7JJ6	424	86	94.7	94.6	0.75	0.67	14207	2.3	0.55	4.1	2.7	150.2	14000	
710	1RQ1560-7JK6	423	96	94.8	94.7	0.75	0.66	16018	2.2	0.55	4.0	2.7	150.2	11200	
800	1RQ1562-7JJ6	424	108	94.9	94.8	0.75	0.66	18040	2.2	0.60	4.2	2.7	169.2	11200	
900	1RQ1564-7JJ6	423	118	94.9	95.0	0.77	0.68	20314	2.2	0.60	4.2	2.7	185.2	12600	
1000	1RQ1566-7JJ6	423	130	95.0	95.1	0.78	0.70	22588	2.2	0.60	4.2	2.7	202.2	14200	
1120	1RQ1630-7JJ6	425	146	95.4	95.4	0.77	0.68	25161	2.0	0.55	4.1	3.7	301.8	13100	
1250	1RQ1632-7JJ6	425	160	95.4	95.5	0.79	0.73	28115	2.0	0.60	4.1	3.7	330.8	13100	
1400	1RQ1634-7JJ6	425	178	95.6	95.6	0.79	0.71	31474	2.1	0.60	4.2	3.7	362.8	14800	
1600	1RQ1636-7JJ6	425	205	95.8	95.9	0.79	0.72	35978	2.1	0.60	4.2	3.7	403.8	19400	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
16-pole															
355	1RQ1500-9JA6	371	52	94	93.8	0.69	0.59	9148	1.8	0.55	3.5	1.6	60.4	12000	
400	1RQ1502-9JA6	370	58	94.1	94.0	0.71	0.61	10313	1.8	0.55	3.5	1.6	66.4	12000	
450	1RQ1504-9JA6	370	64	94.1	94.0	0.71	0.61	11605	1.8	0.55	3.5	1.6	73.4	12000	
500	1RQ1506-9JA6	370	70	94.2	94.2	0.72	0.63	12902	1.8	0.55	3.5	1.6	80.4	12000	
560	1RQ1560-9JJ6	370	80	94.3	94.2	0.72	0.62	14442	2.1	0.50	3.6	2.4	151.2	21500	
630	1RQ1560-9JK6	370	90	94.5	94.5	0.72	0.62	16270	1.9	0.50	3.4	2.4	151.2	24500	
710	1RQ1562-9JJ6	370	100	94.7	94.6	0.72	0.62	18326	1.9	0.50	3.6	2.4	169.2	24500	
800	1RQ1564-9JJ6	370	110	94.7	94.7	0.74	0.65	20677	1.9	0.50	3.6	2.4	186.2	24500	
900	1RQ1566-9JJ6	369	122	94.7	94.9	0.75	0.67	23286	1.9	0.50	3.6	2.4	203.2	24500	
1000	1RQ1630-9JJ6	371	138	94.8	94.7	0.74	0.65	25734	1.9	0.55	3.6	3.3	302.8	20900	
1120	1RQ1632-9JJ6	371	152	95.0	95.0	0.75	0.67	28838	1.9	0.55	3.6	3.3	331.8	22200	
1250	1RQ1634-9JJ6	371	168	95.0	95.0	0.75	0.67	32177	1.9	0.60	3.7	3.3	363.8	22200	
1400	1RQ1636-9JJ6	371	188	95.2	95.2	0.75	0.68	36047	1.9	0.60	3.7	3.3	404.8	25700	

Type of construction

See page 1/10

Pole number

9 16-pole: additional order code **H1A** required

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
6.6 kV, 60 Hz															
2-pole															
500	1RQ1350-2JD1	3567	54	92.9	91.8	0.88	0.87	1339	2.9	0.65	6.2	2.3	4.0	26	
560	1RQ1352-2JD1	3566	60	93.2	92.3	0.89	0.89	1500	3.0	0.75	6.4	2.3	4.5	26	
630	1RQ1354-2JD1	3565	66	93.7	92.9	0.90	0.90	1688	3.0	0.75	6.4	2.3	4.9	26	
710	1RQ1356-2JD1	3565	74	93.9	93.2	0.90	0.90	1902	3.1	0.80	6.6	2.3	5.2	26	
800	1RQ1356-2JE1	3558	82	94.0	93.5	0.91	0.91	2147	2.7	0.70	5.9	2.3	5.2	19	
900	1RQ1402-2JD1	3575	94	94.1	93.3	0.89	0.89	2404	2.8	0.65	6.7	2.3	7.9	38	
1000	1RQ1404-2JD1	3576	102	94.5	93.7	0.90	0.90	2671	3.1	0.75	6.9	2.3	8.7	39	
1120	1RQ1406-2JD1	3577	114	94.8	94.1	0.90	0.90	2990	3.3	0.85	7.0	2.3	9.4	40	
1250	1RQ1406-2JE1	3574	126	94.9	94.4	0.91	0.91	3341	3.0	0.80	6.8	2.3	9.4	33	
1400	1RQ1450-2JJ1	3576	148	94.5	93.7	0.88	0.87	3742	2.7	0.60	6.2	4.3	15.3	80	
1600	1RQ1452-2JJ1	3576	168	94.9	94.2	0.88	0.88	4276	2.7	0.60	6.2	4.3	16.4	77	
1800	1RQ1454-2JJ1	3576	188	95.2	94.6	0.88	0.88	4811	2.7	0.60	6.2	4.3	17.8	83	
2000	1RQ1456-2JJ1	3577	205	95.4	94.9	0.89	0.89	5342	3.0	0.70	6.6	4.3	19.1	84	
2240	1RQ1500-2JJ1	3574	230	94.4	94.9	0.90	0.90	5985	2.5	0.60	5.5	6.0	31.3	80	
2500	1RQ1502-2JJ1	3575	255	94.7	95.1	0.91	0.90	6678	2.6	0.60	5.8	6.0	33.4	80	
2800	1RQ1504-2JJ1	3576	285	95.1	95.5	0.91	0.91	7478	2.7	0.65	6.0	6.0	36.6	85	
3150	1RQ1506-2JJ1	3577	315	95.4	95.8	0.92	0.92	8410	2.8	0.70	6.3	6.0	39.9	100	
3550 ²⁾	1RQ1560-2JJ1	3573	360	95.7	95.4	0.90	0.90	9489	2.4	0.50	5.3	8.7	41.4	80	
4000 ²⁾	1RQ1562-2JJ1	3575	405	96.0	95.7	0.90	0.90	10686	2.5	0.50	5.5	8.7	43.6	85	
4500 ²⁾	1RQ1564-2JJ1	3578	450	96.3	96.1	0.91	0.91	12011	2.8	0.50	6.0	8.7	48.3	95	
4950 ²⁾	1RQ1566-2JJ1	3579	495	96.5	96.3	0.91	0.91	13209	2.9	0.55	6.0	8.7	51.2	100	
5000 ²⁾	1RQ1630-2JJ1	3580	510	96.2	95.9	0.89	0.91	13338	2.1	0.35	4.9	10.3	64.2	100	
5600 ²⁾	1RQ1632-2JJ1	3581	560	96.4	96.1	0.90	0.91	14935	2.2	0.35	5.2	10.3	69.6	120	
6000 ²⁾	1RQ1634-2JJ1	3583	600	96.6	96.3	0.91	0.92	15993	2.5	0.40	5.8	10.3	75.2	125	
6600 ²⁾	1RQ1636-2JJ1	3585	660	96.8	96.6	0.91	0.92	17584	2.7	0.45	6.0	10.3	82.0	140	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).²⁾ For safe area motors only.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6.6 kV, 60 Hz															
4-pole															
500	1RQ1350-4JA1	1781	54	94.6	94.3	0.86	0.83	2682	2.8	1.00	6.2	2.1	7.1	160	
560	1RQ1352-4JA1	1778	59	94.6	94.6	0.88	0.88	3009	2.6	1.00	6.2	2.1	7.9	185	
630	1RQ1354-4JA1	1780	66	94.8	94.7	0.88	0.87	3380	2.8	1.10	6.3	2.1	8.6	195	
710	1RQ1356-4JA1	1780	73	95.0	95.0	0.89	0.88	3811	2.8	1.10	6.3	2.1	9.4	210	
800	1RQ1400-4JA1	1784	85	94.7	94.4	0.87	0.85	4283	2.8	1.10	6.4	2.8	13.5	170	
900	1RQ1402-4JA1	1784	94	94.9	94.7	0.88	0.86	4818	2.8	1.10	6.5	2.8	14.5	180	
1000	1RQ1404-4JA1	1785	104	95.2	95.0	0.88	0.86	5351	2.8	1.10	6.5	2.8	16.2	205	
1120	1RQ1406-4JA1	1785	116	95.3	95.2	0.88	0.87	5991	2.9	1.10	6.5	2.8	18.0	220	
1250	1RQ1450-4JA1	1783	130	95.2	95.1	0.88	0.88	6695	2.8	0.90	6.2	3.8	19.0	165	
1400	1RQ1452-4JA1	1783	144	95.4	95.3	0.89	0.88	7499	2.8	0.90	6.2	3.8	21.0	180	
1600	1RQ1454-4JA1	1784	164	95.6	95.6	0.89	0.87	8565	2.9	0.90	6.5	3.8	23.0	180	
1800	1RQ1456-4JA1	1783	184	95.8	95.8	0.89	0.89	9641	2.9	0.90	6.5	3.8	25.0	195	
		Type of construction													
		See page 1/10													

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6.6 kV, 60 Hz															
6-pole															
400	1RQ1350-6JA1	1185	43.5	94.2	94.4	0.85	0.83	3225	2.6	1.00	5.8	1.8	10.3	150	
450	1RQ1352-6JA1	1185	49.0	94.4	94.7	0.85	0.83	3627	2.7	1.00	6.0	1.8	11.8	185	
500	1RQ1354-6JA1	1185	54	94.5	94.8	0.85	0.83	4029	2.7	1.00	6.0	1.8	12.7	225	
560	1RQ1356-6JA1	1187	61	94.8	95.0	0.85	0.80	4504	3.2	1.10	6.4	1.8	14.2	300	
630	1RQ1400-6JA1	1187	68	94.9	94.9	0.85	0.83	5069	2.6	0.90	5.6	2.4	18.9	260	
710	1RQ1402-6JA1	1188	77	95.2	95.2	0.85	0.82	5709	2.7	0.90	5.8	2.4	20.7	350	
800	1RQ1404-6JA1	1188	85	95.3	95.3	0.86	0.83	6434	2.7	0.90	5.8	2.4	22.9	400	
900	1RQ1406-6JA1	1188	96	95.5	95.5	0.86	0.83	7237	2.8	0.90	5.9	2.4	25.3	485	
1000	1RQ1450-6JA1	1191	108	95.7	95.9	0.85	0.80	8016	2.6	1.00	5.8	3.4	30.0	800	
1120	1RQ1450-6JB1	1190	120	95.7	96.0	0.85	0.82	8991	2.5	1.00	5.5	3.4	30.0	650	
1250	1RQ1452-6JA1	1190	132	95.9	96.1	0.86	0.82	10032	2.5	1.10	5.5	3.4	32.0	680	
1400	1RQ1454-6JA1	1190	148	96.0	96.3	0.86	0.83	11237	2.5	1.10	5.5	3.4	35.0	705	
1600	1RQ1456-6JA1	1190	170	96.1	96.4	0.86	0.83	12844	2.5	1.10	5.5	3.4	38.0	720	
8-pole															
280	1RQ1350-8JA1	888	32.5	93.6	93.5	0.80	0.74	3012	2.5	1.00	5.0	1.4	10.3	265	
315	1RQ1352-8JA1	887	36.5	93.8	93.8	0.80	0.76	3391	2.5	1.00	5.0	1.4	11.8	300	
355	1RQ1354-8JA1	888	41.5	94.0	94.1	0.80	0.75	3820	2.6	1.00	5.0	1.4	12.7	370	
400	1RQ1356-8JA1	888	46.5	94.3	94.2	0.80	0.75	4302	2.7	1.10	5.2	1.4	14.2	440	
450	1RQ1400-8JA1	889	52	94.4	94.4	0.80	0.75	4834	2.5	1.00	5.2	1.8	18.9	470	
500	1RQ1402-8JA1	888	57	94.5	94.7	0.81	0.77	5376	2.5	1.00	5.2	1.8	20.7	695	
560	1RQ1404-8JA1	887	63	94.5	94.8	0.82	0.80	6029	2.5	1.00	5.2	1.8	22.9	755	
630	1RQ1406-8JA1	889	71	94.8	95.0	0.82	0.77	6770	2.6	1.00	5.2	1.8	25.3	940	
710	1RQ1450-8JA1	892	79	95.4	95.4	0.82	0.77	7606	2.2	0.80	4.6	2.5	30.0	1210	
800	1RQ1450-8JB1	891	89	95.3	95.4	0.82	0.77	8577	2.2	0.80	4.6	2.5	30.0	865	
900	1RQ1452-8JA1	890	99	95.4	95.6	0.83	0.79	9657	2.1	0.80	4.5	2.5	32.0	1000	
1000	1RQ1454-8JA1	890	110	95.7	95.8	0.83	0.78	10726	2.2	0.80	4.5	2.5	35.0	1025	
1120	1RQ1456-8JA1	890	124	95.8	95.9	0.83	0.79	12015	2.2	0.80	4.5	2.5	38.0	1100	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
10 kV, 50 Hz															
2-pole															
355	1RQ1352-2JD8	2974	24	93.5	92.9	0.88	0.86	1140	3.6	0.90	7.0	1.9	4.5	39	
400	1RQ1352-2JE8	2969	28	93.5	93.2	0.88	0.87	1287	3.2	0.80	6.9	1.9	4.5	34	
450	1RQ1352-2JF8	2963	32	93.5	93.3	0.88	0.88	1450	2.8	0.75	6.1	1.9	4.5	24	
500	1RQ1354-2JD8	2963	34	93.8	93.6	0.89	0.89	1611	2.9	0.75	6.4	1.9	4.9	24	
560	1RQ1356-2JD8	2964	38	94.1	94.0	0.89	0.89	1804	3.1	0.85	6.7	1.9	5.2	26	
630	1RQ1400-2JD8	2976	44	94.0	93.5	0.89	0.89	2022	3.0	0.75	7.0	1.9	7.4	23	
710	1RQ1402-2JD8	2974	48	94.2	93.9	0.89	0.89	2280	3.0	0.75	6.8	1.9	7.9	24	
800	1RQ1404-2JD8	2976	54	94.6	94.3	0.90	0.90	2568	3.2	0.85	7.0	1.9	8.7	24	
900	1RQ1406-2JD8	2974	60	94.7	94.5	0.91	0.91	2890	3.2	0.85	7.0	2.6	9.4	24	
1000	1RQ1450-2JA8	2980	70	94.4	93.8	0.88	0.88	3205	3.0	0.70	6.5	3.6	13.0	86	
1120	1RQ1450-2JB8	2976	76	94.5	94.0	0.89	0.89	3594	2.6	0.60	5.8	3.6	13.0	66	
1250	1RQ1452-2JA8	2979	86	94.8	94.3	0.89	0.88	4008	2.8	0.75	6.4	3.6	13.8	66	
1400	1RQ1454-2JA8	2978	96	95.1	94.7	0.89	0.89	4490	2.8	0.75	6.4	3.6	15.1	75	
1600	1RQ1456-2JA8	2977	108	95.4	95.1	0.90	0.90	5133	2.8	0.80	6.4	3.6	16.4	75	
1800	1RQ1500-2JJ8	2976	120	94.7	94.4	0.91	0.90	5776	2.5	0.65	5.2	5.0	31.3	85	
2000	1RQ1502-2JJ8	2977	134	95.0	94.7	0.91	0.90	6415	2.6	0.70	5.5	5.0	33.4	85	
2240	1RQ1504-2JJ8	2979	148	95.3	95.0	0.92	0.91	7182	2.8	0.70	5.7	5.0	36.6	85	
2500	1RQ1506-2JJ8	2980	164	95.6	95.3	0.92	0.91	8011	3.0	0.80	6.2	5.0	39.9	120	
2800	1RQ1560-2JJ8	2975	188	95.6	95.4	0.90	0.90	8988	2.6	0.55	5.6	7.3	41.4	135	
3200	1RQ1562-2JJ8	2976	215	95.9	95.7	0.90	0.90	10268	2.6	0.55	5.7	7.3	43.6	145	
3700	1RQ1564-2JJ8	2978	245	96.1	96.1	0.91	0.91	11867	2.7	0.55	6.0	7.3	48.3	155	
4000	1RQ1566-2JJ8	2980	265	96.4	96.3	0.91	0.90	12818	2.9	0.60	6.0	7.3	51.2	165	
4500	1RQ1630-2JJ8	2980	305	96.3	96.1	0.89	0.90	14420	2.2	0.40	5.1	8.6	64.2	170	
5000	1RQ1632-2JJ8	2982	330	96.5	96.4	0.90	0.91	16015	2.4	0.45	5.5	8.6	69.6	185	
5600	1RQ1634-2JJ8	2982	370	96.7	96.6	0.90	0.91	17935	2.4	0.45	5.6	8.6	75.2	190	
6100	1RQ1636-2JJ8	2984	400	96.9	96.8	0.91	0.91	19524	2.6	0.45	6.0	8.6	82.0	200	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
4-pole															
355	1RQ1354-4JA8	1488	25.0	94.3	94.2	0.87	0.84	2278	3.6	1.20	7.5	1.7	8.2	120	
400	1RQ1354-4JB8	1486	28.0	94.1	94.3	0.87	0.86	2571	3.4	1.20	7.0	1.7	8.2	105	
450	1RQ1354-4JC8	1483	31.5	94.2	94.3	0.87	0.87	2898	3.2	1.20	6.5	1.7	8.2	75	
500	1RQ1356-4JA8	1483	34.5	94.3	94.6	0.88	0.88	3220	3.2	1.20	6.5	1.7	9.1	85	
560	1RQ1358-4JA8	1484	39.0	94.6	94.8	0.88	0.87	3604	3.0	1.00	6.7	1.7	9.5	95	
630	1RQ1400-4JA8	1485	44.5	94.5	94.3	0.86	0.83	4051	3.0	1.10	6.8	2.3	13.5	225	
710	1RQ1402-4JA8	1485	49.5	94.7	94.5	0.87	0.84	4567	3.0	1.10	6.8	2.3	14.5	235	
800	1RQ1404-4JA8	1485	55	94.9	94.8	0.88	0.85	5145	3.0	1.10	6.8	2.3	16.2	285	
900	1RQ1406-4JA8	1486	62	95.2	95.0	0.88	0.85	5785	3.2	1.30	7.0	2.3	18.0	350	
1000	1RQ1450-4JA8	1484	70	95.1	95.0	0.87	0.85	6435	2.9	0.90	6.1	3.2	19.0	285	
1120	1RQ1452-4JA8	1483	77	95.2	95.2	0.88	0.87	7212	2.9	1.00	6.3	3.2	21.0	305	
1250	1RQ1454-4JA8	1484	86	95.5	95.4	0.88	0.86	8044	3.0	1.00	6.5	3.2	23.0	320	
1400	1RQ1456-4JA8	1484	95	95.6	95.6	0.89	0.88	9009	3.0	1.00	6.5	3.2	25.0	350	
1600	1RQ1500-4JA8	1486	110	95.2	95.1	0.88	0.87	10281	2.8	1.00	6.0	4.5	40.5	195	
1800	1RQ1502-4JA8	1487	124	95.4	95.3	0.88	0.86	11558	2.9	1.00	6.2	4.5	44.6	215	
2000	1RQ1504-4JA8	1487	136	95.5	95.5	0.89	0.88	12848	2.9	1.00	6.2	4.5	48.9	235	
2240	1RQ1506-4JA8	1488	152	95.8	95.8	0.89	0.87	14374	3.2	1.20	6.5	4.5	54.1	270	
2500	1RQ1560-4JJ8	1491	170	96.1	96.0	0.88	0.85	16025	3.0	0.70	6.0	6.7	87.1	1700	
2800	1RQ1560-4JK8	1490	190	96.2	96.1	0.88	0.86	17948	2.8	0.70	6.0	6.7	87.1	1300	
3150	1RQ1562-4JJ8	1490	215	96.4	96.3	0.88	0.86	20190	2.8	0.70	6.0	6.7	92.6	1300	
3750	1RQ1564-4JJ8	1489	255	96.5	96.5	0.88	0.86	24050	2.8	0.70	6.0	6.7	97.4	1300	
3850	1RQ1566-4JJ8	1489	260	96.5	96.6	0.89	0.86	24693	2.8	0.70	6.0	6.7	99.5	1300	
4000	1RQ1630-4JJ8	1490	270	96.3	96.2	0.89	0.88	25636	2.9	0.60	6.0	9.3	135.4	1750	
4550	1RQ1630-4JK8	1489	305	96.4	96.3	0.89	0.88	29188	2.7	0.60	6.0	9.3	135.4	1200	
4800	1RQ1632-4JJ8	1489	325	96.5	96.4	0.89	0.88	30784	2.8	0.60	6.0	9.3	147.0	1300	
5350	1RQ1634-4JJ8	1489	360	96.6	96.6	0.89	0.88	34306	2.9	0.60	6.0	9.3	158.3	1600	
5650	1RQ1636-4JJ8	1489	380	96.7	96.7	0.89	0.88	36228	2.9	0.60	6.0	9.3	172.4	1600	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
6-pole															
280	1RQ1352-6JA8	990	21.5	93.7	93.6	0.81	0.73	2701	3.4	1.40	6.8	1.5	11.8	255	
315	1RQ1352-6JB8	988	24.0	93.7	93.7	0.81	0.76	3045	3.4	1.40	6.4	1.5	11.8	185	
355	1RQ1354-6JA8	988	27.0	93.7	93.6	0.81	0.73	3431	3.4	1.40	6.4	1.5	12.7	185	
400	1RQ1356-6JA8	989	30.5	94.0	93.9	0.81	0.72	3864	3.5	1.45	6.6	1.5	14.2	235	
450	1RQ1400-6JA8	990	33.0	94.2	94.3	0.83	0.79	4340	2.9	1.00	6.3	2.0	18.9	210	
500	1RQ1402-6JA8	991	37.0	94.4	94.5	0.83	0.78	4821	2.9	1.00	6.3	2.0	20.7	235	
560	1RQ1404-6JA8	991	41.0	94.7	94.8	0.83	0.79	5399	3.1	1.10	6.3	2.0	22.9	305	
630	1RQ1406-6JA8	991	45.5	94.8	94.9	0.84	0.78	6071	3.2	1.20	6.5	2.0	25.3	355	
710	1RQ1450-6JA8	991	52	94.7	95.2	0.83	0.81	6841	2.6	1.10	5.7	2.8	30.0	950	
800	1RQ1450-6JB8	991	58	94.9	95.3	0.83	0.78	7706	2.6	1.10	5.8	2.8	30.0	1000	
900	1RQ1450-6JC8	990	65	94.9	95.3	0.84	0.80	8686	2.6	1.10	5.8	2.8	30.0	790	
1000	1RQ1452-6JA8	990	72	95.1	95.4	0.84	0.80	9645	2.6	1.20	5.8	2.8	32.0	790	
1120	1RQ1454-6JA8	990	80	95.3	95.7	0.85	0.81	10809	2.6	1.20	5.8	2.8	35.0	1005	
1250	1RQ1456-6JA8	991	90	95.6	95.9	0.84	0.79	12052	2.7	1.40	6.0	2.8	38.0	1160	
1400	1RQ1500-6JA8	992	100	95.5	95.6	0.84	0.83	13485	2.5	1.10	5.6	3.9	57.9	965	
1600	1RQ1502-6JA8	993	114	95.8	95.7	0.84	0.78	15391	2.8	1.20	6.0	3.9	64.2	1095	
1800	1RQ1504-6JA8	993	128	95.8	95.8	0.85	0.80	17316	2.8	1.30	6.0	3.9	70.9	1225	
2000	1RQ1506-6JA8	993	142	96.0	96.0	0.85	0.80	19237	2.9	1.30	6.0	3.9	78.5	1370	
2240	1RQ1560-6JJ8	994	160	96.2	96.1	0.84	0.79	21525	2.9	0.80	6.0	5.9	129.1	2600	
2500	1RQ1560-6JK8	993	176	96.2	96.3	0.85	0.81	24051	2.6	0.75	5.7	5.9	129.1	2000	
2600	1RQ1562-6JJ8	993	184	96.2	96.3	0.85	0.80	25008	2.6	0.75	5.8	5.9	133.5	2100	
2850	1RQ1564-6JJ8	993	200	96.3	96.4	0.85	0.81	27412	2.7	0.75	5.8	5.9	144.7	2500	
3150	1RQ1566-6JJ8	993	220	96.5	96.5	0.86	0.82	30295	2.7	0.75	5.9	5.9	157.1	2800	
3550	1RQ1630-6JJ8	994	255	96.5	96.5	0.84	0.82	34121	2.9	0.80	6.0	7.8	212.1	5100	
4000	1RQ1630-6JK8	992	280	96.5	96.5	0.85	0.82	38496	2.5	0.75	5.7	7.8	227.0	4300	
4550	1RQ1632-6JJ8	992	320	96.6	96.6	0.85	0.83	43803	2.5	0.75	5.7	7.8	235.7	4300	
4900	1RQ1636-6JJ8	993	340	96.7	96.7	0.86	0.83	47144	2.7	0.85	6.0	7.8	252.3	5100	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
8-pole															
315	1RQ1400-8JA8	741	25	93.3	93.3	0.79	0.70	4060	2.5	1.00	5.0	1.5	18.9	595	
355	1RQ1402-8JA8	741	28	93.4	93.5	0.79	0.71	4576	2.5	1.00	5.0	1.5	20.7	650	
400	1RQ1404-8JA8	741	31	93.6	93.8	0.80	0.73	5159	2.5	1.00	5.5	1.5	22.9	745	
450	1RQ1406-8JA8	741	35	93.8	94.0	0.80	0.72	5801	2.6	1.10	5.5	1.5	25.3	880	
500	1RQ1450-8JA8	743	39	94.2	94.4	0.79	0.71	6430	2.7	1.10	5.5	2.1	30.0	1390	
560	1RQ1450-8JB8	741	43	94.4	94.4	0.80	0.73	7216	2.4	1.10	5.0	2.1	30.0	1100	
630	1RQ1452-8JA8	741	48	94.4	94.6	0.80	0.76	8125	2.4	1.10	5.0	2.1	32.0	1100	
710	1RQ1454-8JA8	741	54	94.5	94.8	0.80	0.74	9149	2.5	1.20	5.2	2.1	35.0	1355	
800	1RQ1456-8JA8	742	61	94.8	95.0	0.80	0.71	10299	2.7	1.30	5.4	2.1	38.0	1660	
900	1RQ1500-8JA8	743	65	95.5	95.4	0.84	0.77	11562	2.4	0.90	5.0	2.9	57.9	3190	
1000	1RQ1500-8JB8	742	72	95.5	95.5	0.84	0.79	12869	2.4	0.90	5.0	2.9	57.9	2110	
1120	1RQ1502-8JA8	743	81	95.6	95.5	0.84	0.78	14405	2.4	1.00	5.0	2.9	64.2	2400	
1250	1RQ1504-8JA8	742	90	95.6	95.7	0.84	0.79	16080	2.4	1.00	5.0	2.9	70.9	2690	
1400	1RQ1506-8JA8	743	102	95.8	95.8	0.83	0.75	17985	2.6	1.10	5.4	2.9	78.5	3080	
1600	1RQ1560-8JJ8	744	118	95.8	95.9	0.82	0.78	20551	2.1	0.60	4.4	4.4	129.1	3200	
1800	1RQ1562-8JJ8	744	130	96.0	96.2	0.83	0.79	23120	2.2	0.60	4.5	4.4	133.5	3700	
2000	1RQ1564-8JJ8	744	144	96.1	96.3	0.83	0.78	25669	2.3	0.65	4.8	4.4	144.7	4500	
2240	1RQ1566-8JJ8	744	162	96.3	96.4	0.83	0.78	28749	2.4	0.65	4.8	4.4	157.1	5500	
2700	1RQ1630-8JJ8	744	196	96.3	96.4	0.83	0.80	34667	2.0	0.65	4.5	5.9	212.1	5000	
3000	1RQ1632-8JJ8	744	215	96.4	96.5	0.83	0.80	38518	2.1	0.65	4.5	5.9	227.0	6500	
3250	1RQ1634-8JJ8	744	235	96.5	96.6	0.83	0.79	41706	2.2	0.70	4.8	5.9	235.7	7300	
3550	1RQ1636-8JJ8	745	255	96.6	96.7	0.83	0.79	45525	2.3	0.70	5.1	5.9	252.3	8500	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
10-pole															
400	1RQ1450-3JA8	594	32	93.2	92.9	0.78	0.69	6428	2.2	1.00	5.5	1.8	32.8	1200	
450	1RQ1452-3JA8	593	36	93.3	93.4	0.79	0.76	7247	2.2	1.00	5.5	1.8	35.8	1200	
500	1RQ1454-3JA8	594	40	93.6	93.4	0.79	0.71	8040	2.5	1.15	5.5	1.8	38.3	1400	
540	1RQ1456-3JA8	594	42	93.8	93.6	0.79	0.71	8682	2.6	1.20	5.5	1.8	41.3	1600	
630	1RQ1500-3JA8	594	46	94.3	94.4	0.83	0.79	10132	1.9	0.75	4.5	2.2	57.8	4200	
710	1RQ1502-3JA8	594	52	94.6	94.5	0.83	0.78	11409	1.9	0.80	4.8	2.2	64.8	4800	
800	1RQ1504-3JA8	594	58	94.7	94.7	0.83	0.79	12866	1.9	0.80	4.8	2.2	70.8	4800	
900	1RQ1506-3JA8	594	66	94.8	94.8	0.83	0.80	14482	1.9	0.80	4.8	2.2	78.8	5000	
1000	1RQ1560-3JJ8	594	74	95.5	95.5	0.82	0.77	16067	2.2	0.55	4.4	3.4	120.7	7000	
1120	1RQ1560-3JK8	594	82	95.4	95.5	0.82	0.77	18004	2.1	0.55	4.3	3.4	120.7	4500	
1250	1RQ1562-3JJ8	594	92	95.5	95.6	0.82	0.78	20090	2.1	0.55	4.3	3.4	134.7	4500	
1400	1RQ1564-3JJ8	594	104	95.5	95.6	0.82	0.78	22505	2.1	0.55	4.4	3.4	147.7	4500	
1600	1RQ1566-3JJ8	594	116	95.6	95.8	0.83	0.79	25737	2.1	0.55	4.4	3.4	160.7	5400	
1800	1RQ1630-3JJ8	595	132	95.9	95.9	0.82	0.78	28900	2.1	0.60	4.7	4.5	239.8	7600	
2000	1RQ1632-3JJ8	594	144	95.9	96.0	0.83	0.80	32133	2.1	0.60	4.7	4.5	261.8	8200	
2240	1RQ1634-3JJ8	595	162	96.1	96.1	0.83	0.77	35953	2.3	0.65	4.8	4.5	286.8	9500	
2500	1RQ1636-3JJ8	595	180	96.2	96.2	0.83	0.79	40146	2.3	0.65	4.8	4.5	317.8	9700	
		Type of construction													
		See page 1/10													

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
12-pole															
500	1RQ1500-5JA8	495	40	94.0	93.7	0.76	0.69	9656	2.0	0.70	4.2	1.9	58.8	6200	
560	1RQ1502-5JA8	494	46	94.1	93.9	0.76	0.70	10817	2.0	0.70	4.2	1.9	64.8	6500	
630	1RQ1504-5JA8	495	50	94.3	94.0	0.76	0.69	12167	2.1	0.75	4.3	1.9	71.8	7400	
710	1RQ1506-5JA8	495	58	94.5	94.1	0.76	0.67	13706	2.2	0.80	4.5	1.9	79.8	8100	
800	1RQ1560-5JJ8	494	64	94.9	94.8	0.77	0.71	15453	1.9	0.60	3.9	3.2	139.7	18100	
900	1RQ1560-5JK8	494	72	94.8	94.8	0.77	0.71	17406	1.8	0.55	3.7	3.2	139.7	12500	
1000	1RQ1562-5JJ8	494	78	95.0	94.9	0.77	0.70	19316	2.0	0.60	4.0	3.2	156.7	12500	
1120	1RQ1564-5JJ8	494	88	95.0	95.0	0.77	0.71	21652	2.0	0.60	4.0	3.2	171.7	12500	
1250	1RQ1566-5JJ8	495	98	95.3	95.1	0.77	0.69	24141	2.1	0.70	4.1	3.2	187.7	16900	
1400	1RQ1630-5JJ8	496	106	95.3	95.2	0.80	0.74	26977	2.0	0.70	4.5	4.4	267.8	9400	
1600	1RQ1632-5JJ8	496	120	95.5	95.5	0.80	0.75	30838	2.0	0.70	4.5	4.4	292.8	11600	
1800	1RQ1634-5JJ8	495	136	95.5	95.6	0.80	0.77	34720	2.0	0.70	4.5	4.4	320.8	12300	
2000	1RQ1636-5JJ8	496	150	95.7	95.6	0.80	0.73	38516	2.3	0.80	4.9	4.4	356.8	13400	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque	Break-down torque	Locked-rotor torque	Locked-rotor current	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	T_{rated} Nm	$T_{\text{B}}/$ T_{rated} [-]	$T_{\text{LR}}/$ T_{rated} [-]	$I_{\text{LR}}/$ I_{rated} [-]	Motor		External, max.	
10 kV, 50 Hz															
14-pole															
355	1RQ1 502-7JA8	424	30	93.5	93.0	0.72	0.62	7996	1.9	0.65	4.0	1.6	66.4	8300	
400	1RQ1 502-7JB8	423	34	93.5	93.2	0.73	0.65	9026	1.9	0.65	4.0	1.6	66.4	8300	
450	1RQ1 504-7JA8	423	38	93.8	93.6	0.73	0.65	10155	1.9	0.70	4.0	1.6	73.4	10500	
500	1RQ1 506-7JA8	424	42	94.0	93.7	0.73	0.63	11275	2.0	0.75	4.0	1.6	81.4	12700	
560	1RQ1 560-7JJ8	424	46	94.3	94.3	0.75	0.69	12628	2.2	0.50	4.0	2.7	150.2	8900	
630	1RQ1 560-7JK8	424	52	94.5	94.4	0.75	0.67	14207	2.2	0.55	4.0	2.7	150.2	8500	
710	1RQ1 562-7JJ8	424	58	94.7	94.5	0.75	0.65	15996	2.3	0.60	4.3	2.7	169.2	9300	
800	1RQ1 564-7JJ8	424	64	94.8	94.7	0.75	0.66	18036	2.3	0.60	4.3	2.7	185.2	9800	
900	1RQ1 566-7JJ8	424	72	94.9	94.8	0.76	0.67	20295	2.3	0.60	4.3	2.7	202.2	9800	
1000	1RQ1 630-7JJ8	425	80	94.7	94.6	0.77	0.68	22471	2.0	0.60	4.1	3.7	301.8	8800	
1120	1RQ1 632-7JJ8	425	88	94.9	94.9	0.78	0.71	25185	2.0	0.60	4.1	3.7	330.8	10000	
1250	1RQ1 634-7JJ8	425	98	95.1	95.1	0.78	0.71	28108	2.1	0.60	4.1	3.7	362.8	11600	
1400	1RQ1 636-7JJ8	425	108	95.2	95.1	0.78	0.70	31466	2.2	0.70	4.3	3.7	403.8	11600	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling air flow rate m ³ /s	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
16-pole															
315	1RQ1 500-9JA8	370	28	92.9	92.6	0.69	0.60	8122	1.9	0.55	3.4	1.6	60.4	6400	
355	1RQ1 502-9JA8	370	32	93.1	92.9	0.69	0.61	9155	1.9	0.60	3.4	1.6	66.4	7200	
400	1RQ1 504-9JA8	370	36	93.4	93.1	0.69	0.60	10313	2.0	0.60	3.5	1.6	73.4	8300	
450	1RQ1 506-9JA8	371	40	93.5	93.2	0.69	0.58	11596	2.1	0.65	3.7	1.6	80.4	9200	
500	1RQ1 560-9JJ8	370	42	93.9	93.7	0.72	0.62	12905	2.0	0.50	3.5	2.4	151.2	18600	
560	1RQ1 560-9JK8	370	48	93.9	93.8	0.72	0.62	14474	1.9	0.50	3.3	2.4	151.2	16100	
630	1RQ1 562-9JJ8	369	52	94.1	94.1	0.73	0.64	16287	1.9	0.50	3.4	2.4	169.2	18200	
710	1RQ1 564-9JJ8	370	60	94.2	94.1	0.73	0.63	18346	2.0	0.55	3.5	2.4	186.2	18200	
800	1RQ1 566-9JJ8	369	68	94.3	94.3	0.73	0.64	20688	2.0	0.55	3.5	2.4	203.2	19100	
900	1RQ1 630-9JJ8	371	76	93.9	93.7	0.72	0.63	23148	1.9	0.55	3.4	3.3	302.8	11000	
1000	1RQ1 632-9JJ8	371	86	94.2	94.0	0.72	0.62	25714	2.0	0.55	3.5	3.3	331.8	14000	
1120	1RQ1 634-9JJ8	372	96	94.4	94.2	0.72	0.61	28791	2.0	0.60	3.6	3.3	363.8	16500	
1250	1RQ1 636-9JJ8	371	104	94.6	94.5	0.73	0.63	32142	2.0	0.60	3.6	3.3	404.8	18100	

Type of construction

See page 1/10

Pole number

9 16-pole: additional order code **H1A** required

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

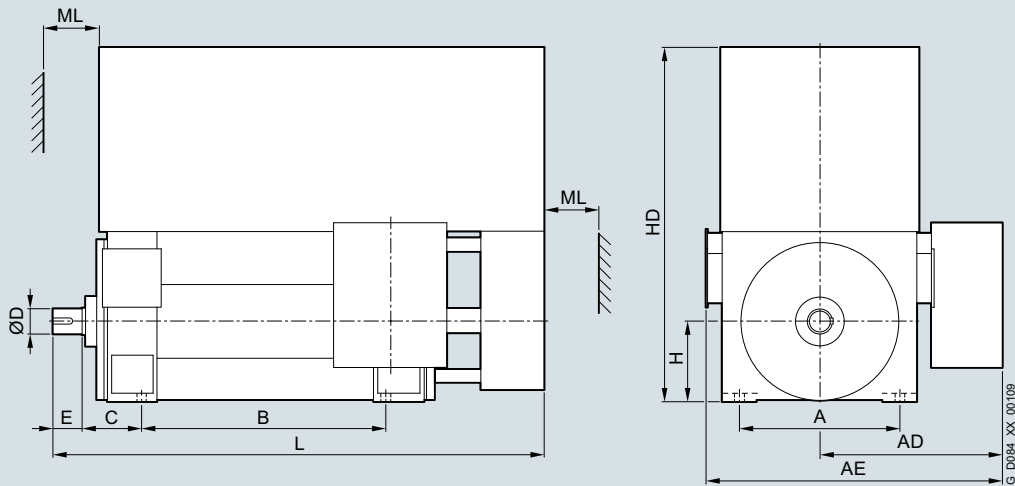
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
2-pole													
1RQ1350-2....	2900	415	710	765	1275	1180	224	85	130	355	1640	2200	180
1RQ1352-2....	2950	430	710	765	1275	1180	224	85	130	355	1640	2200	180
1RQ1354-2....	3100	449	710	765	1275	1180	224	85	130	355	1640	2200	180
1RQ1356-2....	3200	464	710	765	1275	1180	224	85	130	355	1640	2200	180
1RQ1400-2....	3750	544	800	815	1370	1250	250	85	130	400	1760	2350	180
1RQ1402-2....	3800	563	800	815	1370	1250	250	85	130	400	1760	2350	180
1RQ1404-2....	3950	594	800	815	1370	1250	250	85	130	400	1760	2350	180
1RQ1406-2....	4100	624	800	815	1370	1250	250	85	130	400	1760	2350	180
1RQ1450-2.... ¹⁾	4950	698	950	870	1480	1400	250	95	130	450	1950	2365	195
1RQ1452-2.... ¹⁾	5100	728	950	870	1480	1400	250	95	130	450	1950	2365	195
1RQ1454-2.... ¹⁾	5300	768	950	870	1480	1400	250	95	130	450	1950	2365	195
1RQ1456-2.... ¹⁾	5500	818	950	870	1480	1400	250	95	130	450	1950	2365	195

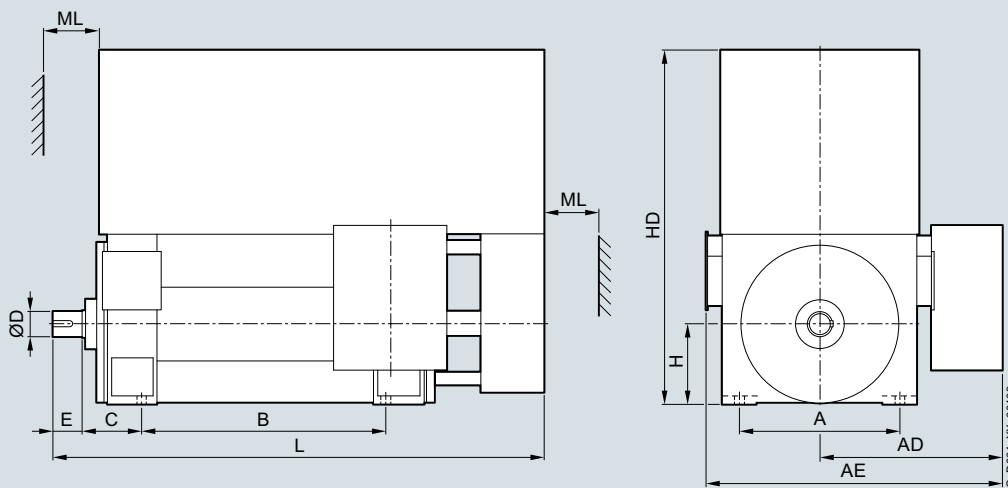
¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



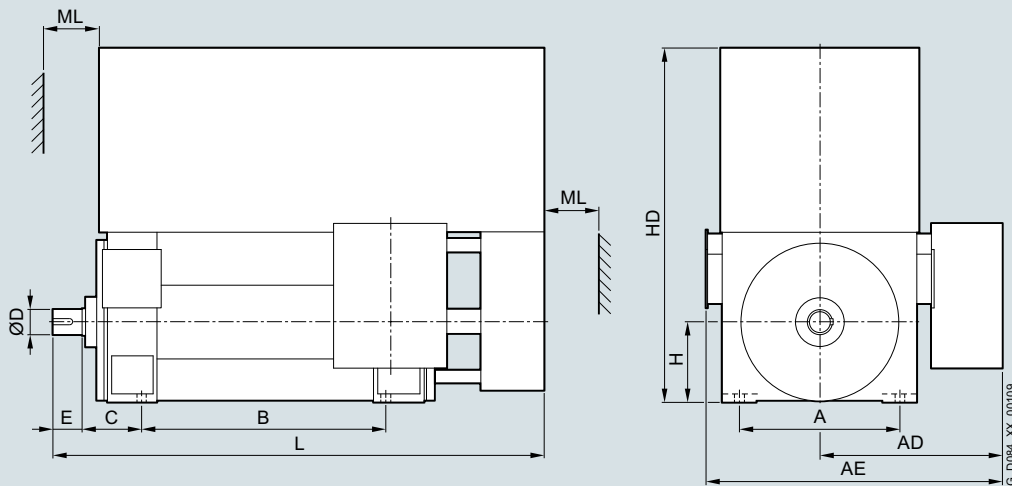
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
4-pole													
1RQ1350-4....	2950	446	710	765	1275	1180	224	95	130	355	1640	2200	180
1RQ1352-4....	3050	479	710	765	1275	1180	224	95	130	355	1640	2200	180
1RQ1354-4....	3150	511	710	765	1275	1180	224	95	130	355	1640	2200	180
1RQ1356-4....	3300	549	710	765	1275	1180	224	95	130	355	1640	2200	180
1RQ1400-4....	3850	646	800	815	1370	1250	250	110	165	400	1760	2350	180
1RQ1402-4....	3950	680	800	815	1370	1250	250	110	165	400	1760	2350	180
1RQ1404-4....	4150	740	800	815	1370	1250	250	110	165	400	1760	2350	180
1RQ1406-4....	4350	800	800	815	1370	1250	250	110	165	400	1760	2350	180
1RQ1450-4....	5150	844	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1452-4....	5400	914	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1454-4....	5600	964	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1456-4....	5900	1034	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1500-4....	6750	1262	1060	945	1615	1500	280	150	200	500	2090	2810	215
1RQ1502-4....	7000	1342	1060	945	1615	1500	280	150	200	500	2090	2810	215
1RQ1504-4....	7300	1432	1060	945	1615	1500	280	150	200	500	2090	2810	215
1RQ1506-4....	7750	1532	1060	1115	1785	1500	280	150	200	500	2090	2810	215
1RQ1560-4....	10850	2172	1250	1090	1915	1700	315	170	240	560	2370	3200	390
1RQ1562-4....	11150	2262	1250	1270	2090	1700	315	170	240	560	2370	3200	390
1RQ1564-4....	11450	2342	1250	1270	2090	1700	315	170	240	560	2370	3200	390
1RQ1566-4....	11650	2372	1250	1270	2090	1700	315	170	240	560	2370	3200	390
1RQ1630-4....	14350	2683	1400	1570	2510	1900	315	200	280	630	2680	3480	415
1RQ1632-4....	14900	2838	1400	1570	2510	1900	315	200	280	630	2680	3480	415
1RQ1634-4....	15500	2972	1400	1570	2510	1900	315	200	280	630	2680	3480	415
1RQ1636-4....	16050	3152	1400	1570	2510	1900	315	200	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



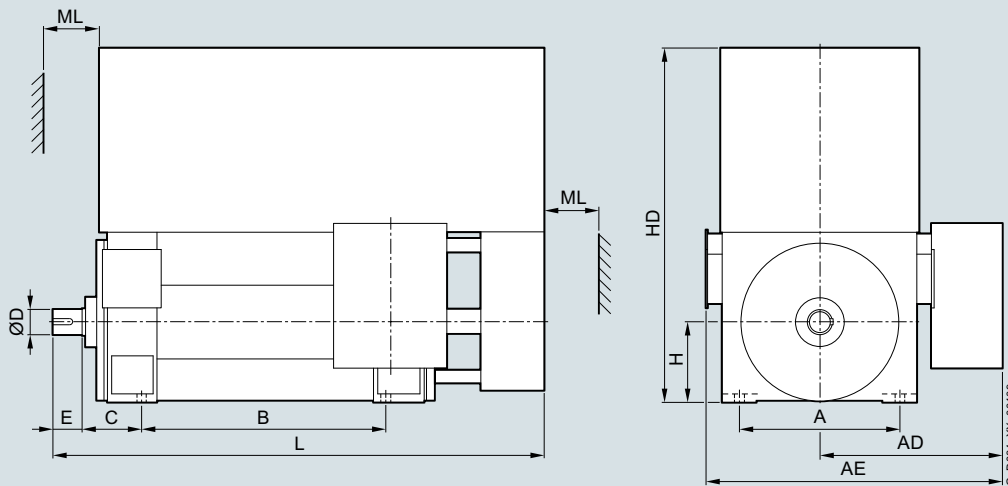
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
6-pole													
1RQ1350-6....	3100	566	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1352-6....	3200	621	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1354-6....	3300	653	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1356-6....	3450	711	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1400-6....	4050	795	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1402-6....	4200	847	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1404-6....	4400	911	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1406-6....	4600	979	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1450-6....	5350	1021	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1452-6....	5550	1091	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1454-6....	5750	1151	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1456-6....	6000	1221	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1500-6....	7100	1519	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1502-6....	7450	1629	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1504-6....	7800	1759	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1506-6....	8250	1899	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1560-6....	10900	2571	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1562-6....	11100	2651	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1564-6....	11600	2811	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1566-6....	12100	2991	1250	1270	2090	1700	315	190	280	560	2370	3055	390
1RQ1630-6....	15000	3314	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1632-6....	15500	3481	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1634-6....	15850	3575	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1636-6....	16450	3758	1400	1570	2510	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



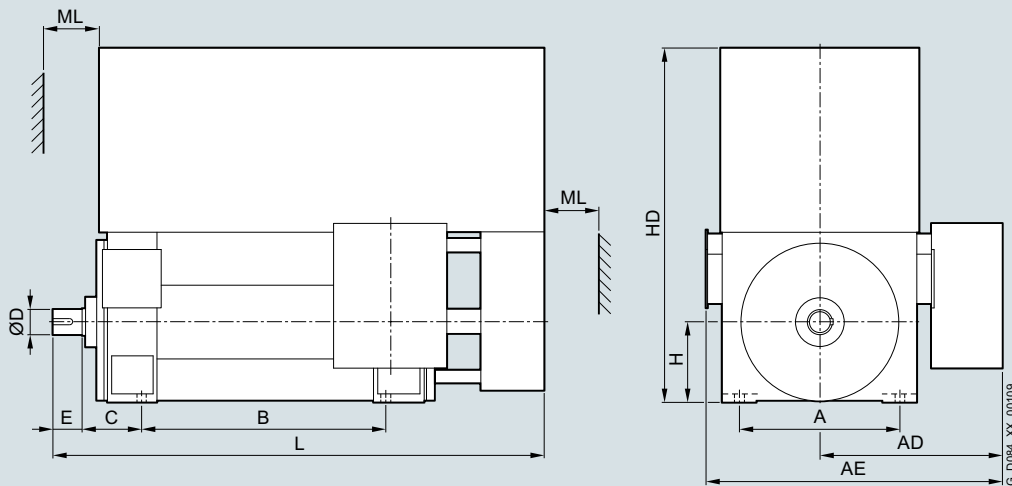
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
8-pole													
1RQ1350-8....	3100	566	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1352-8....	3200	621	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1354-8....	3300	653	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1356-8....	3450	711	710	765	1275	1180	224	110	165	355	1640	2200	180
1RQ1400-8....	4050	795	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1402-8....	4200	847	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1404-8....	4400	911	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1406-8....	4600	979	800	815	1370	1250	250	130	200	400	1760	2350	180
1RQ1450-8....	5350	1021	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1452-8....	5550	1091	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1454-8....	5750	1151	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1456-8....	6000	1221	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1500-8....	7100	1519	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1502-8....	7450	1629	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1504-8....	7800	1759	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1506-8....	8250	1899	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1560-8....	10900	2571	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1562-8....	11100	2651	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1564-8....	11600	2811	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1566-8....	12100	2991	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1630-8....	15000	3314	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1632-8....	15500	3481	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1634-8....	15850	3575	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1636-8....	16450	3758	1400	1570	2510	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



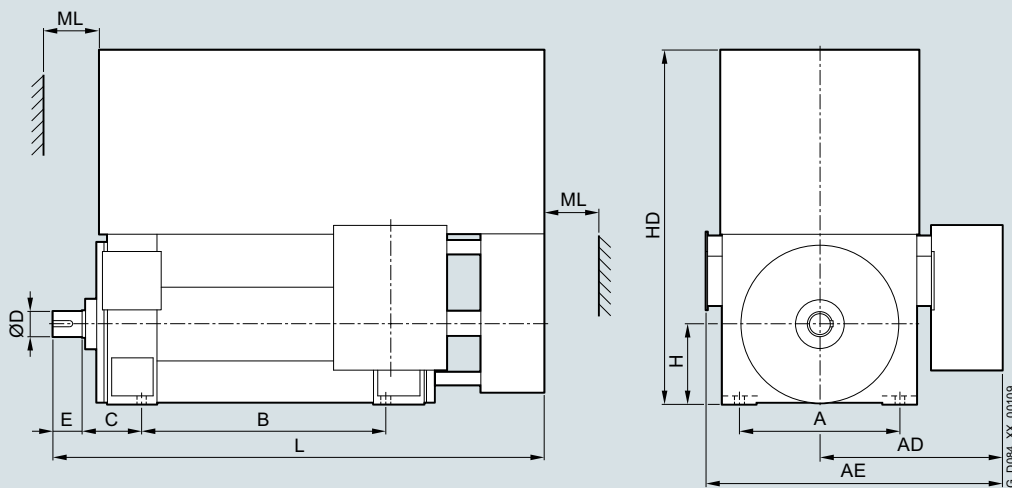
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
10-pole													
1RQ1450-3....	5500	1134	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1452-3....	5650	1194	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1454-3....	5800	1244	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1456-3....	6050	1323	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1500-3....	7100	1571	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1502-3....	7450	1681	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1504-3....	7800	1791	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1506-3....	8200	1931	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1560-3....	10500	2370	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1560-3....	10500	2370	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1562-3....	11000	2570	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1564-3....	11500	2730	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1566-3....	11950	2920	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1630-3....	14300	3433	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1632-3....	14950	3663	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1634-3....	14500	3923	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1636-3....	16450	4243	1400	1570	2510	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



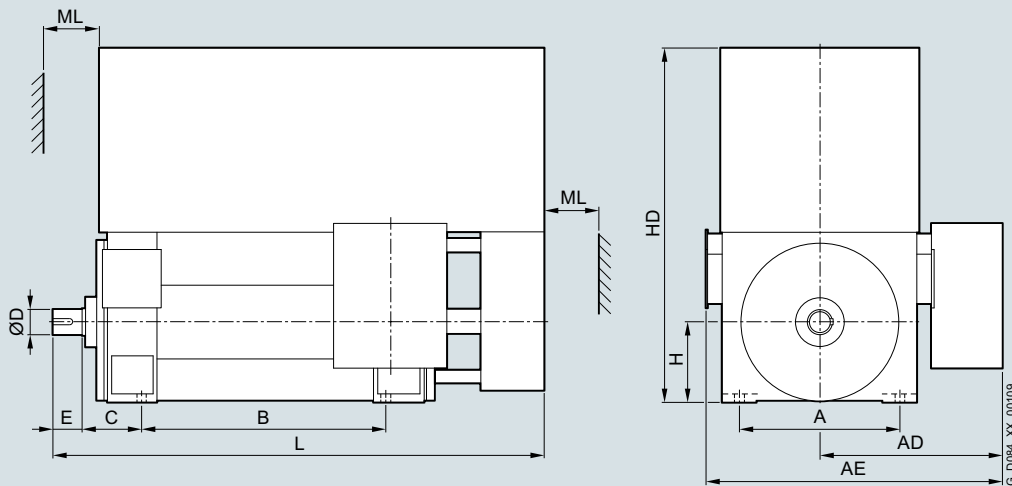
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
12-pole													
1RQ1450-5....	5450	1194	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1452-5....	5650	1264	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1454-5....	5800	1324	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1456-5....	6050	1403	950	870	1480	1400	250	130	200	450	1950	2435	195
1RQ1500-5....	7150	1581	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1502-5....	7500	1691	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1504-5....	7800	1811	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1506-5....	8200	1941	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1560-5....	10450	2520	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1560-5....	10450	2520	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1562-5....	11050	2740	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1564-5....	11500	2930	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1566-5....	12000	3130	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1630-5....	14300	3613	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1632-5....	14900	3863	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1634-5....	15600	4133	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1636-5....	16450	4483	1400	1570	2510	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



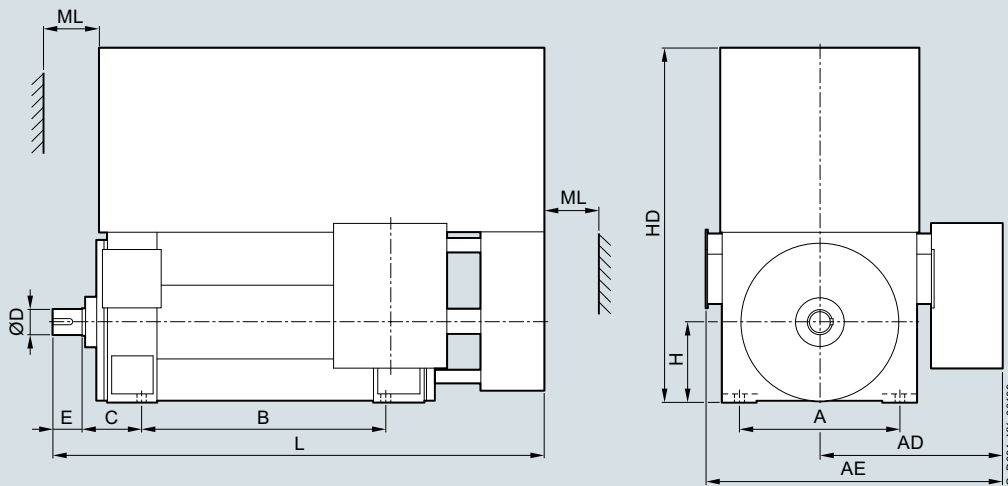
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
14-pole													
1RQ1500-7....	7100	1582	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1502-7....	7500	1712	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1504-7....	7750	1832	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1506-7....	8200	1972	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1560-7....	10400	2591	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1560-7....	10400	2591	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1562-7....	10900	2821	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1564-7....	11400	3021	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1566-7....	11950	3241	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1630-7....	14300	3807	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1632-7....	14900	4077	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1634-7....	15500	4367	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1636-7....	16350	4757	1400	1570	2510	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings													
16-pole													
1RQ1500-9....	7100	1592	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1502-9....	7450	1702	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1504-9....	7750	1822	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1506-9....	8150	1962	1060	945	1615	1500	280	160	240	500	2090	2850	215
1RQ1560-9....	10300	2541	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1560-9....	10350	2541	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1562-9....	10850	2741	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1564-9....	11350	3021	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1566-9....	11900	3241	1250	1090	1915	1700	315	190	280	560	2370	3055	390
1RQ1630-9....	14250	3807	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1632-9....	14850	4077	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1634-9....	15450	4367	1400	1570	2510	1900	315	220	280	630	2680	3480	415
1RQ1636-9....	16350	4767	1400	1570	2510	1900	315	220	280	630	2680	3480	415

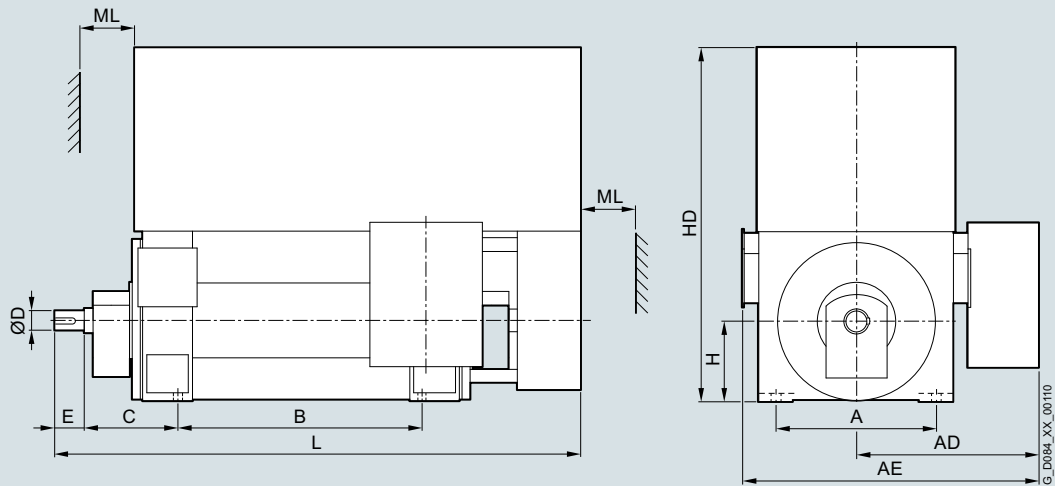
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, sleeve bearings													
2-pole													
1RQ1400-2....	3750	473	800	815	1370	1250	425	85	130	400	1760	2550	180
1RQ1402-2....	3850	492	800	815	1370	1250	425	85	130	400	1760	2550	180
1RQ1404-2....	4000	535	800	815	1370	1250	425	85	130	400	1760	2550	180
1RQ1406-2....	4100	565	800	815	1370	1250	425	85	130	400	1760	2550	180
1RQ1450-2....	5050	668	950	870	1480	1400	450	95	130	450	1950	2695	195
1RQ1452-2....	5200	698	950	870	1480	1400	450	95	130	450	1950	2695	195
1RQ1454-2....	5400	746	950	870	1480	1400	450	95	130	450	1950	2695	195
1RQ1456-2....	5600	796	950	870	1480	1400	450	95	130	450	1950	2695	195
1RQ1500-2....	6900	1190	1060	945	1615	1500	475	110	165	500	2090	2970	215
1RQ1502-2....	7050	1220	1060	945	1615	1500	475	110	165	500	2090	2970	215
1RQ1504-2....	7350	1302	1060	945	1615	1500	475	110	165	500	2090	2970	215
1RQ1506-2....	7650	1382	1060	1115	1785	1500	475	110	165	500	2090	2970	215
1RQ1560-2....	10300	1535	1250	1090	1915	1700	530	140	200	560	2370	3860	390
1RQ1562-2....	10650	1585	1250	1090	1915	1700	530	140	200	560	2370	3860	390
1RQ1564-2....	11250	1709	1250	1250	1270	1700	530	140	200	560	2370	3860	390
1RQ1566-2....	11600	1769	1250	1250	1270	1700	530	140	200	560	2370	3860	390
1RQ1630-2....	14250	2000	1400	1570	2680	1900	530	160	240	630	2680	4180	415
1RQ1632-2....	14750	2089	1400	1570	2680	1900	530	160	240	630	2680	4180	415
1RQ1634-2....	15200	2192	1400	1570	2680	1900	530	160	240	630	2680	4180	415
1RQ1636-2....	15950	2307	1400	1570	2680	1900	530	160	240	630	2680	4180	415

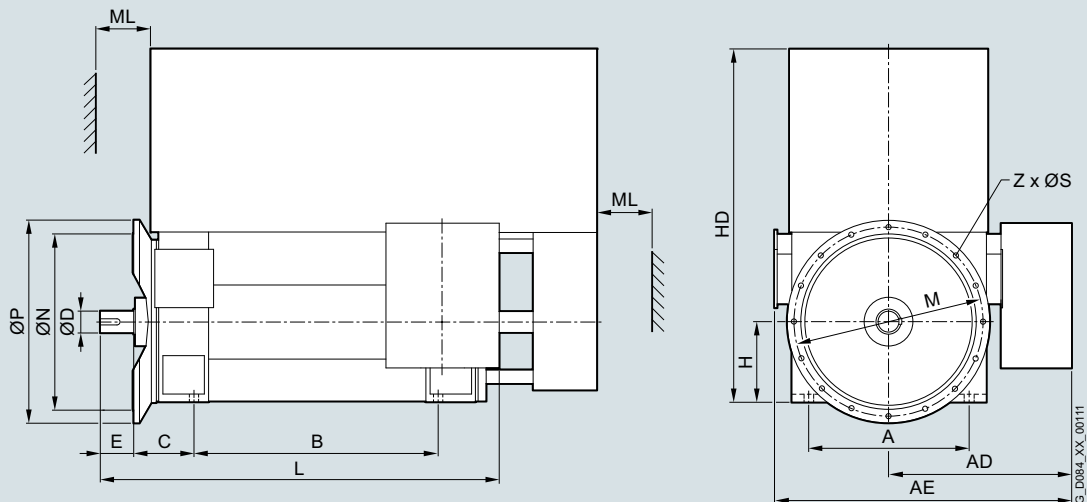
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



Motor type	Weight		Dimensions														
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

2-pole

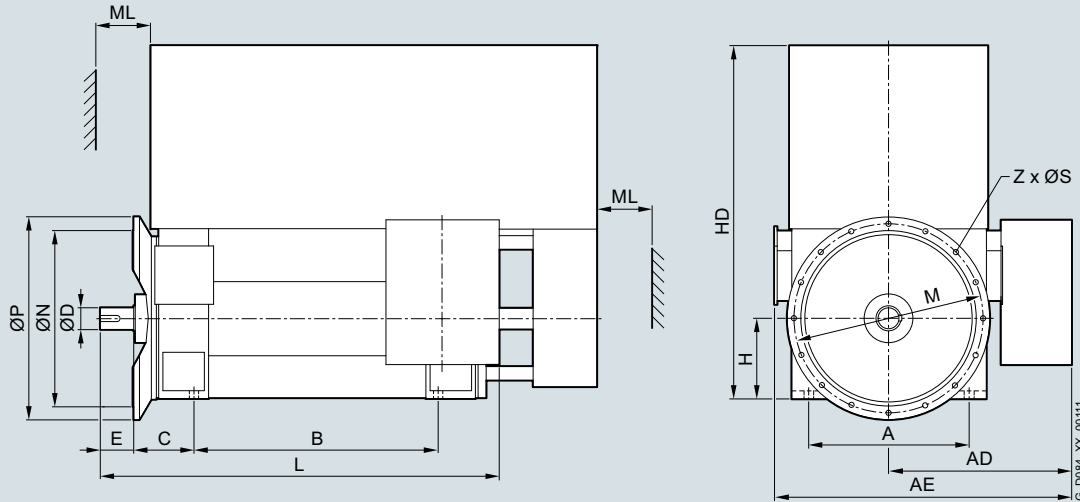
1RQ1350-2....	2950	415	710	765	1275	1180	224	85	130	355	1640	2200	180	840	780	900	22	8
1RQ1352-2....	3050	430	710	765	1275	1180	224	85	130	355	1640	2200	180	840	780	900	22	8
1RQ1354-2....	3150	449	710	765	1275	1180	224	85	130	355	1640	2200	180	840	780	900	22	8
1RQ1356-2....	3200	464	710	765	1275	1180	224	85	130	355	1640	2200	180	840	780	900	22	8
1RQ1400-2....	3800	544	800	815	1370	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1402-2....	3900	563	800	815	1370	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1404-2....	4050	594	800	815	1370	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1406-2....	4150	624	800	815	1370	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1450-2.... ¹⁾	5050	698	950	870	1480	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8
1RQ1452-2.... ¹⁾	5200	728	950	870	1480	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8
1RQ1454-2.... ¹⁾	5400	768	950	870	1480	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8
1RQ1456-2.... ¹⁾	5650	818	950	870	1480	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8

¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters
Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions														
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

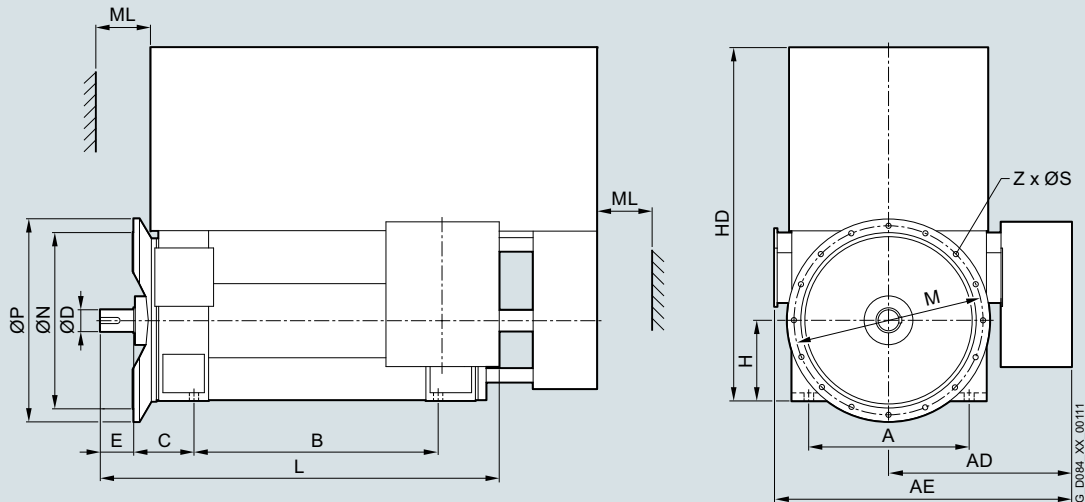
4-pole																		
1RQ1350-4....	3000	446	710	765	1275	1180	224	95	130	355	1640	2200	180	840	780	900	22	8
1RQ1352-4....	3100	479	710	765	1275	1180	224	95	130	355	1640	2200	180	840	780	900	22	8
1RQ1354-4....	3200	511	710	765	1275	1180	224	95	130	355	1640	2200	180	840	780	900	22	8
1RQ1356-4....	3350	549	710	765	1275	1180	224	95	130	355	1640	2200	180	840	780	900	22	8
1RQ1400-4....	3900	646	800	815	1370	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1402-4....	4050	680	800	815	1370	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1404-4....	4250	740	800	815	1370	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1406-4....	4400	800	800	815	1370	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1450-4....	5300	844	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1452-4....	5550	914	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1454-4....	5750	964	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1456-4....	6050	1034	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1500-4....	6900	1262	1060	945	1615	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1502-4....	7150	1342	1060	945	1615	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1504-4....	7400	1432	1060	945	1615	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1506-4....	7850	1532	1060	1115	1785	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1560-4....	10950	2172	1250	1090	1915	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1562-4....	11250	2262	1250	1270	2090	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1564-4....	11600	2342	1250	1270	2090	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1566-4....	11750	2372	1250	1270	2090	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1630-4....	14550	2683	1400	1570	2510	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1632-4....	15100	2838	1400	1570	2510	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1634-4....	15700	2972	1400	1570	2510	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1636-4....	16300	3152	1400	1570	2510	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



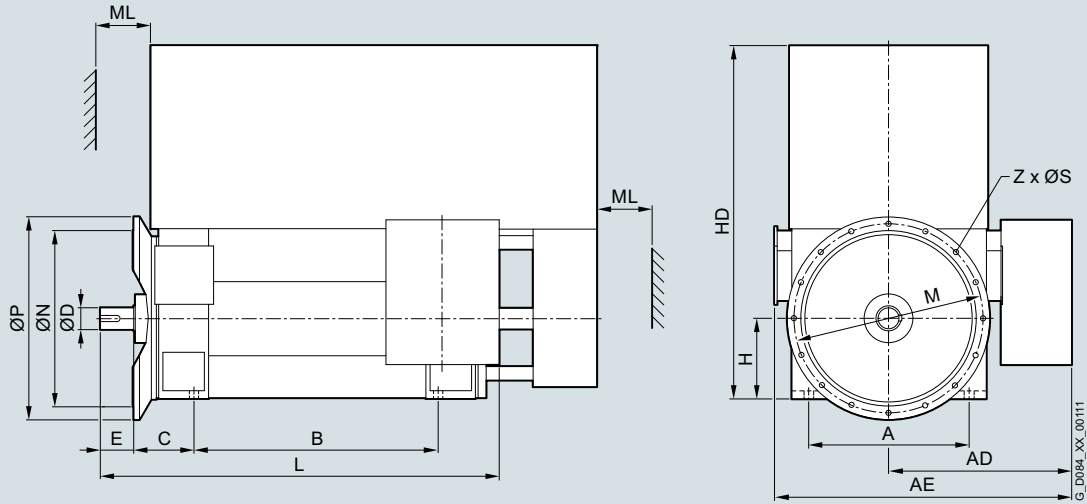
Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM B35 type of construction, anti-friction bearings																		
6-pole																		
1RQ1350-6....	3150	566	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1352-6....	3300	621	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1354-6....	3400	653	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1356-6....	3550	711	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1400-6....	4100	795	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1402-6....	4250	847	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1404-6....	4450	911	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1406-6....	4650	979	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1450-6....	5500	1021	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1452-6....	5700	1091	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1454-6....	5900	1151	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1456-6....	6100	1221	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1500-6....	7250	1519	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1502-6....	7550	1629	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1504-6....	7950	1759	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1506-6....	8350	1899	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1560-6....	11100	2571	1250	1090	1915	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1562-6....	11300	2651	1250	1090	1915	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1564-6....	11800	2811	1250	1090	1915	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1566-6....	12300	2991	1250	1270	2090	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1630-6....	15250	3314	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1632-6....	15750	3481	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1634-6....	16100	3575	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1636-6....	16700	3758	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions														
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

8-pole

1RQ1350-8....	3150	566	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1352-8....	3300	621	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1354-8....	3400	653	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1356-8....	3550	711	710	765	1275	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1400-8....	4100	795	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1402-8....	4250	847	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1404-8....	4450	911	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1406-8....	4650	979	800	815	1370	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1450-8....	5500	1021	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1452-8....	5700	1091	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1454-8....	5900	1151	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1456-8....	6100	1221	950	870	1480	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1500-8....	7250	1519	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1502-8....	7550	1629	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1504-8....	7950	1759	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1506-8....	8350	1899	1060	945	1615	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1560-8....	11100	2571	1250	1090	1915	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1562-8....	11300	2651	1250	1090	1915	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1564-8....	11800	2811	1250	1090	1915	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1566-8....	12300	2991	1250	1090	1915	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1630-8....	15250	3314	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1632-8....	15750	3481	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1634-8....	16100	3575	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1636-8....	16700	3758	1400	1570	2510	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16

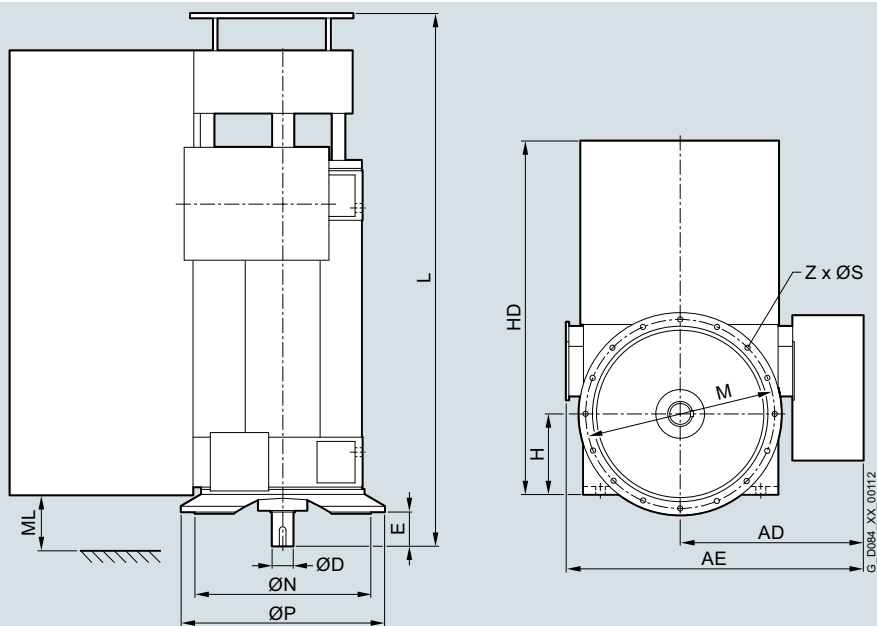
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

4-pole

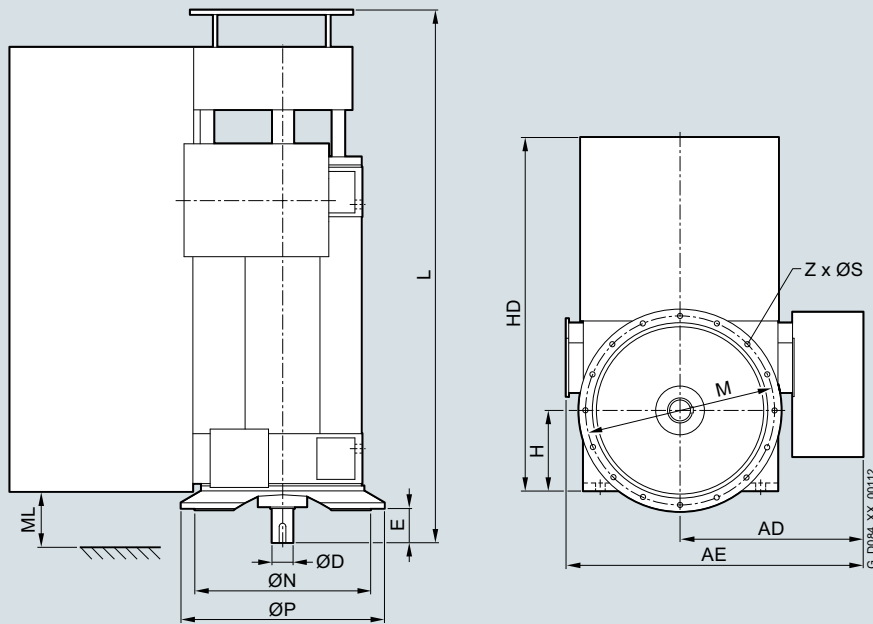
1RQ1350-4....	3200	446	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1352-4....	3300	479	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1354-4....	3400	511	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1356-4....	3500	549	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1400-4....	4200	646	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1402-4....	4300	680	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1404-4....	4500	740	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1406-4....	4650	800	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1450-4....	5500	854	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-4....	5750	924	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-4....	6000	974	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-4....	6250	1044	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-4....	7200	1235	935	1605	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-4....	7450	1315	935	1605	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-4....	7750	1405	935	1605	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-4....	8100	1505	935	1605	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-4....	11350	2096	1090	1915	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-4....	11750	2186	1270	2090	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-4....	12050	2266	1270	2090	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-4....	12250	2296	1270	2090	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-4....	15400	2683	1570	2510	200	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-4....	15950	2838	1570	2510	200	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-4....	16550	2972	1570	2510	200	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-4....	17150	3152	1570	2510	200	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

6-pole

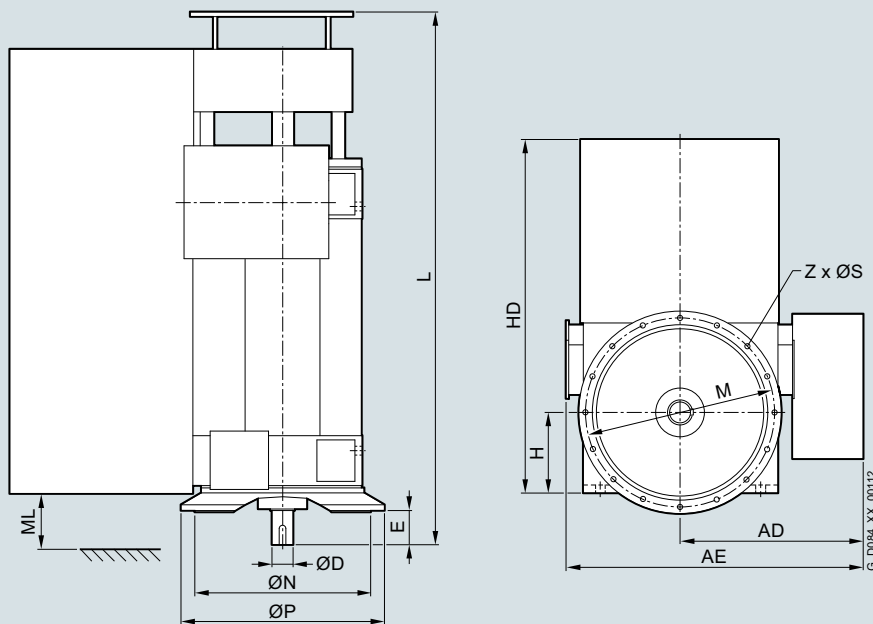
1RQ1350-6....	3300	566	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1352-6....	3450	621	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1354-6....	355	653	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1356-6....	3700	711	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1400-6....	4350	795	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1402-6....	4500	846	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1404-6....	4700	911	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1406-6....	4900	979	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1450-6....	5750	1080	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-6....	6000	1153	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-6....	6150	1217	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-6....	6400	1290	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-6....	7550	1493	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-6....	7900	1603	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-6....	8250	1733	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-6....	8650	1873	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-6....	11550	2504	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-6....	11750	2584	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-6....	12200	2744	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-6....	12800	2924	1270	2090	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-6....	16100	3314	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-6....	16600	3418	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-6....	16950	3575	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-6....	17550	3758	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

8-pole

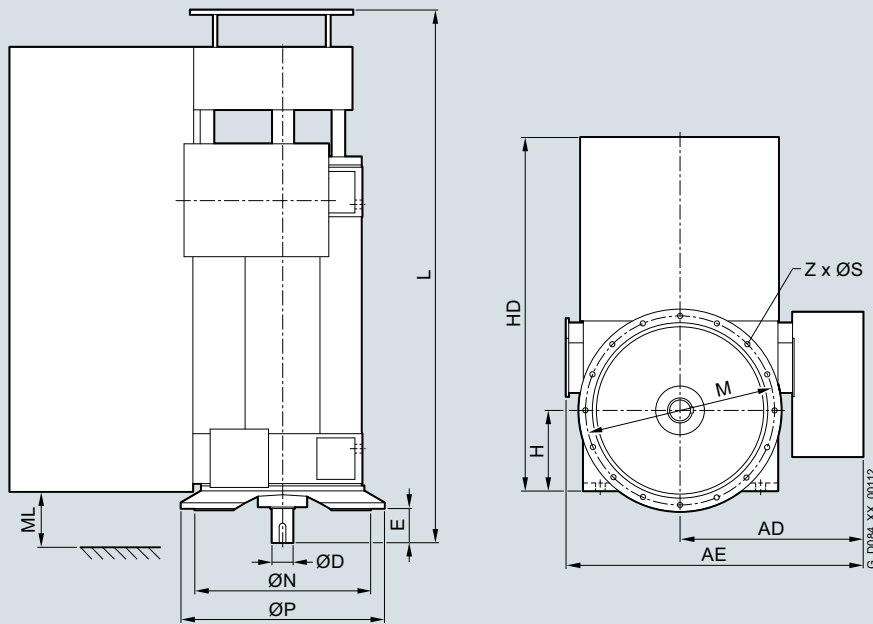
1RQ1350-8....	3300	566	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1352-8....	3450	621	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1354-8....	355	653	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1356-8....	3700	711	765	1275	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1400-8....	4350	795	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1402-8....	4500	846	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1404-8....	4700	911	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1406-8....	4900	979	815	1370	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1450-8....	5750	1080	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-8....	6000	1153	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-8....	6150	1217	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-8....	6400	1290	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-8....	7550	1493	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-8....	7900	1603	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-8....	8250	1733	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-8....	8650	1873	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-8....	11550	2504	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-8....	11750	2584	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-8....	12200	2744	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-8....	12800	2924	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-8....	16100	3314	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-8....	16600	3418	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-8....	16950	3575	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-8....	17550	3758	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



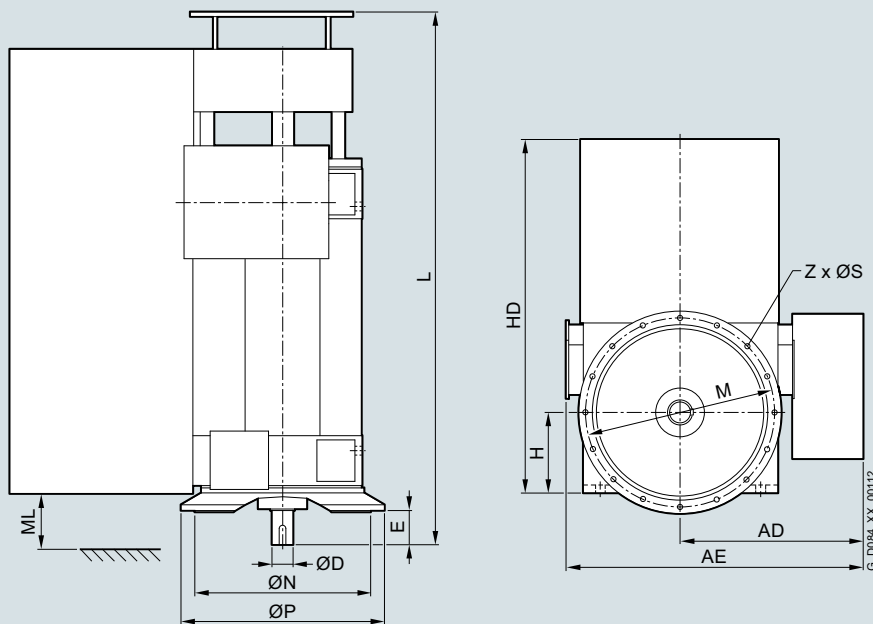
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
10-pole															
1RQ1450-3....	5850	1133	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-3....	6000	1203	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-3....	6150	1243	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-3....	6350	1312	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-3....	7550	1571	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-3....	7900	1681	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-3....	8250	1791	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-3....	8650	1931	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-3....	11100	2304	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-3....	11100	2304	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-3....	11650	2504	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-3....	12100	2664	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-3....	12550	2854	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-3....	15400	3433	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-3....	16050	3663	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-3....	15650	3923	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-3....	17550	4243	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



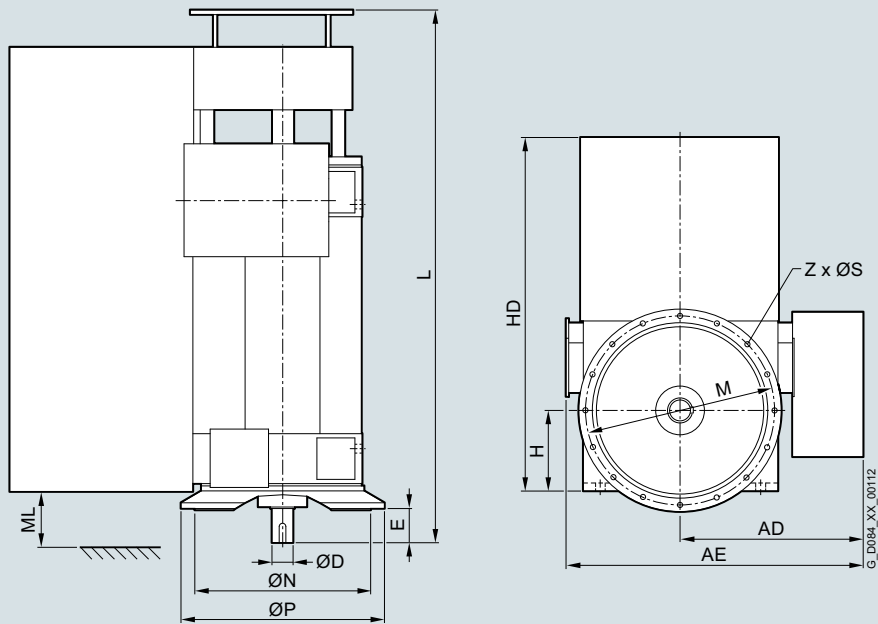
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
12-pole															
1RQ1450-5....	5800	1183	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-5....	6000	1253	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-5....	6150	1313	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-5....	6350	1392	860	1455	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-5....	7600	1581	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-5....	7950	1691	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-5....	8250	1811	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-5....	8650	1941	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-5....	11050	2454	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-5....	11050	2454	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-5....	11650	2674	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-5....	12100	2864	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-5....	12600	3064	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-5....	15400	3613	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-5....	16050	3863	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-5....	16700	4133	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-5....	17500	4483	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



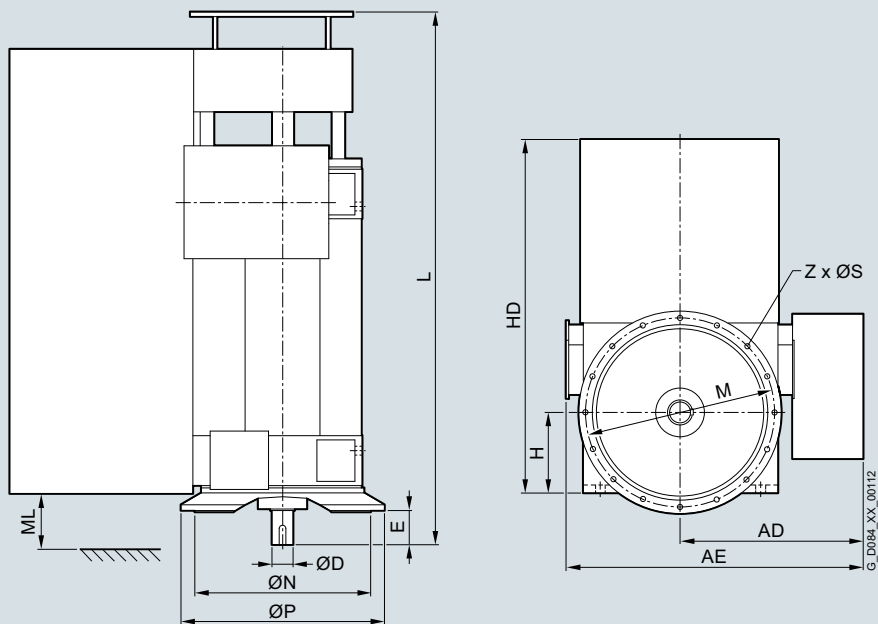
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
14-pole															
1RQ1500-7....	7550	1571	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-7....	7900	1681	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-7....	8150	1791	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-7....	8600	1931	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-7....	11000	2525	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-7....	11000	2525	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-7....	11500	2755	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-7....	12000	2955	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-7....	12550	3175	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-7....	15400	3807	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-7....	16000	4077	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-7....	16600	4367	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-7....	17500	4757	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings															
16-pole															
1RQ1500-9....	7550	1581	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-9....	7900	1691	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-9....	8200	1811	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-9....	8600	1941	935	1605	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-9....	10900	2475	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-9....	10950	2475	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-9....	11450	2675	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-9....	11950	2955	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-9....	12500	3175	1090	1915	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-9....	15350	3807	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-9....	15950	4077	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-9....	16550	4367	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-9....	17450	4767	1570	2510	220	280	630	2680	3770	415	1320	1250	1400	26	16

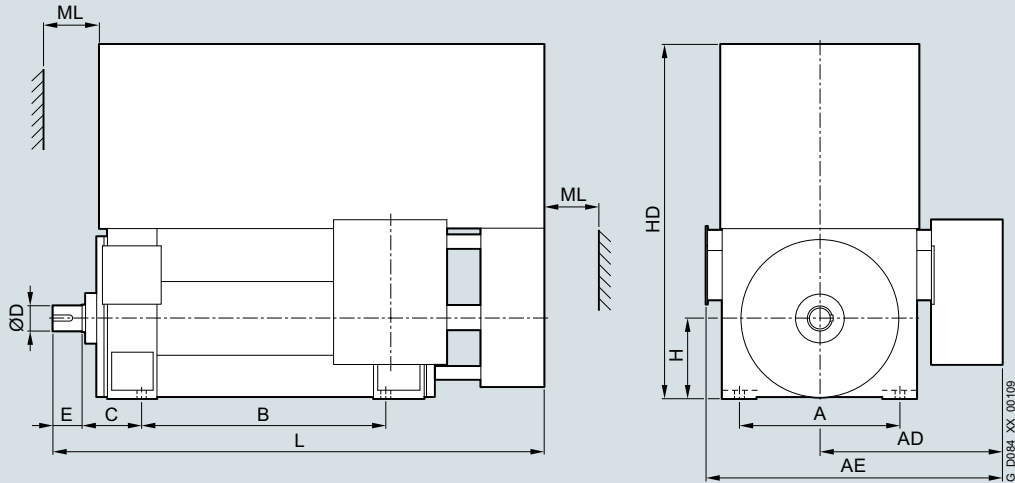
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



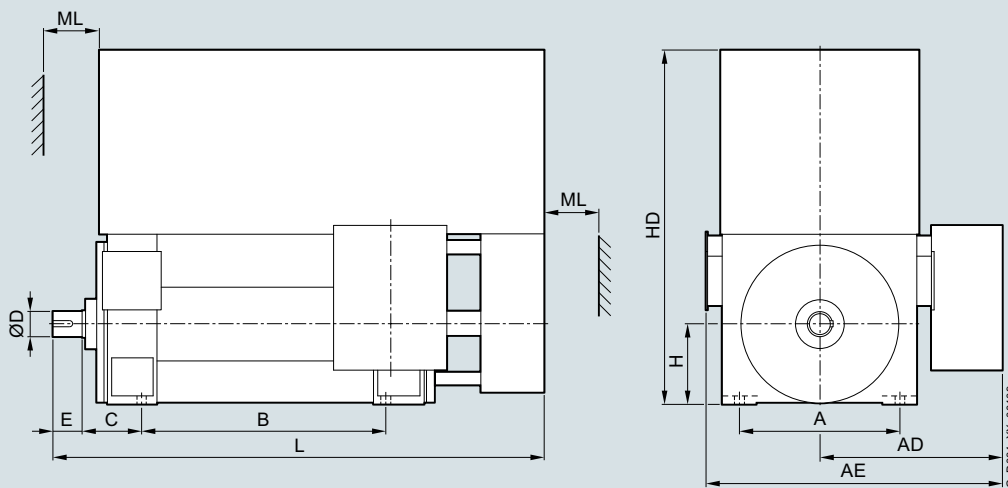
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
2-pole													
1RQ1352-2....	3050	430	710	935	1445	1180	224	85	130	355	1640	2200	180
1RQ1354-2....	3150	449	710	935	1445	1180	224	85	130	355	1640	2200	180
1RQ1356-2....	3200	464	710	935	1445	1180	224	85	130	355	1640	2200	180
1RQ1400-2....	3800	544	800	985	1545	1250	250	85	130	400	1760	2350	180
1RQ1402-2....	3900	563	800	985	1545	1250	250	85	130	400	1760	2350	180
1RQ1404-2....	4050	594	800	985	1545	1250	250	85	130	400	1760	2350	180
1RQ1406-2....	4150	624	800	985	1545	1250	250	85	130	400	1760	2350	180
1RQ1450-2....	5000	698	950	1040	1600	1400	250	95	130	450	1950	2365	195
1RQ1452-2....	5100	728	950	1040	1600	1400	250	95	130	450	1950	2365	195
1RQ1454-2....	5300	768	950	1040	1600	1400	250	95	130	450	1950	2365	195
1RQ1456-2....	5500	818	950	1040	1600	1400	250	95	130	450	1950	2365	195

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



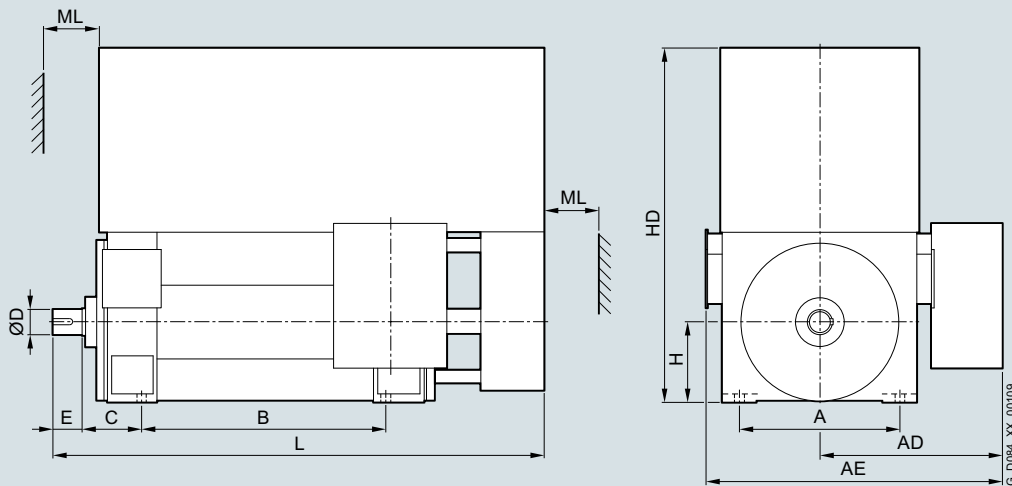
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
4-pole													
1RQ1354-4....	3150	479	710	935	1445	1180	224	95	130	355	1640	2200	180
1RQ1356-4....	3250	511	710	935	1445	1180	224	95	130	355	1640	2200	180
1RQ1358-4....	3400	549	710	935	1445	1180	224	95	130	355	1640	2200	180
1RQ1400-4....	3850	646	800	985	1545	1250	250	110	165	400	1760	2350	180
1RQ1402-4....	3950	680	800	985	1545	1250	250	110	165	400	1760	2350	180
1RQ1404-4....	4150	740	800	985	1545	1250	250	110	165	400	1760	2350	180
1RQ1406-4....	4350	800	800	985	1545	1250	250	110	165	400	1760	2350	180
1RQ1450-4....	5200	844	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1452-4....	5450	914	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1454-4....	5650	964	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1456-4....	5900	1034	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1500-4....	6800	1262	1060	1115	1785	1500	280	150	200	500	2090	2810	215
1RQ1502-4....	7100	1342	1060	1115	1785	1500	280	150	200	500	2090	2810	215
1RQ1504-4....	7350	1432	1060	1115	1785	1500	280	150	200	500	2090	2810	215
1RQ1506-4....	7700	1532	1060	1115	1785	1500	280	150	200	500	2090	2810	215
1RQ1560-4....	10750	2172	1250	1200	2025	1700	315	170	240	560	2370	3055	390
1RQ1562-4....	11100	2262	1250	1200	2025	1700	315	170	240	560	2370	3055	390
1RQ1564-4....	11400	2342	1250	1200	2025	1700	315	170	240	560	2370	3055	390
1RQ1566-4....	11600	2372	1250	1200	2025	1700	315	170	240	560	2370	3055	390
1RQ1630-4....	14050	2683	1400	1330	2440	1900	315	200	280	630	2680	3480	415
1RQ1632-4....	14700	2838	1400	1330	2440	1900	315	200	280	630	2680	3480	415
1RQ1634-4....	15200	2972	1400	1330	2440	1900	315	200	280	630	2680	3480	415
1RQ1636-4....	15900	3152	1400	1330	2440	1900	315	200	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



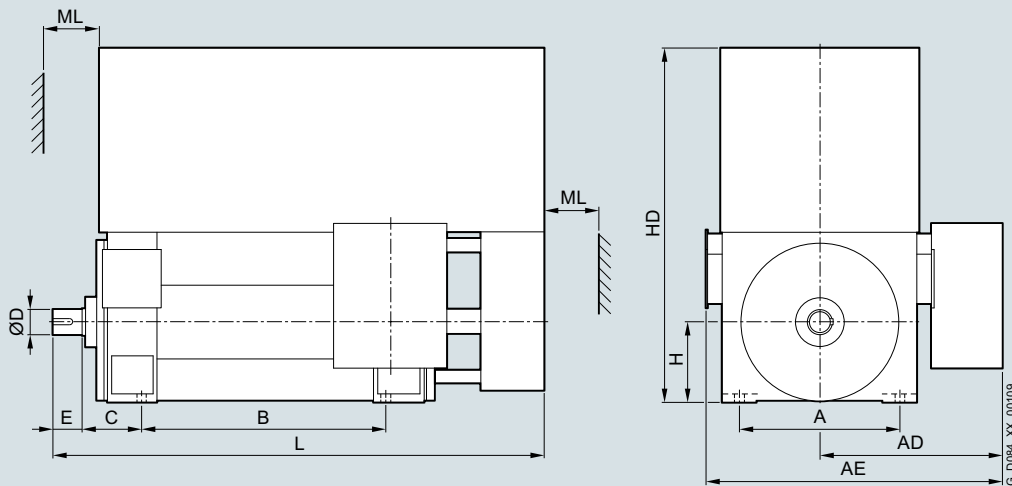
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
6-pole													
1RQ1352-6....	3350	581	710	935	1445	1180	224	110	165	355	1640	2200	180
1RQ1354-6....	3400	596	710	935	1445	1180	224	110	165	355	1640	2200	180
1RQ1356-6....	3500	628	710	935	1445	1180	224	110	165	355	1640	2200	180
1RQ1400-6....	4100	734	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1402-6....	4200	776	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1404-6....	4450	844	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1406-6....	4600	901	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1450-6....	5400	1021	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1452-6....	5600	1091	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1454-6....	5800	1151	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1456-6....	6000	1221	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1500-6....	7150	1519	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1502-6....	7500	1629	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1504-6....	7800	1759	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1506-6....	8250	1899	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1560-6....	10850	2571	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1562-6....	11050	2651	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1564-6....	11500	2811	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1566-6....	12050	2991	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1630-6....	14800	3314	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1632-6....	15400	3481	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1636-6....	16250	3758	1400	1330	2440	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



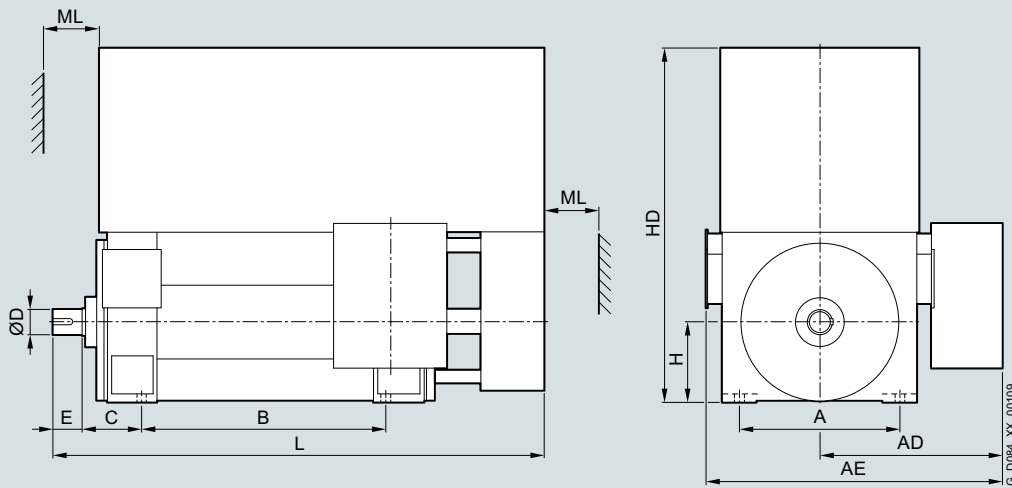
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
8-pole													
1RQ1400-8....	4100	734	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1402-8....	4200	776	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1404-8....	4450	844	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1406-8....	4600	901	800	985	1545	1250	250	130	200	400	1760	2350	180
1RQ1450-8....	5400	1021	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1452-8....	5600	1091	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1454-8....	5800	1151	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1456-8....	6000	1221	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1500-8....	7150	1519	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1502-8....	7500	1629	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1504-8....	7800	1759	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1506-8....	8250	1899	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1560-8....	10850	2571	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1562-8....	11050	2651	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1564-8....	11500	2811	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1566-8....	12050	2991	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1630-8....	14800	3314	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1632-8....	15400	3481	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1634-8....	15650	3575	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1636-8....	16250	3758	1400	1330	2440	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



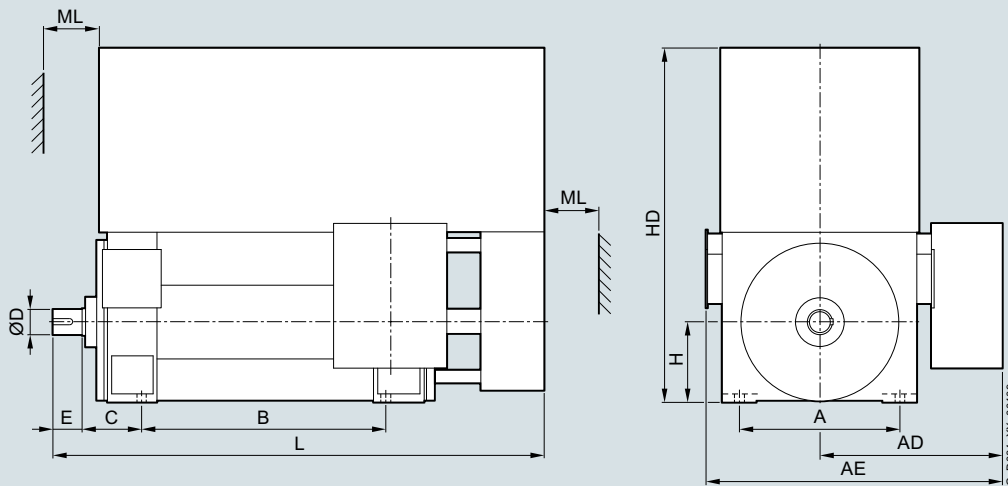
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
10-pole													
1RQ1450-3....	5350	1134	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1452-3....	5550	1194	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1454-3....	5750	1244	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1456-3....	5950	1323	950	1040	1600	1400	250	130	200	450	1950	2435	195
1RQ1500-3....	7100	1571	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1502-3....	7400	1681	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1504-3....	7750	1791	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1506-3....	8100	1931	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1560-3....	10400	2370	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1560-3....	10400	2370	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1562-3....	10850	2570	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1564-3....	11350	2730	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1566-3....	11850	2920	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1630-3....	14200	3433	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1632-3....	14750	3663	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1634-3....	15400	3923	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1636-3....	16250	4243	1400	1330	2440	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



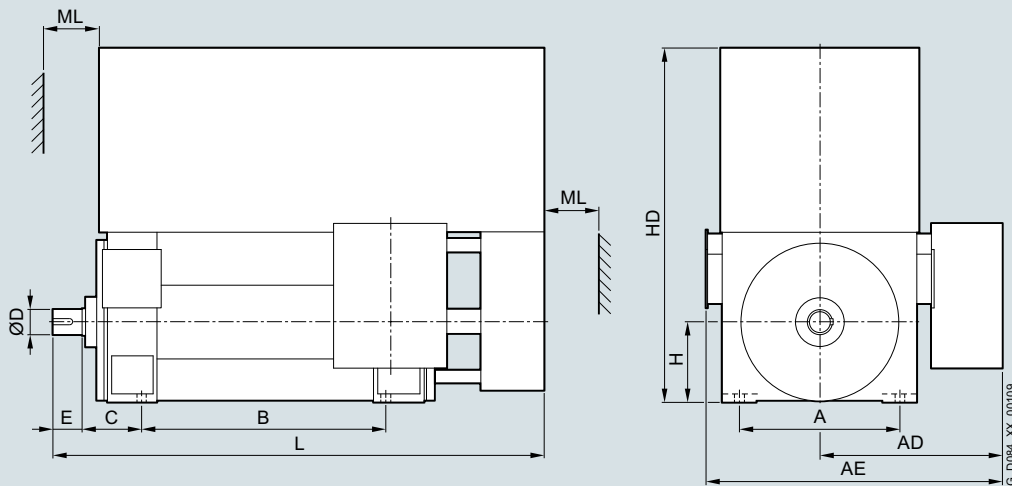
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
12-pole													
1RQ1500-5....	7050	1581	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1502-5....	7350	1691	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1504-5....	7750	1811	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1506-5....	8150	1941	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1560-5....	10400	2520	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1560-5....	10400	2520	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1562-5....	10900	2740	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1564-5....	11400	2930	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1566-5....	11900	3130	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1630-5....	14200	3613	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1632-5....	14800	3863	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1634-5....	15450	4133	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1636-5....	16250	4483	1400	1330	2440	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



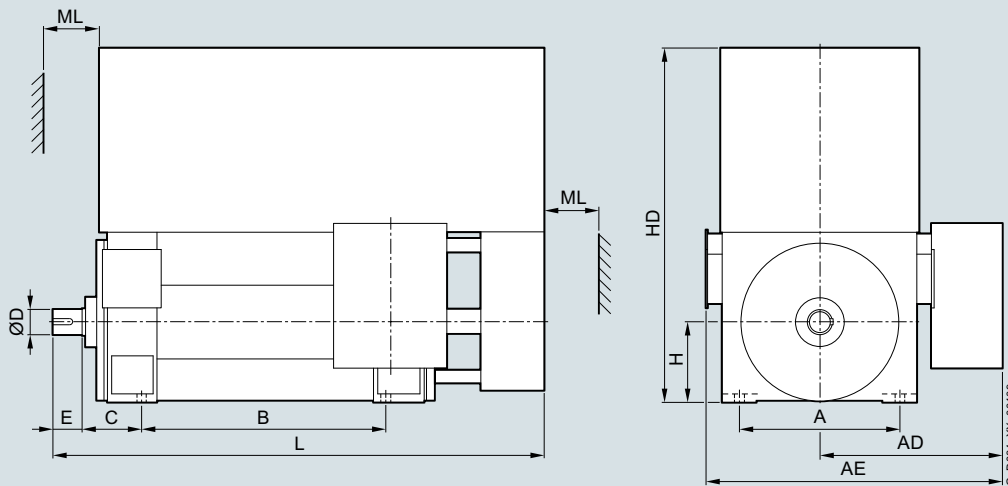
Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
14-pole													
1RQ1500-7....	7350	1712	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1502-7....	7350	1712	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1504-7....	7750	1832	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1506-7....	8100	1962	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1560-7....	10300	2591	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1560-7....	10350	2591	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1562-7....	10850	2821	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1564-7....	11350	3021	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1566-7....	11850	3241	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1630-7....	14150	3807	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1632-7....	14700	4077	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1634-7....	15350	4367	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1636-7....	16200	4757	1400	1330	2440	1900	315	220	280	630	2680	3480	415

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings													
16-pole													
1RQ1500-9....	7000	1592	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1502-9....	7350	1702	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1504-9....	7700	1822	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1506-9....	8100	1962	1060	1115	1785	1500	280	160	240	500	2090	2850	215
1RQ1560-9....	10300	2601	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1560-9....	10350	2601	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1562-9....	10750	2741	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1564-9....	11300	3021	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1566-9....	11800	3241	1250	1200	2025	1700	315	190	280	560	2370	3055	390
1RQ1630-9....	14050	3807	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1632-9....	14650	4077	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1634-9....	15250	4367	1400	1330	2440	1900	315	220	280	630	2680	3480	415
1RQ1636-9....	16100	4767	1400	1330	2440	1900	315	220	280	630	2680	3480	415

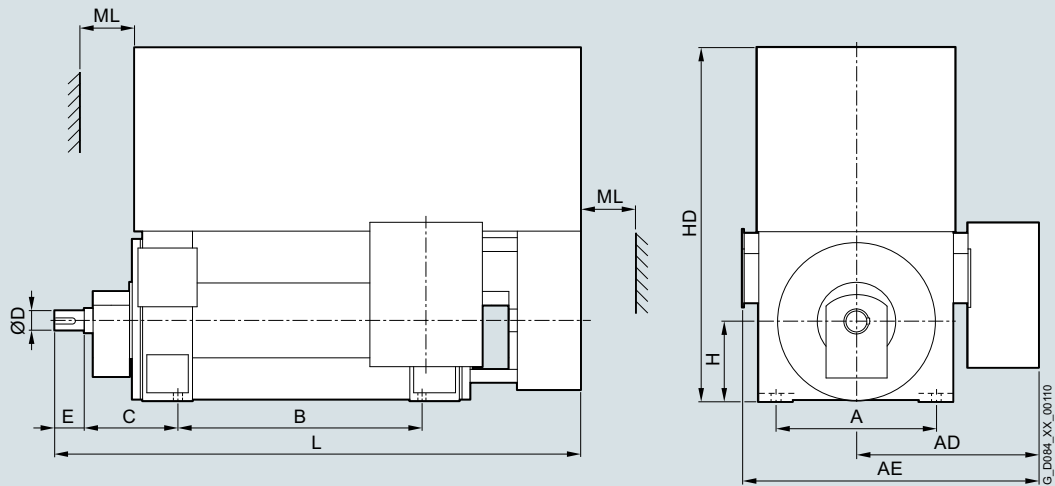
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



Motor type	Weight		Dimensions										
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, sleeve bearings													
2-pole													
1RQ1400-2....	3800	473	800	985	1545	1250	425	85	130	400	1760	2550	180
1RQ1402-2....	3900	492	800	985	1545	1250	425	85	130	400	1760	2550	180
1RQ1404-2....	4050	535	800	985	1545	1250	425	85	130	400	1760	2550	180
1RQ1406-2....	4200	565	800	985	1545	1250	425	85	130	400	1760	2550	180
1RQ1450-2....	5150	668	950	1040	1600	1400	450	95	130	450	1950	2695	195
1RQ1452-2....	5250	698	950	1040	1600	1400	450	95	130	450	1950	2695	195
1RQ1454-2....	5450	746	950	1040	1600	1400	450	95	130	450	1950	2695	195
1RQ1456-2....	5650	796	950	1040	1600	1400	450	95	130	450	1950	2695	195
1RQ1500-2....	6950	1190	1060	1115	1785	1500	475	110	165	500	2090	2970	215
1RQ1502-2....	7100	1220	1060	1115	1785	1500	475	110	165	500	2090	2970	215
1RQ1504-2....	7400	1302	1060	1115	1785	1500	475	110	165	500	2090	2970	215
1RQ1506-2....	7700	1382	1060	1115	1785	1500	475	110	165	500	2090	2970	215
1RQ1560-2....	10300	1535	1250	1200	2025	1700	530	140	200	560	2370	3860	390
1RQ1562-2....	10650	1585	1250	1200	2025	1700	530	140	200	560	2370	3860	390
1RQ1564-2....	11150	1709	1250	1200	2025	1700	530	140	200	560	2370	3860	390
1RQ1566-2....	11500	1769	1250	1200	2025	1700	530	140	200	560	2370	3860	390
1RQ1630-2....	14050	2000	1400	1330	2440	1900	530	160	240	630	2680	4180	415
1RQ1632-2....	14500	2089	1400	1330	2440	1900	530	160	240	630	2680	4180	415
1RQ1634-2....	15100	2192	1400	1330	2440	1900	530	160	240	630	2680	4180	415
1RQ1636-2....	15750	2307	1400	1330	2440	1900	530	160	240	630	2680	4180	415

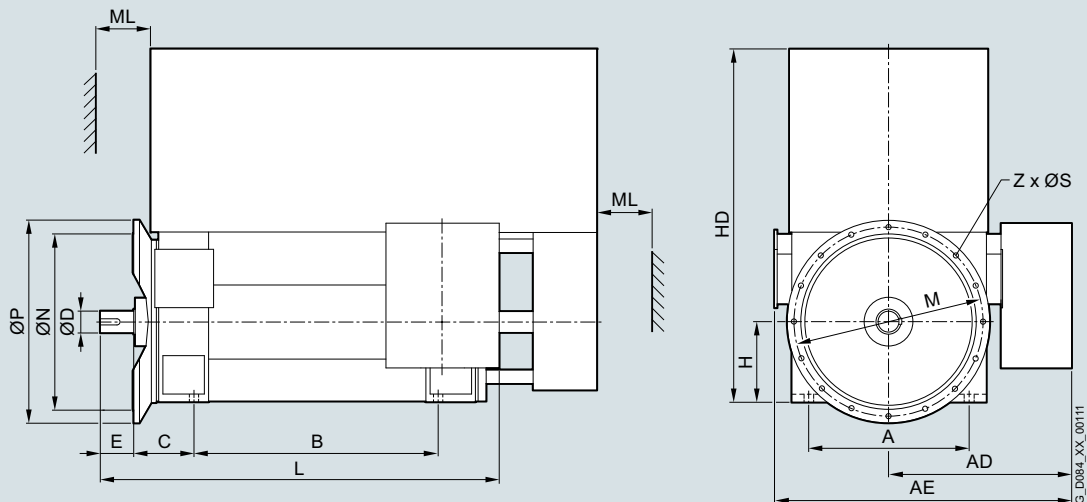
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



Motor type	Weight		Dimensions														
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 10 kV, IM B35 type of construction, anti-friction bearings

2-pole

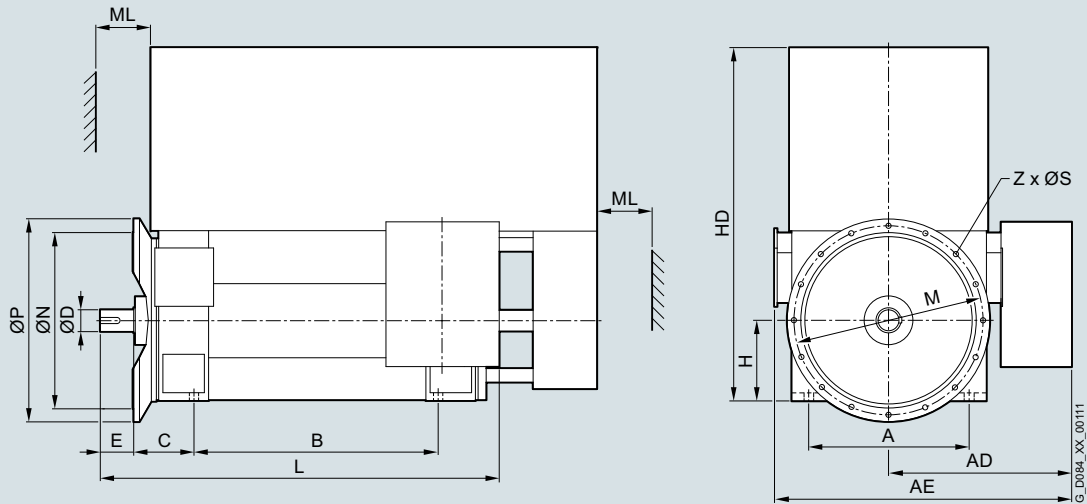
1RQ1352-2....	3100	430	710	935	1445	1180	224	85	130	355	1640	2200	180	840	780	900	22	8
1RQ1354-2....	3200	449	710	935	1445	1180	224	85	130	355	1640	2200	180	840	780	900	22	8
1RQ1356-2....	3250	464	710	935	1445	1180	224	85	130	355	1640	2200	180	840	780	900	22	8
1RQ1400-2....	3900	544	800	985	1545	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1402-2....	3950	563	800	985	1545	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1404-2....	4100	594	800	985	1545	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1406-2....	4250	624	800	985	1545	1250	250	85	130	400	1760	2350	180	940	880	1000	22	8
1RQ1450-2....	5150	698	950	1040	1600	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8
1RQ1452-2....	5250	728	950	1040	1600	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8
1RQ1454-2....	5450	768	950	1040	1600	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8
1RQ1456-2....	5650	818	950	1040	1600	1400	250	95	130	450	1950	2365	195	1080	1000	1150	26	8

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions														
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 10 kV, IM B35 type of construction, anti-friction bearings

4-pole

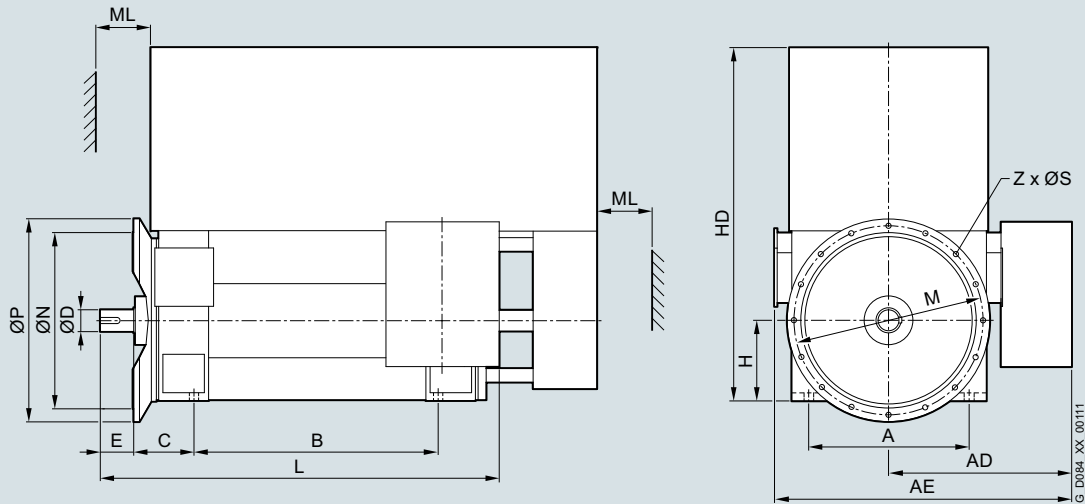
1RQ1354-4....	3200	479	710	935	1445	1180	224	95	130	355	1640	2200	180	840	780	900	22	8
1RQ1356-4....	3300	511	710	935	1445	1180	224	95	130	355	1640	2200	180	840	780	900	22	8
1RQ1358-4....	3450	549	710	935	1445	1180	224	95	130	355	1640	2200	180	840	780	900	22	8
1RQ1400-4....	3950	646	800	985	1545	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1402-4....	4050	680	800	985	1545	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1404-4....	4250	740	800	985	1545	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1406-4....	4450	800	800	985	1545	1250	250	110	165	400	1760	2350	180	940	880	1000	22	8
1RQ1450-4....	5300	844	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1452-4....	5550	914	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1454-4....	5750	964	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1456-4....	6050	1034	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1500-4....	6950	1262	1060	1115	1785	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1502-4....	7200	1342	1060	1115	1785	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1504-4....	7450	1432	1060	1115	1785	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1506-4....	7800	1532	1060	1115	1785	1500	280	150	200	500	2090	2810	215	1180	1120	1250	26	16
1RQ1560-4....	10900	2172	1250	1200	2025	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1562-4....	11200	2262	1250	1200	2025	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1564-4....	11550	2342	1250	1200	2025	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1566-4....	11700	2372	1250	1200	2025	1700	315	170	240	560	2370	3055	390	1320	1250	1400	26	16
1RQ1630-4....	14300	2683	1400	1330	2440	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1632-4....	14950	2838	1400	1330	2440	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1634-4....	15400	2972	1400	1330	2440	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1636-4....	16150	3152	1400	1330	2440	1900	315	200	280	630	2680	3480	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

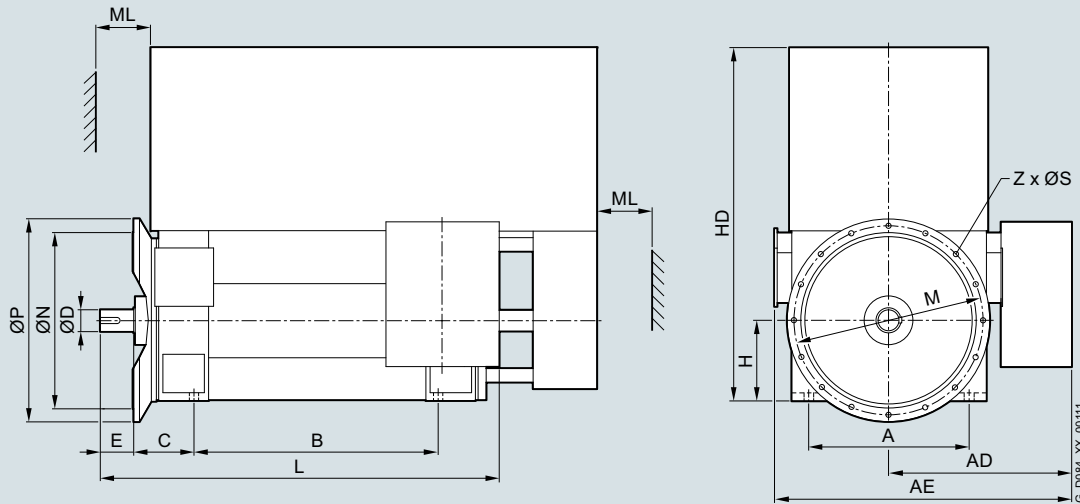


Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM B35 type of construction, anti-friction bearings																		
6-pole																		
1RQ1352-6....	3400	581	710	935	1445	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1354-6....	3450	596	710	935	1445	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1356-6....	3550	628	710	935	1445	1180	224	110	165	355	1640	2200	180	840	780	900	22	8
1RQ1400-6....	4150	734	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1402-6....	4300	776	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1404-6....	4500	844	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1406-6....	4700	901	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1450-6....	5500	1021	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1452-6....	5750	1091	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1454-6....	5950	1151	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1456-6....	6150	1221	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1500-6....	7300	1519	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1502-6....	7600	1629	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1504-6....	7950	1759	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1506-6....	8350	1899	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1560-6....	11000	2571	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1562-6....	11250	2651	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1564-6....	11700	2811	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1566-6....	12200	2991	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1630-6....	15050	3314	1400	1330	2440	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1632-6....	15650	3481	1400	1330	2440	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1636-6....	16450	3758	1400	1330	2440	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters
Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



Motor type	Weight		Dimensions														
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 10 kV, IM B35 type of construction, anti-friction bearings

8-pole																		
1RQ1400-8....	4150	734	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1402-8....	4300	776	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1404-8....	4500	844	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1406-8....	4700	901	800	985	1545	1250	250	130	200	400	1760	2350	180	940	880	1000	22	8
1RQ1450-8....	5500	1021	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1452-8....	5750	1091	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1454-8....	5950	1151	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1456-8....	6150	1221	950	1040	1600	1400	250	130	200	450	1950	2435	195	1080	1000	1150	26	8
1RQ1500-8....	7300	1519	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1502-8....	7600	1629	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1504-8....	7950	1759	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1506-8....	8350	1899	1060	1115	1785	1500	280	160	240	500	2090	2850	215	1180	1120	1250	26	16
1RQ1560-8....	11000	2571	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1562-8....	11250	2651	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1564-8....	11700	2811	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1566-8....	12200	2991	1250	1200	2025	1700	315	190	280	560	2370	3055	390	1320	1250	1400	26	16
1RQ1630-8....	15050	3314	1400	1330	2440	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1632-8....	15650	3481	1400	1330	2440	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1634-8....	15900	3575	1400	1330	2440	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16
1RQ1636-8....	16450	3758	1400	1330	2440	1900	315	220	280	630	2680	3480	415	1320	1250	1400	26	16

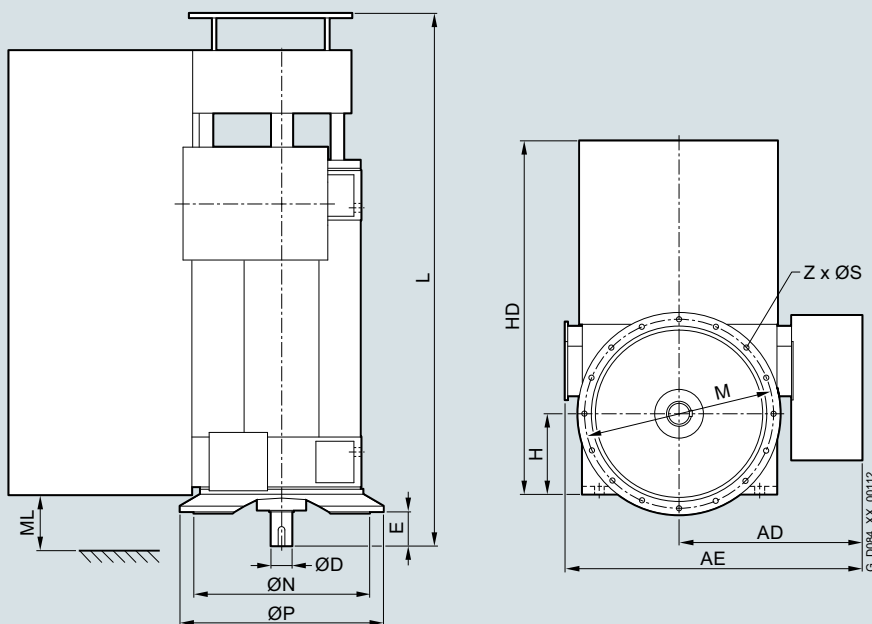
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SG1 (Ex ec).



Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 10 kV, IM V1 type of construction, anti-friction bearings

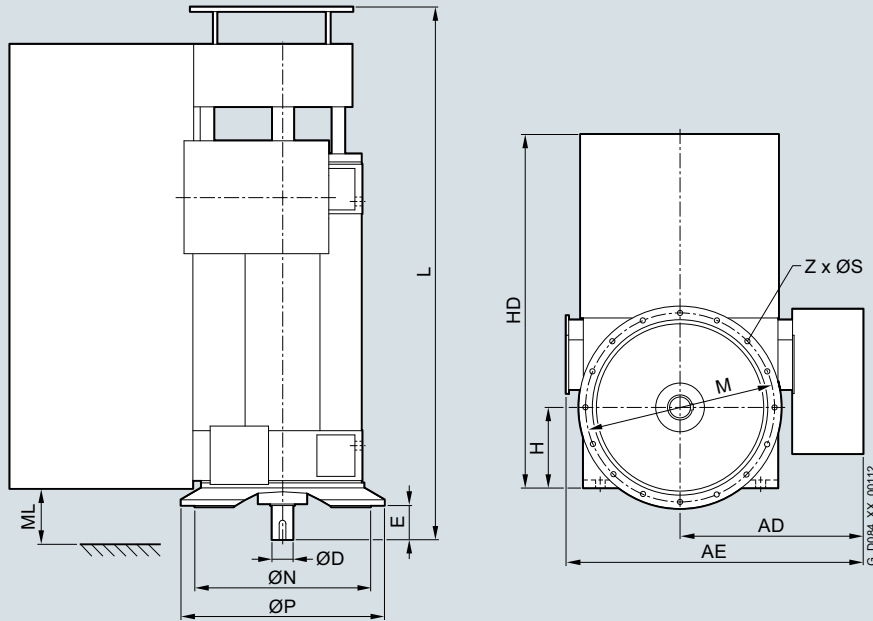
4-pole															
1RQ1354-4....	3350	479	935	1445	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1356-4....	3400	511	935	1445	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1358-4....	3550	549	935	1445	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1400-4....	4150	646	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1402-4....	4250	680	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1404-4....	4450	740	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1406-4....	4650	800	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1450-4....	5500	854	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-4....	5750	924	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-4....	5950	974	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-4....	6250	1044	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-4....	7200	1235	1015	1685	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-4....	7450	1315	1015	1685	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-4....	7700	1405	1015	1685	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-4....	8050	1505	1015	1685	150	200	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-4....	11300	2096	1200	2025	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-4....	11650	2186	1200	2025	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-4....	11950	2266	1200	2025	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-4....	12100	2296	1200	2025	170	240	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-4....	15150	2683	1330	2440	200	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-4....	15700	2838	1330	2440	200	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-4....	16200	2972	1330	2440	200	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-4....	16950	3152	1330	2440	200	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



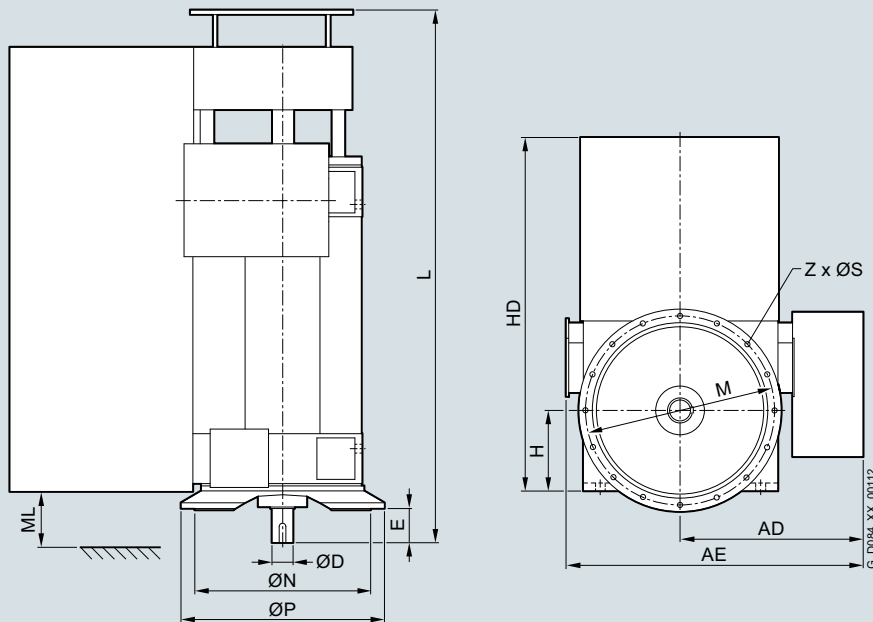
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
6-pole															
1RQ1352-6....	3550	621	935	1445	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1354-6....	3600	653	935	1445	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1356-6....	3750	711	935	1445	95	130	355	1640	2410	180	840	780	900	22	8
1RQ1400-6....	4400	795	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1402-6....	4500	846	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1404-6....	4750	911	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1406-6....	4950	979	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1450-6....	5750	1080	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-6....	5950	1153	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-6....	6150	1217	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-6....	6400	1290	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-6....	7550	1493	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-6....	7850	1603	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-6....	8200	1733	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-6....	8600	1873	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-6....	11450	2504	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-6....	11650	2584	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-6....	12100	2744	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-6....	12650	2924	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-6....	15900	3314	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-6....	16400	3481	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-6....	17250	3758	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



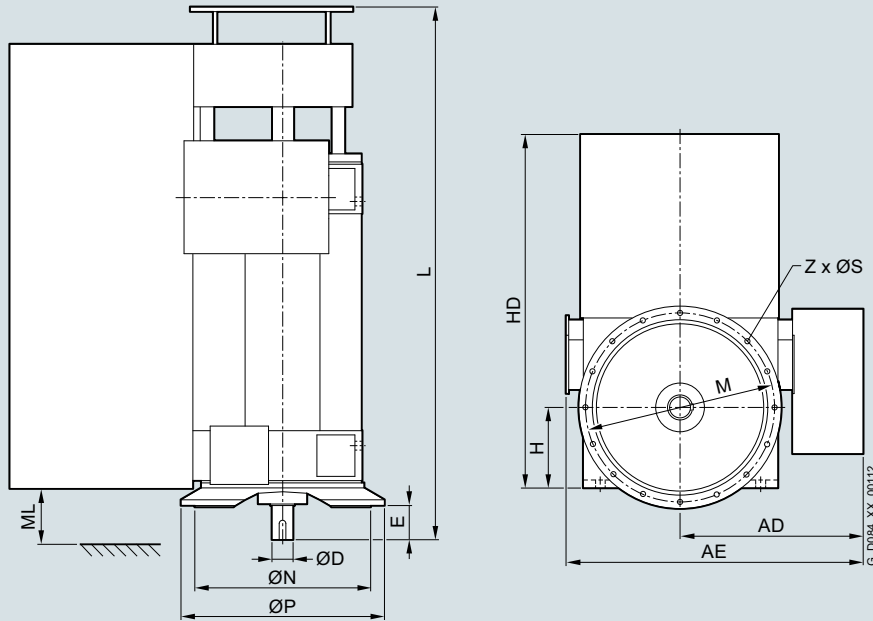
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
8-pole															
1RQ1400-8....	4400	795	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1402-8....	4500	846	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1404-8....	4750	911	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1406-8....	4950	979	985	1545	120	165	400	1760	2690	180	940	880	1000	22	8
1RQ1450-8....	5750	1080	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-8....	5950	1153	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-8....	6150	1217	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-8....	6400	1290	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-8....	7550	1493	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-8....	7850	1603	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-8....	8200	1733	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-8....	8600	1873	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-8....	11450	2504	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-8....	11650	2584	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-8....	12100	2744	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-8....	12650	2924	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-8....	15900	3314	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-8....	16400	3481	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-8....	16700	3575	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-8....	17250	3758	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



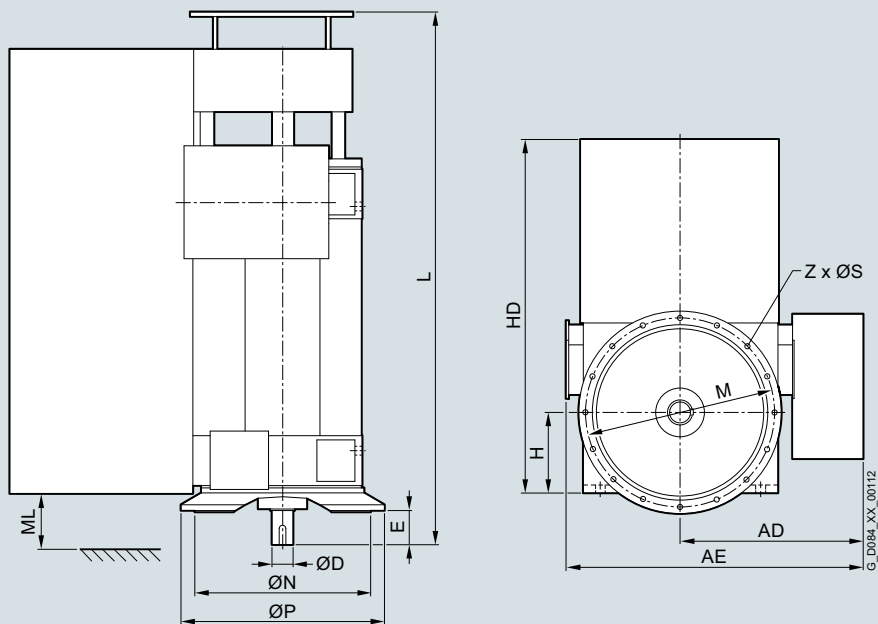
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
10-pole															
1RQ1450-3....	5650	1133	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1452-3....	5850	1203	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1454-3....	6050	1243	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1456-3....	6250	1312	940	1535	130	200	450	1950	2895	195	1080	1000	1150	26	8
1RQ1500-3....	7550	1571	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-3....	7850	1681	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-3....	8200	1791	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-3....	8550	1931	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-3....	11000	2304	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-3....	11000	2304	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-3....	11500	2504	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-3....	11950	2664	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-3....	12500	2854	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-3....	15250	3433	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-3....	15850	3663	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-3....	16500	3923	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-3....	17350	4243	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



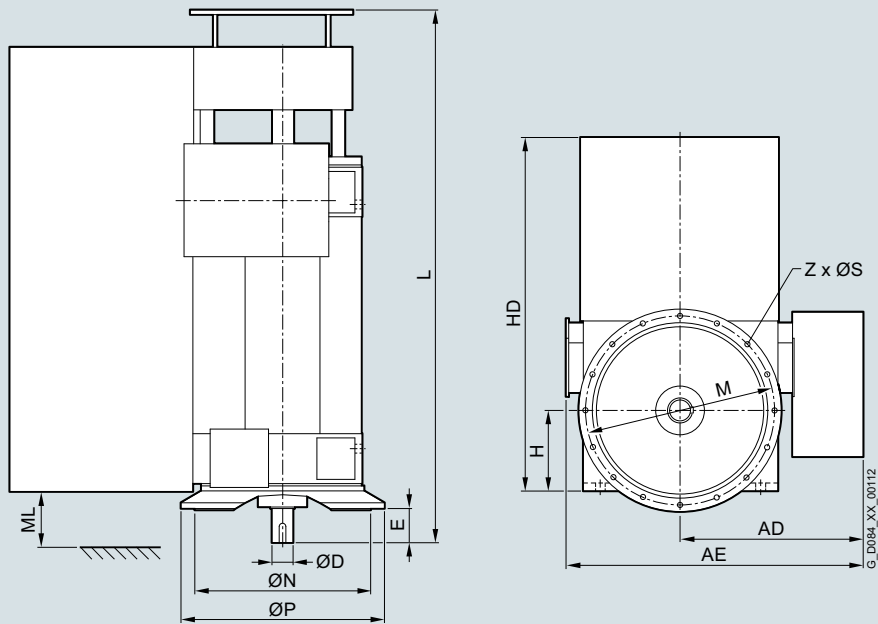
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
12-pole															
1RQ1500-5....	7500	1581	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-5....	7850	1691	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-5....	8200	1811	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-5....	8600	1941	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-5....	11000	2454	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-5....	11000	2454	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-5....	11550	2674	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-5....	12000	2864	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-5....	12500	3064	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-5....	15250	3613	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-5....	15900	3863	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-5....	16500	4133	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-5....	17350	4483	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



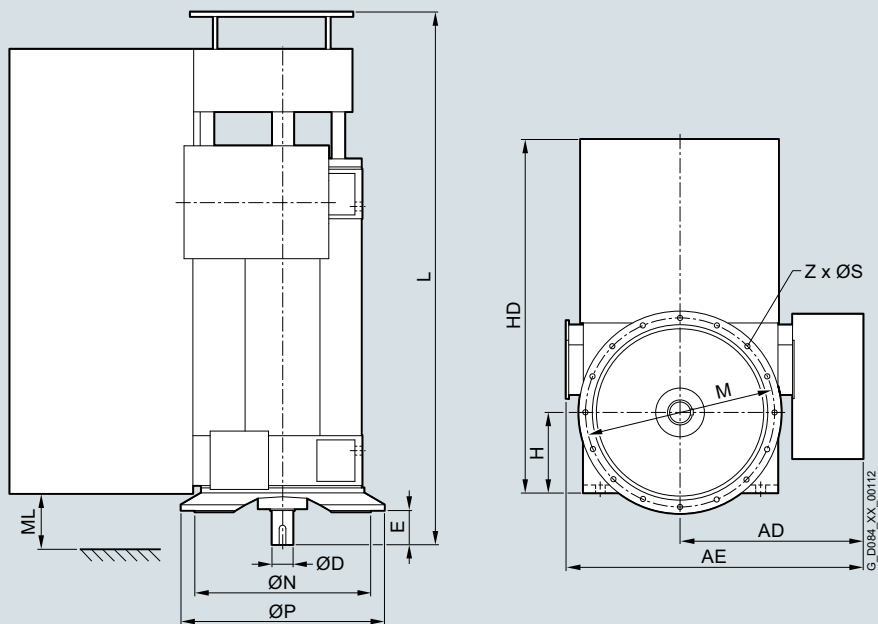
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
14-pole															
1RQ1500-7....	7800	1681	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-7....	7800	1681	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-7....	8150	1791	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-7....	8550	1931	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-7....	10900	2525	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-7....	10950	2525	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-7....	11500	2755	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-7....	11950	2955	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-7....	12450	3175	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-7....	15200	3807	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-7....	15800	4077	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-7....	16450	4367	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-7....	17250	4757	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/air-cooled motors

SIMOTICS HV Series A-compact PLUS 1RQ1, 1SG1

Dimensional drawings (continued)



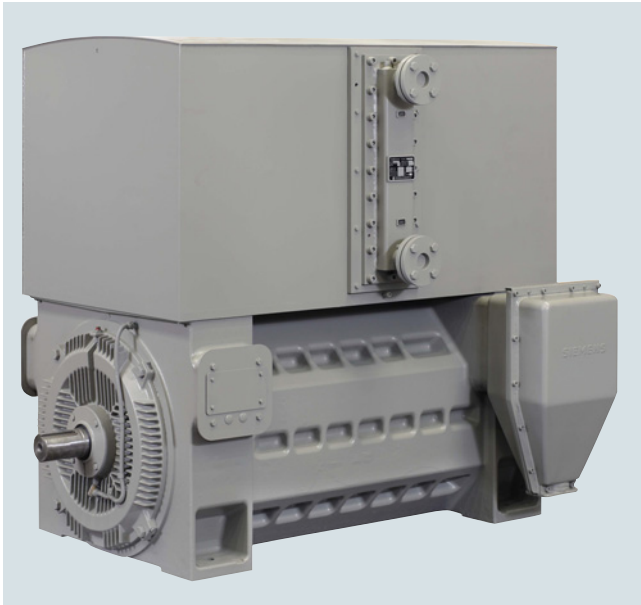
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings															
16-pole															
1RQ1500-9....	7450	1581	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1502-9....	7800	1691	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1504-9....	8100	1811	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1506-9....	8500	1941	1015	1685	160	240	500	2090	3270	215	1180	1120	1250	26	16
1RQ1560-9....	10900	2535	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1560-9....	10950	2535	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1562-9....	11350	2675	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1564-9....	11900	2955	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1566-9....	12400	3175	1200	2025	190	280	560	2370	3650	390	1320	1250	1400	26	16
1RQ1630-9....	15150	3807	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1632-9....	15750	4077	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1634-9....	16300	4367	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16
1RQ1636-9....	17200	4767	1330	2440	220	280	630	2680	3770	415	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

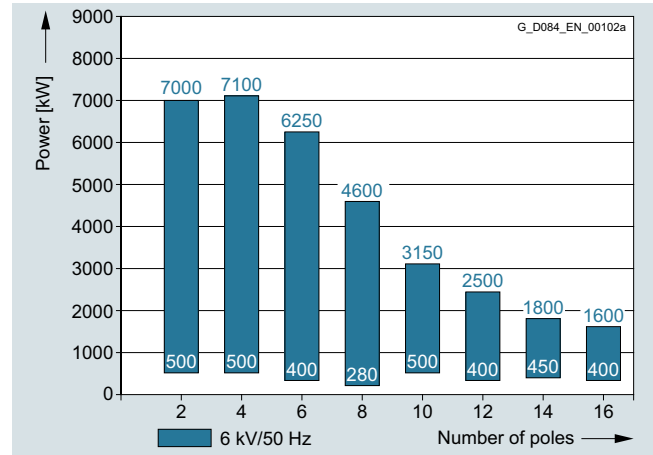
Overview



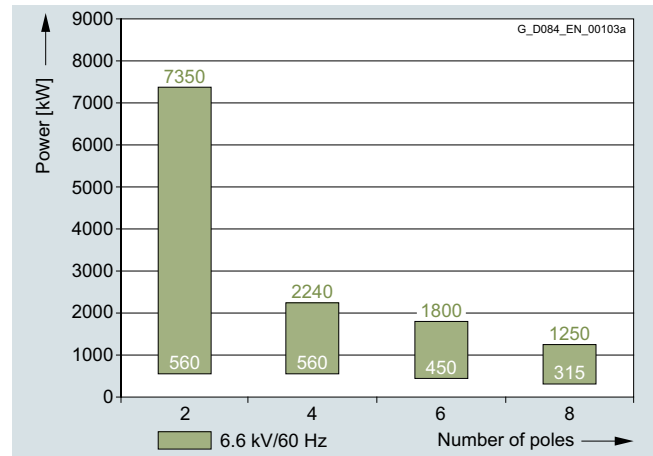
Technical Data (continued)

Power range

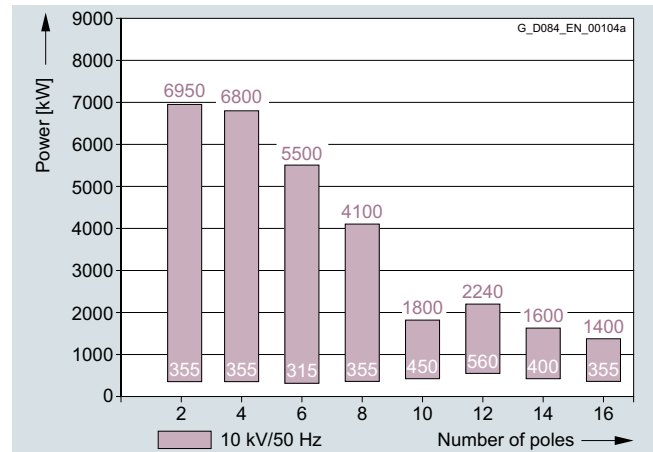
6 kV; 50 Hz



6.6 kV; 60 Hz



10 kV; 50 Hz



Technical Data

Overview of technical data

A-compact PLUS 1RN1, 1SL1

Rated voltage	6 kV, 6.6 kV, 10 kV
Rated frequency	50 Hz, 60 Hz
Motor type	Induction motor with squirrel-cage rotor
Type of construction	IM B3, IM B35, IM V1
Degree of protection	IP55
Cooling method	IC81W
Stator winding insulation	Thermal class 155 (F), utilized to 130 (B)
Shaft height	355 ... 630 mm
Bearings	Anti-friction bearings, sleeve bearings
Cage material	Aluminum, copper
Standards	IEC, GB, JB
Frame design	Frame: Cast iron Top cover: Steel

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data

The following data also apply to explosion-protected motors 1SL1 (Ex ec).

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque T_B/T_{rated} [-]	Locked-rotor torque T_{LR}/T_{rated} [-]	Locked-rotor current I_{LR}/I_{rated} [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
2-pole															
500	1RN1350-2HD6	2957	58	94.0	94.0	0.89	0.89	1615	2.5	0.65	5.3	5.9	3.8	31	
560	1RN1352-2HD6	2958	64	94.3	94.3	0.89	0.89	1808	2.5	0.65	5.4	5.9	4.3	31	
630	1RN1354-2HD6	2957	70	94.4	94.5	0.91	0.91	2035	2.7	0.70	5.8	5.9	4.6	31	
710	1RN1356-2HD6	2958	80	94.6	94.7	0.91	0.91	2292	2.8	0.80	6.0	5.9	4.9	31	
800	1RN1400-2HD6	2965	92	94.7	94.7	0.89	0.90	2577	2.1	0.55	4.8	9.2	7.2	52	
900	1RN1402-2HD6	2901	102	94.8	95.0	0.90	0.91	2963	2.2	0.55	4.9	9.2	7.6	54	
1000	1RN1404-2HD6	2968	112	95.1	95.2	0.91	0.92	3218	2.5	0.60	5.7	9.2	8.4	56	
1120	1RN1406-2HD6	2970	124	95.4	95.6	0.91	0.92	3601	2.6	0.70	5.9	9.2	9.1	60	
1170	1RN1406-2HE6	2968	130	95.4	95.6	0.91	0.92	3764	2.5	0.65	5.7	9.2	9.1	54	
1250	1RN1450-2HA6	2975	142	95.4	95.4	0.89	0.89	4012	2.9	0.65	6.4	9.8	12.6	77	
1400	1RN1450-2HB6	2971	156	95.4	95.5	0.90	0.90	4501	2.5	0.60	5.4	9.8	12.6	62	
1600	1RN1452-2HA6	2972	178	95.6	95.7	0.90	0.89	5141	2.7	0.70	5.8	9.8	13.4	62	
1800	1RN1454-2HA6	2972	200	95.9	96.0	0.90	0.90	5785	2.7	0.80	5.8	9.8	14.7	65	
2000	1RN1456-2HA6	2974	225	96.1	96.2	0.90	0.90	6423	2.8	0.80	6.0	9.8	16.1	68	
2240	1RN1500-2HJ6	2976	245	95.8	95.6	0.91	0.90	7189	2.5	0.65	5.0	13.5	30.7	100	
2500	1RN1502-2HJ6	2974	275	95.9	95.7	0.91	0.91	8029	2.5	0.65	5.0	13.5	32.8	100	
2800	1RN1504-2HJ6	2977	305	96.1	96.0	0.92	0.91	8982	2.7	0.70	5.5	13.5	36.0	125	
3150	1RN1506-2HJ6	2978	340	96.3	96.2	0.92	0.91	10102	2.8	0.70	5.7	13.5	39.3	150	
3550	1RN1560-2HJ6	2972	395	96.3	96.4	0.90	0.89	11407	2.4	0.50	5.2	18.5	41.1	125	
4000	1RN1562-2HJ6	2974	440	96.5	96.7	0.90	0.89	12844	2.5	0.50	5.4	18.5	43.3	125	
4500	1RN1564-2HJ6	2977	495	96.8	96.9	0.90	0.89	14434	2.8	0.55	6.0	18.5	48.0	145	
4950	1RN1566-2HJ6	2978	550	96.9	97.1	0.90	0.89	15874	2.9	0.60	6.0	18.5	50.9	145	
5150	1RN1630-2HJ6	2979	570	96.9	97.0	0.89	0.90	16513	2.1	0.35	4.8	21.6	63.8	150	
5750	1RN1632-2HJ6	2980	640	97.1	97.2	0.89	0.90	18430	2.2	0.35	5.0	21.6	69.2	160	
6300	1RN1634-2HJ6	2981	690	97.2	97.3	0.90	0.91	20181	2.4	0.40	5.4	21.6	74.8	175	
7000	1RN1636-2HJ6	2983	770	97.4	97.5	0.90	0.90	22411	2.6	0.45	5.9	21.6	81.6	200	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
6 kV, 50 Hz															
4-pole															
500	1RN1350-4HA6	1479	59	94.5	94.6	0.87	0.83	3229	2.4	0.90	5.2	5.9	6.8	220	
560	1RN1352-4HA6	1477	65	94.6	94.9	0.87	0.86	3620	2.4	0.90	5.2	5.9	7.5	265	
630	1RN1354-4HA6	1479	73	94.9	95.1	0.87	0.86	4069	2.4	0.90	5.3	5.9	8.2	290	
710	1RN1356-4HA6	1479	82	95.1	95.3	0.88	0.86	4584	2.5	1.10	5.6	5.9	9.1	305	
800	1RN1400-4HA6	1482	93	95.1	95.2	0.87	0.85	5155	2.4	0.90	5.5	9.2	12.9	265	
900	1RN1402-4HA6	1482	104	95.2	95.4	0.88	0.86	5799	2.4	0.90	5.5	9.2	13.9	285	
1000	1RN1404-4HA6	1482	114	95.4	95.6	0.89	0.88	6444	2.4	0.90	5.5	9.2	15.6	320	
1120	1RN1406-4HA6	1484	126	95.5	95.7	0.89	0.87	7209	2.6	1.10	6.2	9.2	17.4	335	
1250	1RN1450-4HA6	1484	142	95.5	95.7	0.88	0.86	8044	2.9	0.90	6.2	9.8	19.0	330	
1400	1RN1450-4HB6	1480	160	95.4	95.7	0.88	0.87	9034	2.4	0.90	5.5	9.8	19.0	240	
1600	1RN1452-4HA6	1479	182	95.5	95.9	0.88	0.88	10331	2.4	0.80	5.5	9.8	21.0	265	
1800	1RN1454-4HA6	1481	205	95.8	96.0	0.88	0.87	11607	2.7	0.90	5.8	9.8	23.0	265	
2000	1RN1456-4HA6	1481	225	95.9	96.2	0.89	0.88	12897	2.7	0.90	5.8	9.8	25.0	290	
2240	1RN1500-4HA6	1483	250	95.7	96.0	0.89	0.87	14422	2.5	0.85	5.1	13.5	38.8	180	
2500	1RN1502-4HA6	1485	280	95.8	96.1	0.89	0.87	16082	2.6	0.90	5.5	13.5	42.9	200	
2800	1RN1504-4HA6	1485	315	95.9	96.3	0.89	0.87	18008	2.6	0.90	5.5	13.5	47.2	220	
3150	1RN1506-4HA6	1486	355	96.2	96.5	0.89	0.87	20240	2.8	1.00	5.7	13.5	52.4	250	
3550	1RN1560-4HJ6	1489	400	96.7	96.8	0.88	0.85	22764	2.5	0.60	5.8	18.5	84.3	1400	
4000	1RN1562-4HJ6	1489	450	96.8	97.0	0.88	0.85	25653	2.5	0.60	5.8	18.5	89.8	1400	
4700	1RN1564-4HJ6	1488	530	96.9	97.1	0.88	0.85	30163	2.5	0.60	5.8	18.5	94.6	1400	
4950	1RN1566-4HJ6	1487	560	96.9	97.1	0.88	0.86	31782	2.5	0.60	5.8	18.5	96.7	1400	
5000	1RN1630-4HJ6	1490	560	97.1	97.0	0.88	0.87	32056	3.0	0.60	6.0	21.6	131.3	1450	
5500	1RN1630-4HK6	1489	620	97.1	97.0	0.88	0.85	35266	2.9	0.60	6.0	21.6	131.3	1300	
5600	1RN1632-4HJ6	1490	630	97.1	97.1	0.88	0.86	35902	2.9	0.60	6.0	21.6	142.9	1350	
6600	1RN1634-4HJ6	1489	740	97.2	97.2	0.88	0.86	42333	2.9	0.60	6.0	21.6	154.2	1350	
7100	1RN1636-4HJ6	1489	800	97.2	97.2	0.88	0.86	45537	2.9	0.60	6.0	21.6	168.3	1400	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
6-pole															
400	1RN1350-6HA6	984	48.5	94.0	94.4	0.84	0.81	3881	2.8	1.00	5.6	5.9	9.7	210	
450	1RN1352-6HA6	985	54	94.3	94.6	0.85	0.82	4365	2.8	1.00	5.6	5.9	11.2	250	
500	1RN1354-6HA6	985	60	94.5	94.9	0.85	0.82	4848	2.9	1.00	5.8	5.9	12.1	320	
560	1RN1356-6HA6	984	67	94.6	94.9	0.85	0.84	5435	2.9	1.00	5.8	5.9	13.6	360	
630	1RN1400-6HA6	987	75	94.9	95.1	0.85	0.81	6098	2.8	1.00	5.5	9.2	18.0	355	
710	1RN1402-6HA6	988	84	95.2	95.3	0.85	0.80	6866	3.0	1.10	5.8	9.2	19.8	475	
800	1RN1404-6HA6	987	95	95.3	95.4	0.85	0.81	7739	3.0	1.10	5.8	9.2	22.0	540	
900	1RN1406-6HA6	988	106	95.4	95.6	0.85	0.81	8704	3.1	1.20	6.0	9.2	24.4	655	
1000	1RN1450-6HA6	990	118	95.6	95.9	0.85	0.81	9643	2.4	1.00	5.5	9.8	30.0	1335	
1120	1RN1450-6HB6	988	132	95.5	95.9	0.86	0.83	10824	2.2	1.00	5.0	9.8	30.0	990	
1250	1RN1452-6HA6	988	146	95.5	96.0	0.86	0.84	12086	2.2	0.90	5.0	9.8	32.0	1100	
1400	1RN1454-6HA6	989	164	95.7	96.1	0.86	0.83	13524	2.3	1.00	5.3	9.8	35.0	1100	
1600	1RN1456-6HA6	989	188	95.9	96.3	0.85	0.81	15444	2.5	1.00	5.6	9.8	38.0	1100	
1800	1RN1500-6HA6	991	210	96.1	96.3	0.85	0.82	17351	2.3	1.00	5.2	13.5	55.2	920	
2000	1RN1502-6HA6	991	230	96.2	96.4	0.86	0.83	19281	2.3	1.00	5.2	13.5	61.5	1025	
2240	1RN1504-6HA6	991	260	96.3	96.6	0.86	0.82	21578	2.4	1.00	5.5	13.5	68.2	1170	
2500	1RN1506-6HA6	991	290	96.4	96.7	0.86	0.84	24092	2.4	1.00	5.5	13.5	75.8	1310	
2800	1RN1560-6HJ6	992	325	96.5	96.7	0.85	0.80	26950	2.4	0.65	5.4	18.5	124.6	3400	
3150	1RN1562-6HJ6	992	370	96.5	96.7	0.85	0.81	30340	2.4	0.65	5.4	18.5	129.0	3400	
3550	1RN1564-6HJ6	991	410	96.6	96.8	0.86	0.83	34207	2.4	0.65	5.4	18.5	140.2	3400	
4000	1RN1566-6HJ6	992	460	96.7	96.9	0.86	0.82	38520	2.4	0.65	5.4	18.5	152.6	3800	
4500	1RN1630-6HJ6	993	530	96.9	96.9	0.85	0.82	43287	2.4	0.70	5.8	21.6	205.7	4200	
5000	1RN1632-6HJ6	993	580	97.0	97.0	0.86	0.83	48106	2.4	0.70	5.8	21.6	220.6	4200	
5600	1RN1634-6HJ6	992	650	97.0	97.1	0.86	0.83	53917	2.4	0.70	5.8	21.6	229.3	4200	
6250	1RN1636-6HJ6	992	720	97.1	97.2	0.86	0.84	60181	2.4	0.70	5.8	21.6	245.9	4300	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
6 kV, 50 Hz															
8-pole															
280	1RN1350-8HA6	737	36.5	93.2	93.2	0.79	0.72	3626	2.5	1.00	5.0	5.9	9.7	350	
315	1RN1352-8HA6	737	40.5	93.3	93.5	0.80	0.75	4083	2.5	1.00	5.0	5.9	11.2	395	
355	1RN1354-8HA6	737	45.5	93.7	93.8	0.80	0.74	4599	2.6	1.00	5.0	5.9	12.1	490	
400	1RN1356-8HA6	738	51	93.9	94.0	0.80	0.73	5178	2.7	1.10	5.3	5.9	13.6	580	
450	1RN1400-8HA6	737	57	94.1	94.5	0.81	0.77	5830	2.2	0.90	4.3	9.2	18.0	760	
500	1RN1402-8HA6	738	63	94.4	94.7	0.81	0.76	6470	2.2	0.95	4.4	9.2	19.8	930	
560	1RN1404-8HA6	737	70	94.4	94.8	0.82	0.79	7257	2.2	0.95	4.4	9.2	22.0	1010	
630	1RN1406-8HA6	739	78	94.6	95.0	0.82	0.76	8147	2.4	1.00	4.8	9.2	24.4	1250	
710	1RN1450-8HA6	742	89	94.9	95.3	0.81	0.75	9144	2.1	0.80	5.0	9.8	30.0	1790	
800	1RN1450-8HB6	740	99	95.0	95.3	0.82	0.78	10331	2.1	0.80	4.5	9.8	30.0	1405	
900	1RN1452-8HA6	740	110	95.1	95.4	0.82	0.77	11618	2.1	0.80	4.5	9.8	32.0	1455	
1000	1RN1454-8HA6	740	122	95.3	95.7	0.82	0.76	12902	2.2	0.80	4.5	9.8	35.0	1530	
1120	1RN1456-8HA6	740	138	95.4	95.7	0.82	0.77	14454	2.2	0.80	4.5	9.8	38.0	1630	
1250	1RN1500-8HA6	742	150	95.8	96.0	0.84	0.79	16090	2.3	0.80	4.5	13.5	55.2	2045	
1400	1RN1502-8HA6	742	168	95.9	96.1	0.84	0.79	18014	2.3	0.90	4.6	13.5	61.5	2275	
1600	1RN1504-8HA6	742	190	96.0	96.2	0.84	0.81	20601	2.3	0.90	4.6	13.5	68.2	2520	
1800	1RN1506-8HA6	743	215	96.2	96.4	0.84	0.79	23152	2.3	0.90	5.0	13.5	75.8	2945	
2100	1RN1560-8HJ6	742	255	96.0	96.3	0.83	0.79	27028	2.0	0.60	4.0	18.5	124.6	3600	
2350	1RN1562-8HJ6	742	285	96.2	96.5	0.83	0.79	30234	2.0	0.60	4.1	18.5	129.0	4400	
2600	1RN1564-8HJ6	743	310	96.3	96.6	0.83	0.79	33437	2.0	0.60	4.2	18.5	140.2	5600	
2900	1RN1566-8HJ6	742	345	96.4	96.7	0.84	0.80	37310	2.0	0.60	4.2	18.5	152.6	7000	
3300	1RN1630-8HJ6	744	400	96.6	96.8	0.82	0.79	42382	2.0	0.60	4.3	21.6	205.7	5900	
3800	1RN1632-8HJ6	744	460	96.6	96.8	0.82	0.78	48783	2.0	0.60	4.4	21.6	220.6	5900	
4200	1RN1634-8HJ6	744	510	96.7	96.9	0.82	0.78	53919	2.1	0.65	4.5	21.6	229.3	6700	
4600	1RN1636-8HJ6	744	560	96.8	97.0	0.82	0.78	59030	2.1	0.65	4.6	21.6	245.9	8600	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters


Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6 kV, 50 Hz															
10-pole															
500	1RN1450-3HA6	592	64	94.7	94.8	0.80	0.76	8067	2.0	0.85	4.3	9.8	29.5	6700	
560	1RN1452-3HA6	592	72	94.7	94.8	0.80	0.75	9032	2.0	0.85	4.3	9.8	32.8	6700	
630	1RN1454-3HA6	592	80	94.7	94.8	0.80	0.74	10160	2.0	0.90	4.4	9.8	35.1	6700	
710	1RN1456-3HA6	592	88	94.8	94.9	0.81	0.76	11463	2.0	0.90	4.4	9.8	37.5	6900	
800	1RN1500-3HA6	593	98	94.8	95.0	0.83	0.81	12890	1.7	0.65	4.0	13.5	53.2	4000	
900	1RN1502-3HA6	593	110	95.1	95.3	0.83	0.81	14494	1.7	0.70	4.2	13.5	59.2	5500	
1000	1RN1504-3HA6	594	122	95.3	95.4	0.83	0.79	16083	1.9	0.80	4.6	13.5	64.2	6500	
1120	1RN1506-3HA6	593	136	95.3	95.5	0.83	0.81	18025	1.9	0.80	4.6	13.5	72.2	6800	
1250	1RN1560-3HJ6	594	154	95.9	96.0	0.81	0.76	20097	2.1	0.55	4.2	18.5	116.2	12100	
1400	1RN1560-3HK6	594	174	95.8	96.0	0.81	0.75	22520	1.9	0.55	4.1	18.5	116.2	8500	
1600	1RN1562-3HJ6	593	196	95.9	96.1	0.82	0.78	25759	1.9	0.55	4.1	18.5	130.2	8500	
1800	1RN1564-3HJ6	593	220	95.9	96.2	0.82	0.78	28983	1.9	0.55	4.1	18.5	143.2	8500	
2000	1RN1566-3HJ6	593	245	96.0	96.2	0.82	0.77	32187	2.0	0.60	4.1	18.5	156.2	8500	
2240	1RN1630-3HJ6	594	270	96.1	96.3	0.83	0.79	35995	2.0	0.50	4.1	21.6	222.3	8900	
2500	1RN1632-3HJ6	594	300	96.3	96.5	0.83	0.79	40167	2.0	0.50	4.2	21.6	243.3	10900	
2800	1RN1634-3HJ6	595	335	96.4	96.6	0.83	0.79	44979	2.1	0.55	4.3	21.6	267.2	11200	
3150	1RN1636-3HJ6	595	380	96.4	96.6	0.83	0.79	50601	2.1	0.55	4.3	21.6	296.9	11200	

Type of construction

 See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
6 kV, 50 Hz															
12-pole															
400	1RN1450-5HA6	492	54	93.9	93.9	0.77	0.71	7761	2.0	0.65	4.0	9.8	32.2	4500	
450	1RN1452-5HA6	492	60	93.9	94.0	0.77	0.70	8728	2.1	0.70	4.1	9.8	35.2	4500	
500	1RN1454-5HA6	492	66	94.0	94.1	0.77	0.70	9697	2.1	0.70	4.1	9.8	37.7	4500	
560	1RN1456-5HA6	492	74	94.1	94.1	0.77	0.69	10863	2.1	0.75	4.2	9.8	40.7	4500	
630	1RN1500-5HA6	493	82	94.7	94.8	0.78	0.73	12194	1.7	0.60	3.7	13.5	53.2	9400	
710	1RN1502-5HA6	493	92	94.8	94.9	0.78	0.75	13756	1.7	0.60	3.7	13.5	59.2	9400	
800	1RN1504-5HA6	494	104	94.8	94.8	0.78	0.72	15478	1.8	0.65	3.9	13.5	66.2	9400	
900	1RN1506-5HA6	494	116	94.9	94.9	0.78	0.71	17409	1.9	0.70	4.0	13.5	73.2	11000	
1000	1RN1560-5HJ6	494	132	95.2	95.2	0.77	0.70	19336	1.9	0.60	3.7	18.5	135.2	21700	
1120	1RN1560-5HK6	493	148	95.2	95.3	0.77	0.70	21678	1.8	0.55	3.5	18.5	135.2	20900	
1250	1RN1562-5HJ6	494	164	95.3	95.4	0.77	0.70	24180	1.8	0.55	3.7	18.5	152.2	23800	
1400	1RN1564-5HJ6	493	182	95.4	95.5	0.78	0.72	27109	1.8	0.55	3.7	18.5	167.2	24600	
1600	1RN1566-5HJ6	493	205	95.4	95.5	0.78	0.71	30981	1.8	0.60	3.7	18.5	183.2	24600	
1800	1RN1630-5HJ6	495	220	95.6	95.9	0.82	0.77	34741	1.8	0.60	3.9	21.6	248.8	10100	
2000	1RN1632-5HJ6	495	245	95.8	96.0	0.82	0.76	38570	1.9	0.65	4.2	21.6	272.5	12400	
2240	1RN1634-5HJ6	495	275	95.9	96.1	0.82	0.78	43242	1.9	0.65	4.2	21.6	299.2	14200	
2500	1RN1636-5HJ6	495	305	96.0	96.2	0.82	0.76	48213	2.0	0.70	4.3	21.6	333.7	15200	

Type of construction

■ See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
6 kV, 50 Hz															
14-pole															
450	1RN1500-7HA6	423	64	94.2	94.0	0.72	0.62	10157	1.8	0.65	3.5	13.5	54.2	15200	
500	1RN1502-7HA6	423	70	94.2	94.2	0.72	0.64	11294	1.8	0.65	3.5	13.5	60.2	15200	
560	1RN1504-7HA6	423	80	94.2	94.0	0.72	0.63	12643	1.9	0.70	3.7	13.5	66.2	15200	
630	1RN1506-7HA6	423	90	94.3	94.1	0.72	0.62	14223	1.9	0.75	3.7	13.5	74.2	19200	
710	1RN1560-7HJ6	423	94	94.7	94.8	0.77	0.71	16041	2.0	0.50	3.7	18.5	145.2	13100	
800	1RN1560-7HK6	423	106	94.7	94.8	0.77	0.69	18079	1.9	0.50	3.7	18.5	145.2	10500	
900	1RN1562-7HJ6	423	118	94.8	94.9	0.77	0.69	20329	1.9	0.55	3.9	18.5	164.2	10500	
1000	1RN1564-7HJ6	422	130	94.9	95.1	0.78	0.71	22609	1.9	0.55	3.9	18.5	180.2	12600	
1120	1RN1566-7HJ6	422	144	94.9	95.2	0.79	0.73	25346	1.9	0.55	3.9	18.5	197.2	13300	
1250	1RN1630-7HJ6	425	162	95.5	95.6	0.78	0.71	28108	1.9	0.50	3.8	21.6	281.1	13900	
1400	1RN1632-7HJ6	425	180	95.6	95.7	0.78	0.69	31466	1.9	0.55	4.0	21.6	308.8	13900	
1600	1RN1634-7HJ6	424	205	95.6	95.7	0.79	0.74	36021	1.9	0.55	4.0	21.6	339.3	13900	
1800	1RN1636-7HJ6	425	230	95.8	95.9	0.79	0.72	40485	2.0	0.60	4.1	21.6	377.8	16700	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
6 kV, 50 Hz															
16-pole															
400	1RN1500-9HA6	370	60	94.0	93.9	0.68	0.57	10313	1.9	0.55	3.3	13.5	53.2	11000	
450	1RN1502-9HA6	370	66	94.2	94.1	0.69	0.59	11605	1.9	0.55	3.3	13.5	60.2	11000	
500	1RN1504-9HA6	370	74	94.2	94.1	0.69	0.59	12891	1.9	0.55	3.4	13.5	66.2	11000	
560	1RN1506-9HA6	370	82	94.2	94.1	0.70	0.61	14446	1.9	0.55	3.4	13.5	74.2	11000	
630	1RN1560-9HJ6	370	90	94.3	94.2	0.71	0.62	16265	2.0	0.50	3.4	18.5	146.2	19800	
710	1RN1560-9HK6	370	102	94.5	94.4	0.71	0.60	18336	1.9	0.50	3.4	18.5	146.2	21100	
800	1RN1562-9HJ6	370	114	94.6	94.6	0.72	0.62	20665	1.9	0.50	3.4	18.5	164.2	21100	
900	1RN1564-9HJ6	369	126	94.6	94.7	0.73	0.65	23274	1.9	0.50	3.4	18.5	181.2	21100	
1000	1RN1566-9HJ6	370	140	94.8	94.8	0.73	0.63	25839	2.0	0.55	3.5	18.5	198.2	28600	
1120	1RN1630-9HJ6	371	156	94.8	94.8	0.73	0.65	28838	1.8	0.55	3.4	21.6	282.2	18500	
1250	1RN1632-9HJ6	371	174	95.0	95.1	0.73	0.64	32168	1.9	0.55	3.5	21.6	308.8	22200	
1400	1RN1634-9HJ6	371	194	95.0	95.0	0.73	0.63	36018	2.0	0.65	3.7	21.6	339.2	22200	
1600	1RN1636-9HJ6	371	220	95.3	95.3	0.73	0.64	41164	2.0	0.65	3.7	21.6	378.8	30100	

Type of construction

See page 1/10

Pole number

9 16-pole: additional order code **H1A** required

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque T_B/T_{rated} [-]	Locked-rotor torque T_{LR}/T_{rated} [-]	Locked-rotor current I_{LR}/I_{rated} [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
6.6 kV, 60 Hz															
2-pole															
560	1RN1350-2HD1	3563	58	94.4	94.1	0.88	0.88	1501	2.6	0.60	5.6	5.9	3.8	22	
630	1RN1352-2HD1	3562	64	94.5	94.3	0.90	0.90	1689	2.6	0.65	5.8	5.9	4.3	22	
710	1RN1354-2HD1	3560	72	94.8	94.7	0.90	0.90	1905	2.6	0.65	5.8	5.9	4.6	22	
800	1RN1356-2HD1	3559	82	94.9	94.8	0.91	0.91	2147	2.8	0.70	6.2	5.9	4.9	22	
840	1RN1356-2HE1	3556	86	94.9	94.8	0.92	0.92	2256	2.7	0.65	5.9	5.9	4.9	20	
900	1RN1400-2HD1	3571	92	94.7	94.4	0.90	0.90	2407	2.5	0.55	5.8	9.2	7.2	39	
1000	1RN1402-2HD1	3572	102	95.0	94.7	0.91	0.91	2674	2.6	0.60	6.0	9.2	7.6	40	
1120	1RN1404-2HD1	3572	112	95.2	95.0	0.92	0.92	2994	2.7	0.65	6.3	9.2	8.4	41	
1250	1RN1406-2HD1	3573	124	95.4	95.3	0.92	0.92	3341	2.9	0.70	6.7	9.2	9.1	41	
1320	1RN1406-2HE1	3571	132	95.4	95.3	0.92	0.92	3530	2.7	0.65	6.3	9.2	9.1	37	
1400	1RN1450-2HJ1	3577	146	95.4	95.0	0.88	0.87	3738	2.8	0.60	6.4	9.8	14.9	94	
1600	1RN1450-2HK1	3572	166	95.4	95.2	0.88	0.88	4277	2.3	0.60	5.2	9.8	14.9	81	
1800	1RN1452-2HJ1	3570	184	95.7	95.5	0.89	0.89	4815	2.3	0.60	5.2	9.8	16.0	82	
2000	1RN1454-2HJ1	3573	205	95.9	95.8	0.89	0.89	5346	2.5	0.60	5.4	9.8	17.5	88	
2240	1RN1456-2HJ1	3575	225	96.1	96.0	0.90	0.89	5985	2.7	0.60	6.0	9.8	18.8	90	
2500	1RN1500-2HJ1	3573	255	95.5	95.8	0.90	0.90	6681	2.3	0.55	5.5	13.5	30.7	95	
2800	1RN1502-2HJ1	3572	285	95.7	96.1	0.90	0.91	7486	2.3	0.55	5.5	13.5	32.8	95	
3150	1RN1504-2HJ1	3573	315	95.8	96.3	0.91	0.91	8420	2.4	0.60	5.5	13.5	36.0	95	
3550	1RN1506-2HJ1	3574	355	96.1	96.5	0.91	0.92	9486	2.5	0.60	5.6	13.5	39.3	105	
3900	1RN1560-2HJ1	3570	390	96.4	96.5	0.90	0.90	10433	2.2	0.45	4.9	18.5	41.1	75	
4300	1RN1562-2HJ1	3573	425	96.7	96.8	0.91	0.91	11493	2.4	0.50	5.4	18.5	43.3	85	
4750	1RN1564-2HJ1	3574	470	96.8	97.0	0.91	0.91	12691	2.5	0.50	5.5	18.5	48.0	90	
5000	1RN1566-2HJ1	3579	495	97.0	97.1	0.91	0.91	13343	2.8	0.55	6.0	18.5	50.9	100	
5000	1RN1630-2HJ1	3581	510	97.0	97.0	0.89	0.91	13335	2.1	0.35	5.0	21.6	63.8	110	
5800	1RN1632-2HJ1	3580	580	97.1	97.2	0.90	0.91	15470	2.2	0.35	5.0	21.6	69.2	110	
6500	1RN1634-2HJ1	3582	650	97.2	97.3	0.90	0.92	17332	2.3	0.35	5.4	21.6	74.8	115	
7350	1RN1636-2HJ1	3583	730	97.4	97.5	0.91	0.92	19593	2.4	0.40	5.7	21.6	81.6	125	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos ϕ	3/4 load cos ϕ	Motor						External, max.	
6.6 kV, 60 Hz															
4-pole															
560	1RN1350-4HA1	1780	60	94.9	94.8	0.86	0.83	3005	2.6	1.00	5.7	5.9	6.8	150	
630	1RN1352-4HA1	1777	66	94.9	95.0	0.88	0.87	3386	2.4	1.00	5.5	5.9	7.5	175	
710	1RN1354-4HA1	1778	74	95.0	95.1	0.88	0.88	3816	2.4	1.00	5.5	5.9	8.2	190	
800	1RN1356-4HA1	1779	83	95.2	95.3	0.88	0.88	4295	2.6	1.00	5.7	5.9	9.1	200	
900	1RN1400-4HA1	1782	94	95.0	95.0	0.88	0.86	4823	2.4	1.10	5.6	9.2	12.9	165	
1000	1RN1402-4HA1	1782	104	95.2	95.2	0.88	0.87	5359	2.4	1.10	5.7	9.2	13.9	175	
1120	1RN1404-4HA1	1784	116	95.5	95.4	0.88	0.86	5996	2.6	1.20	6.1	9.2	15.6	195	
1250	1RN1406-4HA1	1785	130	95.6	95.6	0.88	0.87	6691	2.7	1.20	6.4	9.2	17.4	210	
1400	1RN1450-4HA1	1782	144	95.5	95.7	0.89	0.89	7503	2.6	0.90	5.8	9.8	19.0	225	
1600	1RN1450-4HB1	1777	164	95.4	95.7	0.89	0.89	8599	2.3	0.80	5.2	9.8	19.0	155	
1800	1RN1452-4HA1	1778	184	95.6	95.9	0.89	0.89	9668	2.4	0.80	5.5	9.8	21.0	165	
2000	1RN1454-4HA1	1780	205	95.8	96.1	0.89	0.89	10730	2.4	0.80	5.5	9.8	23.0	170	
2240	1RN1456-4HA1	1779	225	95.9	96.2	0.90	0.90	12025	2.4	0.70	5.5	9.8	25.0	185	
6-pole															
450	1RN1350-6HA1	1185	49.5	94.3	94.3	0.84	0.80	3626	2.8	0.90	5.5	5.9	9.7	130	
500	1RN1352-6HA1	1186	54	94.6	94.6	0.85	0.81	4027	2.8	0.90	5.8	5.9	11.2	155	
560	1RN1354-6HA1	1185	61	94.8	94.8	0.85	0.83	4513	2.8	1.00	5.8	5.9	12.1	210	
630	1RN1356-6HA1	1186	68	95.1	95.1	0.85	0.82	5073	2.9	1.00	6.0	5.9	13.6	300	
710	1RN1400-6HA1	1186	77	95.3	95.3	0.85	0.83	5716	2.6	0.90	5.5	9.2	18.0	300	
800	1RN1402-6HA1	1187	86	95.4	95.6	0.85	0.81	6434	2.8	0.95	5.8	9.2	19.8	325	
900	1RN1404-6HA1	1187	97	95.5	95.6	0.85	0.83	7240	2.8	0.95	5.8	9.2	22.0	355	
1000	1RN1406-6HA1	1188	108	95.7	95.7	0.85	0.83	8041	2.9	1.00	6.0	9.2	24.4	435	
1120	1RN1450-6HA1	1189	118	95.7	96.1	0.86	0.84	8996	2.3	0.90	5.2	9.8	30.0	800	
1250	1RN1450-6HB1	1188	132	95.8	96.2	0.86	0.83	10047	2.3	0.90	5.2	9.8	30.0	625	
1400	1RN1452-6HA1	1189	148	96.0	96.3	0.86	0.84	11249	2.3	0.90	5.2	9.8	32.0	655	
1600	1RN1454-6HA1	1188	170	96.1	96.4	0.86	0.84	12860	2.3	0.90	5.2	9.8	35.0	675	
1800	1RN1456-6HA1	1188	190	96.1	96.5	0.86	0.84	14467	2.3	0.90	5.2	9.8	38.0	695	
		Type of construction													
		See page 1/10													

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 6.6 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max.	
6.6 kV, 60 Hz															
8-pole															
315	1RN1350-8HA1	886	36.5	93.6	93.8	0.81	0.77	3396	2.3	0.90	5.0	5.9	9.7	260	
355	1RN1352-8HA1	885	41.0	93.7	94.0	0.81	0.79	3830	2.3	0.90	5.0	5.9	11.2	285	
400	1RN1354-8HA1	886	45.5	94.0	94.2	0.82	0.78	4313	2.3	0.90	5.0	5.9	12.1	360	
450	1RN1356-8HA1	886	51	94.2	94.4	0.82	0.78	4849	2.4	1.00	5.0	5.9	13.6	430	
500	1RN1400-8HA1	888	57	94.5	94.7	0.81	0.77	5379	2.3	0.80	4.8	9.2	18.0	545	
560	1RN1402-8HA1	887	63	94.6	94.9	0.82	0.79	6032	2.2	0.80	4.8	9.2	19.8	670	
630	1RN1404-8HA1	888	71	94.8	95.0	0.82	0.78	6778	2.2	0.90	4.8	9.2	22.0	780	
710	1RN1406-8HA1	887	79	94.9	95.2	0.83	0.79	7644	2.3	0.90	4.8	9.2	24.4	900	
800	1RN1450-8HA1	891	89	95.4	95.6	0.82	0.77	8571	2.1	0.80	4.6	9.8	30.0	1115	
900	1RN1450-8HB1	889	100	95.3	95.6	0.82	0.79	9664	2.0	0.80	4.5	9.8	30.0	840	
1000	1RN1452-8HA1	891	112	95.6	95.8	0.82	0.76	10724	2.2	0.80	4.5	9.8	32.0	850	
1120	1RN1454-8HA1	890	124	95.8	95.9	0.83	0.77	12015	2.2	0.80	4.5	9.8	35.0	915	
1250	1RN1456-8HA1	890	138	95.8	96.0	0.83	0.78	13413	2.2	0.80	4.5	9.8	38.0	985	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque T_B/T_{rated} [-]	Locked-rotor torque T_{LR}/T_{rated} [-]	Locked-rotor current I_{LR}/I_{rated} [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
2-pole															
355	1RN1352-2HD8	2974	24	93.8	93.5	0.88	0.86	1140	3.6	0.90	7.0	5.9	4.3	42	
400	1RN1352-2HE8	2970	28	93.8	93.7	0.88	0.87	1286	3.2	0.80	6.9	5.9	4.3	38	
450	1RN1352-2HF8	2964	32	93.8	93.8	0.88	0.88	1450	2.8	0.70	6.1	5.9	4.3	32	
500	1RN1352-2HG8	2958	34	93.8	93.9	0.89	0.89	1614	2.5	0.65	5.5	5.9	4.3	19	
560	1RN1354-2HD8	2962	38	94.0	94.1	0.89	0.89	1806	2.8	0.80	6.3	5.9	4.6	19	
630	1RN1356-2HD8	2962	42	94.3	94.4	0.90	0.90	2031	3.0	0.85	6.6	5.9	4.9	19	
710	1RN1400-2HD8	2973	48	94.3	94.1	0.89	0.89	2280	2.8	0.65	6.3	9.2	7.2	22	
800	1RN1402-2HD8	2973	54	94.4	94.3	0.90	0.90	2570	2.9	0.75	6.8	9.2	7.6	22	
900	1RN1404-2HD8	2973	60	94.8	94.7	0.91	0.91	2892	2.9	0.75	6.8	9.2	8.4	31	
1000	1RN1406-2HD8	2975	66	95.1	95.0	0.91	0.91	3210	3.4	0.85	7.0	9.2	9.1	36	
1120	1RN1450-2HA8	2977	76	95.2	95.1	0.89	0.89	3593	2.7	0.60	6.1	9.8	12.6	81	
1250	1RN1450-2HB8	2973	86	95.2	95.2	0.89	0.89	4015	2.4	0.60	5.3	9.8	12.6	70	
1400	1RN1452-2HA8	2976	96	95.4	95.4	0.89	0.89	4493	2.5	0.70	5.6	9.8	13.4	70	
1600	1RN1454-2HA8	2975	108	95.6	95.7	0.89	0.89	5137	2.5	0.70	5.6	9.8	14.7	75	
1800	1RN1456-2HA8	2974	120	95.8	95.9	0.90	0.90	5780	2.5	0.70	5.6	9.8	16.1	75	
2000	1RN1500-2HJ8	2978	132	95.6	95.3	0.91	0.90	6415	2.5	0.65	5.7	13.5	30.7	70	
2240	1RN1502-2HJ8	2975	148	95.7	95.5	0.91	0.90	7192	2.5	0.65	5.0	13.5	32.8	85	
2500	1RN1504-2HJ8	2976	164	95.9	95.7	0.92	0.91	8023	2.6	0.65	5.3	13.5	36.0	90	
2800	1RN1506-2HJ8	2978	182	96.1	96.0	0.92	0.91	8980	2.7	0.70	5.6	13.5	39.3	125	
3200	1RN1560-2HJ8	2971	215	96.1	96.3	0.90	0.90	10285	2.3	0.50	5.0	18.5	41.1	125	
3550	1RN1562-2HJ8	2975	235	96.4	96.5	0.90	0.90	11396	2.6	0.55	5.6	18.5	43.3	140	
4150	1RN1564-2HJ8	2976	270	96.6	96.8	0.91	0.91	13317	2.6	0.55	5.8	18.5	48.0	155	
4500	1RN1566-2HJ8	2978	295	96.8	96.9	0.91	0.91	14433	2.8	0.60	6.0	18.5	50.9	160	
5000	1RN1630-2HJ8	2978	335	96.8	96.9	0.89	0.90	16037	2.0	0.35	4.6	21.6	63.8	130	
5600	1RN1632-2HJ8	2979	370	96.9	97.0	0.90	0.91	17955	2.2	0.40	5.0	21.6	69.2	130	
6300	1RN1634-2HJ8	2979	415	97.1	97.2	0.90	0.91	20196	2.2	0.40	5.0	21.6	74.8	160	
6950	1RN1636-2HJ8	2981	460	97.3	97.4	0.90	0.91	22268	2.3	0.40	5.3	21.6	81.6	175	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
4-pole															
355	1RN1354-4HA8	1488	25.0	94.4	94.4	0.86	0.84	2279	3.2	1.20	7.0	5.9	8.2	135	
400	1RN1354-4HB8	1485	28.5	94.3	94.4	0.86	0.85	2572	3.0	1.20	6.5	5.9	8.2	120	
450	1RN1354-4HC8	1483	32.0	94.4	94.5	0.86	0.86	2897	3.0	1.20	6.5	5.9	8.2	95	
500	1RN1354-4HP8	1483	35.5	94.5	94.6	0.86	0.84	3219	3.0	1.20	6.5	5.9	8.2	105	
560	1RN1356-4HA8	1483	39.5	94.7	94.8	0.86	0.85	3605	3.0	1.20	6.5	5.9	9.1	105	
630	1RN1358-4HA8	1485	44.5	94.9	94.8	0.86	0.82	4053	3.2	1.30	6.8	5.9	9.5	105	
710	1RN1400-4HA8	1483	49.5	94.7	94.8	0.87	0.85	4572	2.6	1.00	6.0	9.2	12.9	225	
800	1RN1402-4HA8	1484	56	94.9	94.9	0.87	0.85	5148	2.7	1.10	6.2	9.2	13.9	230	
900	1RN1404-4HA8	1484	62	95.1	95.2	0.88	0.86	5793	2.8	1.20	6.4	9.2	15.6	280	
1000	1RN1406-4HA8	1485	69	95.4	95.3	0.88	0.85	6431	3.0	1.30	6.6	9.2	17.4	345	
1120	1RN1450-4HA8	1485	79	95.3	95.3	0.86	0.83	7203	2.8	0.90	6.2	9.8	19.0	345	
1250	1RN1450-4HB8	1482	88	95.2	95.3	0.86	0.85	8055	2.8	0.90	5.8	9.8	19.0	255	
1400	1RN1452-4HA8	1482	97	95.3	95.5	0.87	0.87	9022	2.8	1.00	6.0	9.8	21.0	275	
1600	1RN1454-4HA8	1483	110	95.6	95.7	0.87	0.85	10303	2.9	1.00	6.2	9.8	23.0	280	
1800	1RN1456-4HA8	1483	124	95.7	95.8	0.88	0.86	11591	2.9	1.00	6.2	9.8	25.0	300	
2000	1RN1500-4HA8	1485	138	95.7	95.8	0.88	0.86	12864	2.5	0.80	5.3	13.5	38.8	180	
2240	1RN1502-4HA8	1486	154	95.8	96.0	0.88	0.86	14395	2.8	1.00	5.7	13.5	42.9	205	
2500	1RN1504-4HA8	1486	170	95.8	96.0	0.89	0.87	16066	2.8	1.00	6.0	13.5	47.2	230	
2800	1RN1506-4HA8	1488	190	96.0	96.2	0.89	0.86	17976	3.1	1.10	6.5	13.5	52.4	260	
3150	1RN1560-4HJ8	1490	215	96.5	96.6	0.88	0.85	20191	2.8	0.75	6.0	18.5	84.3	1100	
3550	1RN1562-4HJ8	1490	240	96.6	96.7	0.88	0.85	22753	2.8	0.75	6.0	18.5	89.8	1100	
4300	1RN1564-4HJ8	1489	290	96.7	96.9	0.88	0.86	27588	2.8	0.75	6.0	18.5	94.6	1100	
4400	1RN1566-4HJ8	1489	295	96.7	96.9	0.89	0.86	28224	2.8	0.80	6.0	18.5	96.7	1100	
4500	1RN1630-4HJ8	1490	305	96.8	96.7	0.88	0.87	28840	2.9	0.60	6.0	21.6	131.3	1650	
5200	1RN1630-4HK8	1489	350	96.9	96.9	0.88	0.86	33342	2.9	0.60	6.0	21.6	131.3	1350	
5800	1RN1632-4HJ8	1489	390	97.0	97.0	0.88	0.86	37199	2.9	0.60	6.0	21.6	142.9	1350	
6100	1RN1634-4HJ8	1489	410	97.0	97.0	0.89	0.87	39113	2.9	0.60	6.0	21.6	154.2	1500	
6800	1RN1636-4HJ8	1489	455	97.1	97.2	0.89	0.87	43610	2.9	0.60	6.0	21.6	168.3	1500	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
10 kV, 50 Hz															
6-pole															
315	1RN1352-6HA8	989	23.5	93.8	93.9	0.82	0.76	3043	3.0	1.30	6.3	5.9	11.2	280	
355	1RN1352-6HB8	986	26.5	93.7	94.0	0.82	0.78	3438	3.0	1.30	6.2	5.9	11.2	190	
400	1RN1354-6HA8	987	30.0	94.0	94.0	0.82	0.76	3871	3.2	1.30	6.2	5.9	12.1	205	
450	1RN1356-6HA8	987	33.5	94.1	94.2	0.82	0.75	4355	3.2	1.30	6.2	5.9	13.6	225	
500	1RN1400-6HA8	989	36.5	94.5	94.7	0.84	0.81	4828	2.8	0.90	5.6	9.2	18.0	205	
560	1RN1402-6HA8	989	40.5	94.6	94.9	0.84	0.81	5406	2.8	0.90	5.6	9.2	19.8	230	
630	1RN1404-6HA8	989	45.5	94.9	95.1	0.84	0.82	6082	2.8	1.00	5.8	9.2	22.0	300	
710	1RN1406-6HA8	990	51	95.0	95.2	0.84	0.80	6850	3.0	1.10	6.0	9.2	24.4	345	
800	1RN1450-6HA8	992	58	95.1	95.5	0.83	0.78	7702	2.9	1.00	6.0	9.8	30.0	1145	
900	1RN1450-6HB8	990	65	95.1	95.5	0.84	0.80	8680	2.6	1.00	5.8	9.8	30.0	985	
1000	1RN1450-6HC8	988	71	95.0	95.5	0.85	0.82	9665	2.3	1.00	5.4	9.8	30.0	800	
1120	1RN1452-6HA8	989	80	95.2	95.6	0.85	0.82	10818	2.4	1.10	5.4	9.8	32.0	800	
1250	1RN1454-6HA8	988	89	95.4	95.8	0.85	0.83	12081	2.4	1.10	5.4	9.8	35.0	1005	
1400	1RN1456-6HA8	989	99	95.6	96.0	0.85	0.81	13516	2.6	1.20	5.8	9.8	38.0	1140	
1600	1RN1500-6HA8	992	114	95.9	95.9	0.84	0.80	15409	2.5	1.00	5.5	13.5	55.2	940	
1800	1RN1502-6HA8	992	128	96.0	96.1	0.85	0.80	17332	2.6	1.00	5.7	13.5	61.5	1070	
2000	1RN1504-6HA8	992	140	96.0	96.1	0.86	0.82	19258	2.6	1.10	5.7	13.5	68.2	1180	
2240	1RN1506-6HA8	992	156	96.2	96.3	0.86	0.82	21565	2.6	1.10	5.7	13.5	75.8	1335	
2700	1RN1560-6HJ8	992	190	96.3	96.5	0.85	0.82	25990	2.4	0.65	5.4	18.5	124.6	2000	
2900	1RN1562-6HJ8	992	205	96.4	96.6	0.85	0.82	27921	2.4	0.65	5.4	18.5	129.0	2000	
3200	1RN1564-6HJ8	992	220	96.5	96.7	0.86	0.83	30810	2.4	0.65	5.4	18.5	140.2	2500	
3550	1RN1566-6HJ8	992	245	96.6	96.8	0.86	0.83	34176	2.4	0.65	5.4	18.5	152.6	2800	
4000	1RN1630-6HJ8	993	280	96.7	96.7	0.85	0.81	38469	2.5	0.80	6.0	21.6	205.7	4600	
4500	1RN1632-6HJ8	993	315	96.8	96.8	0.85	0.82	43287	2.5	0.80	6.0	21.6	220.6	4600	
5000	1RN1634-6HJ8	992	345	96.8	96.9	0.86	0.84	48140	2.5	0.80	6.0	21.6	229.3	4600	
5500	1RN1636-6HJ8	992	380	96.9	97.0	0.86	0.83	52938	2.5	0.80	6.0	21.6	245.9	4900	

Type of construction

See page 1/10

Note:

For frame size 315, only 1RA1, 2-poles, 6 kV/6.6 kV design is available.

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
8-pole															
355	1RN1400-8HA8	740	28.0	93.2	93.5	0.78	0.73	4581	2.2	0.90	4.5	9.2	18.0	720	
400	1RN1402-8HA8	740	31.5	93.4	93.7	0.78	0.74	5162	2.2	0.90	4.5	9.2	19.8	720	
450	1RN1404-8HA8	739	35.0	93.5	94.0	0.79	0.76	5815	2.2	0.90	4.5	9.2	22.0	765	
500	1RN1406-8HA8	740	39.0	93.8	94.1	0.79	0.75	6456	2.3	0.90	4.7	9.2	24.4	900	
560	1RN1450-8HA8	742	43.0	94.4	94.6	0.80	0.73	7210	2.3	1.00	5.0	9.8	30.0	1325	
630	1RN1450-8HB8	740	47.5	94.4	94.6	0.81	0.76	8133	2.3	1.00	5.0	9.8	30.0	1050	
710	1RN1452-8HA8	741	53	94.7	94.9	0.81	0.73	9152	2.5	1.20	5.0	9.8	32.0	1475	
800	1RN1454-8HA8	741	60	94.8	95.1	0.81	0.74	10315	2.5	1.20	5.0	9.8	35.0	1545	
900	1RN1456-8HA8	741	67	94.9	95.2	0.81	0.74	11605	2.5	1.20	5.0	9.8	38.0	1615	
1000	1RN1500-8HA8	743	74	95.5	95.6	0.82	0.76	12846	2.4	1.00	5.0	13.5	55.2	2920	
1120	1RN1500-8HB8	742	81	95.6	95.6	0.83	0.78	14417	2.3	1.00	4.7	13.5	55.2	2065	
1250	1RN1502-8HA8	742	91	95.6	95.7	0.83	0.80	16099	2.3	1.00	4.7	13.5	61.5	2310	
1400	1RN1504-8HA8	742	102	95.8	95.9	0.83	0.78	18009	2.3	1.00	5.0	13.5	68.2	2635	
1600	1RN1506-8HA8	742	116	96.0	96.0	0.83	0.78	20582	2.3	1.00	5.0	13.5	75.8	2955	
1800	1RN1560-8HJ8	742	130	95.9	96.3	0.83	0.80	23155	1.9	0.60	4.0	18.5	124.6	3500	
2000	1RN1562-8HJ8	743	142	96.0	96.3	0.84	0.81	25717	1.9	0.60	4.1	18.5	129.0	3600	
2300	1RN1564-8HJ8	743	164	96.2	96.5	0.84	0.80	29563	2.0	0.60	4.2	18.5	140.2	4200	
2600	1RN1566-8HJ8	743	186	96.3	96.6	0.84	0.8	33423	2.0	0.60	4.2	18.5	152.6	5100	
3000	1RN1630-8HJ8	744	220	96.4	96.6	0.82	0.79	38518	2.0	0.60	4.5	21.6	205.7	5300	
3400	1RN1632-8HJ8	744	245	96.4	96.6	0.83	0.80	43666	2.0	0.60	4.5	21.6	220.6	5300	
3750	1RN1634-8HJ8	744	270	96.5	96.7	0.83	0.79	48142	2.1	0.65	4.5	21.6	229.3	6000	
4100	1RN1636-8HJ8	744	295	96.6	96.8	0.83	0.79	52606	2.2	0.70	4.8	21.6	245.9	7200	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
10 kV, 50 Hz															
10-pole															
450	1RN1450-3HA8	594	34	93.2	93.2	0.80	0.73	7241	1.9	0.90	5.0	9.8	29.5	1100	
500	1RN1452-3HA8	592	38	93.2	93.5	0.80	0.78	8065	1.9	0.90	5.0	9.8	32.8	1100	
560	1RN1454-3HA8	593	44	93.6	93.6	0.80	0.74	9016	2.2	1.05	5.0	9.8	35.1	1300	
610	1RN1456-3HA8	593	46	93.8	93.8	0.80	0.74	9820	2.3	1.05	5.1	9.8	37.5	1500	
710	1RN1500-3HA8	593	54	94.3	94.6	0.82	0.81	11436	1.7	0.65	4.0	13.5	53.2	3800	
800	1RN1502-3HA8	594	60	94.6	94.7	0.82	0.80	12873	1.8	0.75	4.3	13.5	59.2	4500	
900	1RN1504-3HA8	594	66	94.9	94.8	0.82	0.76	14460	2.1	0.90	4.9	13.5	64.2	5500	
1000	1RN1506-3HA8	594	74	95.0	94.9	0.82	0.76	16067	2.1	0.90	5.0	13.5	72.2	5500	
1120	1RN1560-3HJ8	594	82	95.5	95.7	0.82	0.77	17998	2.1	0.60	4.3	18.5	116.2	5800	
1250	1RN1560-3HK8	593	92	95.4	95.7	0.82	0.79	20121	1.9	0.50	3.9	18.5	116.2	4300	
1400	1RN1562-3HJ8	594	104	95.5	95.7	0.82	0.77	22505	2.0	0.50	4.2	18.5	130.2	4300	
1600	1RN1564-3HJ8	594	118	95.6	95.9	0.82	0.79	25746	2.0	0.50	4.2	18.5	143.2	5900	
1800	1RN1566-3HJ8	594	132	95.8	96.0	0.82	0.77	28939	2.1	0.55	4.3	18.5	156.2	6300	
2000	1RN1630-3HJ8	594	146	95.9	96.0	0.83	0.79	32144	2.0	0.55	4.2	21.6	222.3	7600	
2240	1RN1632-3HJ8	595	162	96.0	96.1	0.83	0.78	35971	2.0	0.60	4.5	21.6	243.3	8600	
2500	1RN1634-3HJ8	595	180	96.1	96.3	0.83	0.79	40160	2.0	0.60	4.5	21.6	267.2	9900	
2800	1RN1636-3HJ8	594	200	96.2	96.4	0.84	0.81	45009	2.0	0.60	4.5	21.6	296.9	10600	

Type of construction

■ See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
10 kV, 50 Hz															
12-pole															
560	1RN1500-5HA8	494	44	94.1	94.0	0.77	0.72	10828	1.8	0.65	3.8	13.5	53.2	5700	
630	1RN1502-5HA8	494	50	94.2	94.2	0.77	0.73	12189	1.8	0.65	3.8	13.5	59.2	6000	
710	1RN1504-5HA8	494	56	94.4	94.3	0.77	0.72	13734	1.8	0.65	3.9	13.5	66.2	7000	
800	1RN1506-5HA8	494	64	94.6	94.4	0.77	0.70	15466	2.0	0.70	4.1	13.5	73.2	8000	
900	1RN1560-5HJ8	494	72	95.0	94.9	0.76	0.69	17388	2.0	0.60	3.9	18.5	135.2	17600	
1000	1RN1560-5HK8	494	80	95.0	95.0	0.76	0.69	19324	1.9	0.60	3.8	18.5	135.2	12600	
1120	1RN1562-5HJ8	494	90	95.1	95.1	0.76	0.69	21643	1.9	0.60	3.8	18.5	152.2	14700	
1250	1RN1564-5HJ8	494	98	95.2	95.2	0.77	0.71	24170	1.9	0.60	3.8	18.5	167.2	17000	
1400	1RN1566-5HJ8	494	108	95.3	95.3	0.78	0.72	27076	1.9	0.60	3.8	18.5	183.2	17700	
1600	1RN1630-5HJ8	495	120	95.3	95.4	0.81	0.77	30875	1.8	0.60	4.1	21.6	248.8	8400	
1800	1RN1632-5HJ8	495	134	95.5	95.6	0.81	0.77	34741	1.8	0.60	4.1	21.6	272.5	11000	
2000	1RN1634-5HJ8	495	150	95.5	95.7	0.81	0.79	38625	1.8	0.60	4.1	21.6	299.2	12000	
2240	1RN1636-5HJ8	495	166	95.8	95.8	0.81	0.75	43181	2.1	0.75	4.5	21.6	333.7	13600	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor						External, max. kgm ²	
10 kV, 50 Hz															
14-pole															
400	1RN1502-7HA8	423	34	93.6	93.3	0.72	0.65	9022	1.9	0.65	3.7	13.5	60.2	8300	
450	1RN1502-7HB8	423	38	93.6	93.3	0.72	0.64	10155	1.9	0.65	3.7	13.5	60.2	8300	
500	1RN1504-7HA8	424	42	94.0	93.8	0.72	0.62	11275	2.0	0.75	3.8	13.5	66.2	11300	
560	1RN1506-7HA8	423	48	94.0	93.8	0.73	0.63	12634	2.0	0.75	3.8	13.5	74.2	11300	
630	1RN1560-7HJ8	424	50	94.3	94.2	0.76	0.67	14203	2.2	0.50	4.0	18.5	145.2	7800	
710	1RN1560-7HK8	423	58	94.4	94.4	0.76	0.67	16022	2.1	0.50	3.8	18.5	145.2	7100	
800	1RN1562-7HJ8	423	64	94.6	94.7	0.77	0.68	18053	2.1	0.55	3.9	18.5	164.2	8700	
900	1RN1564-7HJ8	423	70	94.7	94.8	0.78	0.70	20319	2.1	0.55	3.9	18.5	180.2	9700	
1000	1RN1566-7HJ8	423	78	94.8	94.9	0.78	0.70	22582	2.1	0.55	3.9	18.5	197.2	10000	
1120	1RN1630-7HJ8	425	88	94.7	94.8	0.78	0.71	25197	1.9	0.50	3.7	21.6	281.1	8500	
1250	1RN1632-7HJ8	425	98	95.1	95.2	0.78	0.72	28121	1.9	0.50	3.7	21.6	308.8	10800	
1400	1RN1634-7HJ8	425	108	95.1	95.1	0.78	0.70	31488	1.9	0.60	4.0	21.6	339.3	10800	
1600	1RN1636-7HJ8	424	122	95.1	95.3	0.79	0.73	36012	1.9	0.60	4.0	21.6	377.8	10800	

Type of construction

See page 1/10

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Selection and ordering data (continued)

Rated power P_{rated} 130 (B) ¹⁾ kW	High voltage motor A-compact PLUS Article number	Speed rpm	Rated current		Efficiency		Power factor		Torque T_{rated} Nm	Break-down torque $T_{\text{B}}/T_{\text{rated}}$ [-]	Locked-rotor torque $T_{\text{LR}}/T_{\text{rated}}$ [-]	Locked-rotor current $I_{\text{LR}}/I_{\text{rated}}$ [-]	Cooling water flow rate m ³ /h	Moment of inertia	
			I_{rated} at 10 kV A	4/4 load %	3/4 load %	4/4 load cos φ	3/4 load cos φ	Motor kgm ²						External, max. kgm ²	
10 kV, 50 Hz															
16-pole															
355	1RN1500-9HA8	370	32	92.9	92.6	0.69	0.58	9155	1.9	0.60	3.3	13.5	53.2	5600	
400	1RN1502-9HA8	370	36	93.1	92.8	0.69	0.59	10319	1.9	0.60	3.4	13.5	60.2	6400	
450	1RN1504-9HA8	370	40	93.2	93.0	0.70	0.60	11612	1.9	0.60	3.4	13.5	66.2	6500	
500	1RN1506-9HA8	370	44	93.5	93.4	0.71	0.61	12902	1.9	0.60	3.4	13.5	74.2	8500	
560	1RN1560-9HJ8	370	50	94.0	93.8	0.70	0.59	14450	2.1	0.50	3.4	18.5	146.2	24800	
630	1RN1560-9HK8	370	56	94.0	93.8	0.70	0.59	16274	1.9	0.50	3.3	18.5	146.2	17400	
710	1RN1562-9HJ8	370	62	94.2	94.0	0.71	0.60	18341	1.9	0.55	3.4	18.5	164.2	19200	
800	1RN1564-9HJ8	369	68	94.3	94.2	0.72	0.62	20682	1.9	0.55	3.4	18.5	181.2	19200	
900	1RN1566-9HJ8	369	76	94.3	94.3	0.73	0.63	23280	1.9	0.55	3.4	18.5	198.2	19200	
1000	1RN1630-9HJ8	371	86	94.2	94.0	0.72	0.63	25727	1.8	0.50	3.3	21.6	282.2	14200	
1120	1RN1632-9HJ8	371	96	94.4	94.3	0.72	0.63	28815	1.8	0.50	3.3	21.6	308.8	16300	
1250	1RN1634-9HJ8	371	104	94.4	94.4	0.73	0.64	32168	1.8	0.50	3.3	21.6	339.3	16300	
1400	1RN1636-9HJ8	371	118	94.5	94.4	0.73	0.62	36009	2.0	0.60	3.6	21.6	378.8	16300	

Type of construction

See page 1/10

Pole number

9 16-pole: additional order code **H1A** required

Note:

Efficiencies according to IEC 60034-2-1.

¹⁾ Thermal class 155 (F), utilized to 130 (B).

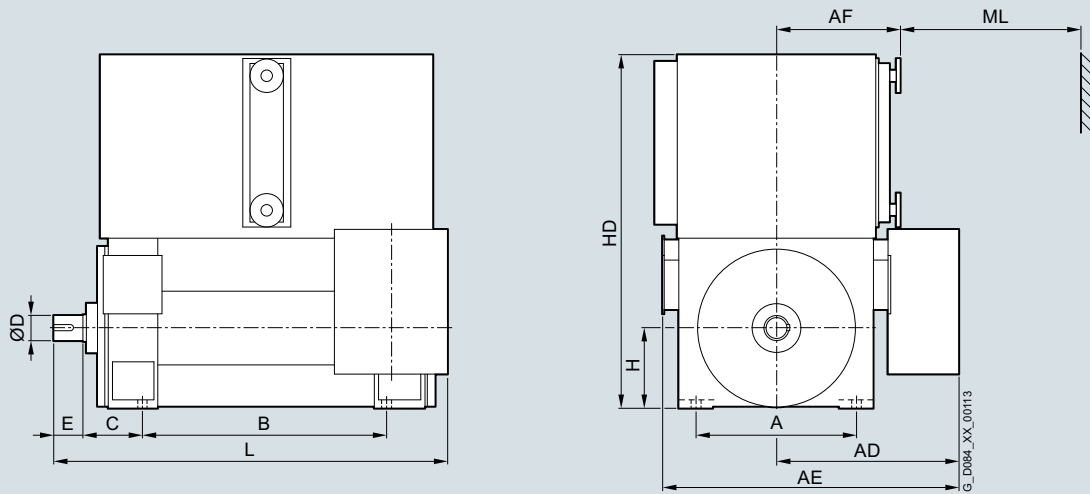
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings														
2-pole														
1RN1350-2....	2350	400	710	765	1275	1180	224	85	130	355	627	1610	1890	1130
1RN1352-2....	2450	415	710	765	1275	1180	224	85	130	355	627	1610	1890	1130
1RN1354-2....	2550	433	710	765	1275	1180	224	85	130	355	627	1610	1890	1130
1RN1356-2....	2600	447	710	765	1275	1180	224	85	130	355	627	1610	1890	1130
1RN1400-2....	3100	528	800	815	1370	1250	250	85	130	400	677	1840	2060	1240
1RN1402-2....	3200	547	800	815	1370	1250	250	85	130	400	677	1840	2060	1240
1RN1404-2....	3350	579	800	815	1370	1250	250	85	130	400	677	1840	2060	1240
1RN1406-2....	3500	608	800	815	1370	1250	250	85	130	400	677	1840	2060	1240
1RN1450-2.... ¹⁾	4250	688	950	870	1480	1400	250	95	130	450	730	2070	2035	1340
1RN1452-2.... ¹⁾	4350	718	950	870	1480	1400	250	95	130	450	730	2070	2035	1340
1RN1454-2.... ¹⁾	4550	758	950	870	1480	1400	250	95	130	450	730	2070	2035	1340
1RN1456-2.... ¹⁾	4800	808	950	870	1480	1400	250	95	130	450	730	2070	2035	1340

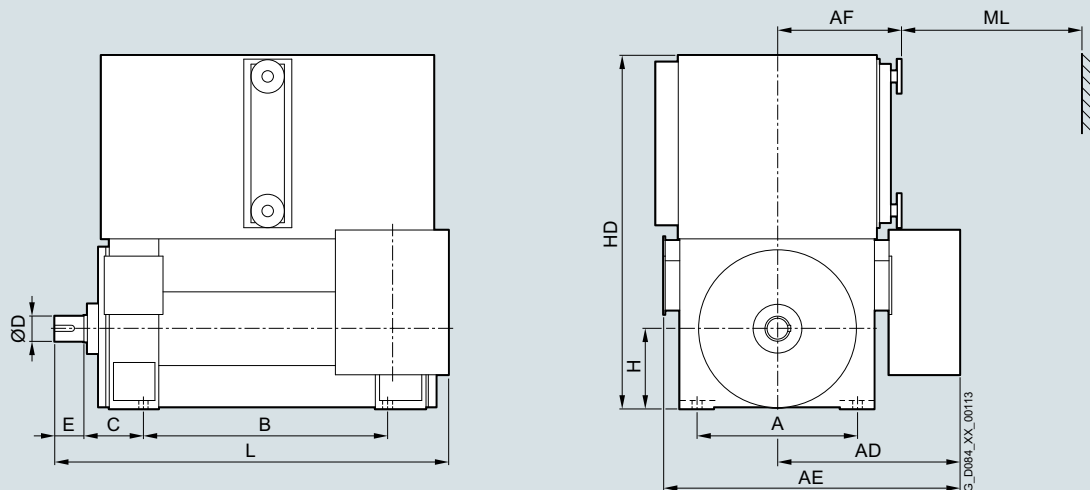
¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



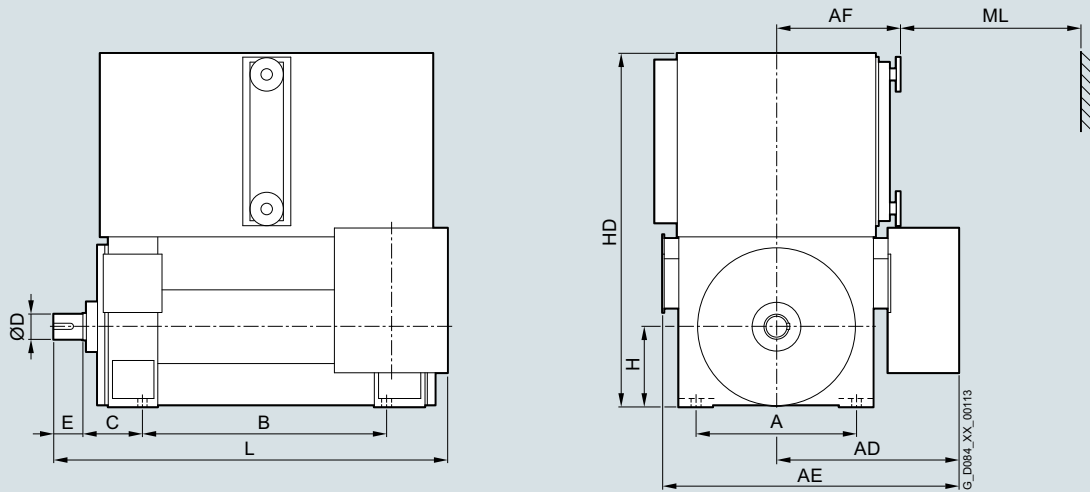
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings														
4-pole														
1RN1350-4....	2450	422	710	765	1275	1180	224	95	130	355	627	1610	1890	1130
1RN1352-4....	2550	455	710	765	1275	1180	224	95	130	355	627	1610	1890	1130
1RN1354-4....	2650	488	710	765	1275	1180	224	95	130	355	627	1610	1890	1130
1RN1356-4....	2750	526	710	765	1275	1180	224	95	130	355	627	1610	1890	1130
1RN1400-4....	3250	614	800	815	1370	1250	250	110	165	400	677	1840	2060	1240
1RN1402-4....	3350	649	800	815	1370	1250	250	110	165	400	677	1840	2060	1240
1RN1404-4....	3550	709	800	815	1370	1250	250	110	165	400	677	1840	2060	1240
1RN1406-4....	3750	768	800	815	1370	1250	250	110	165	400	677	1840	2060	1240
1RN1450-4....	4450	829	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1452-4....	4700	899	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1454-4....	4900	949	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1456-4....	5200	1019	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1500-4....	5650	1190	1060	945	1615	1500	280	150	200	500	785	2230	2280	1460
1RN1502-4....	5900	1270	1060	945	1615	1500	280	150	200	500	785	2230	2280	1460
1RN1504-4....	6200	1360	1060	945	1615	1500	280	150	200	500	785	2230	2280	1460
1RN1506-4....	6650	1460	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460
1RN1560-4....	9450	2044	1250	1090	1915	1700	315	170	240	560	895	2380	2530	1730
1RN1562-4....	9750	2136	1250	1270	2090	1700	315	170	240	560	895	2380	2555	1730
1RN1564-4....	10100	2214	1250	1270	2090	1700	315	170	240	560	895	2380	2555	1730
1RN1566-4....	10250	2249	1250	1270	2090	1700	315	170	240	560	895	2380	2555	1730
1RN1630-4....	12400	2586	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930
1RN1632-4....	12950	2741	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930
1RN1634-4....	13550	2875	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930
1RN1636-4....	14150	3056	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



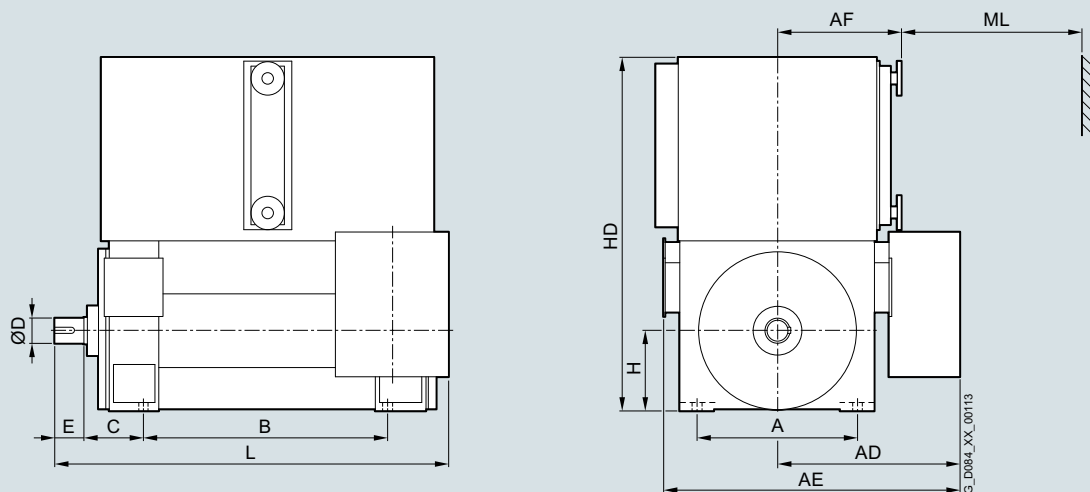
Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings															
6-pole															
1RN1350-6....	2550	535	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	
1RN1352-6....	2700	590	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	
1RN1354-6....	2800	622	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	
1RN1356-6....	2950	680	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	
1RN1400-6....	3250	614	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	
1RN1402-6....	3350	649	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	
1RN1404-6....	3550	709	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	
1RN1406-6....	3750	768	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	
1RN1450-6....	4650	1008	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	
1RN1452-6....	4850	1078	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	
1RN1454-6....	5050	1138	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	
1RN1456-6....	5250	1208	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	
1RN1500-6....	6000	1444	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	
1RN1502-6....	6350	1554	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	
1RN1504-6....	6700	1684	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	
1RN1506-6....	7100	1824	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	
1RN1560-6....	9550	2441	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730	
1RN1562-6....	9750	2525	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730	
1RN1564-6....	10200	2684	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730	
1RN1566-6....	10700	2862	1250	1270	2090	1700	315	190	280	560	895	2380	2555	1730	
1RN1630-6....	13100	3216	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	
1RN1632-6....	13550	3382	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	
1RN1634-6....	13950	3477	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	
1RN1636-6....	14550	3660	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



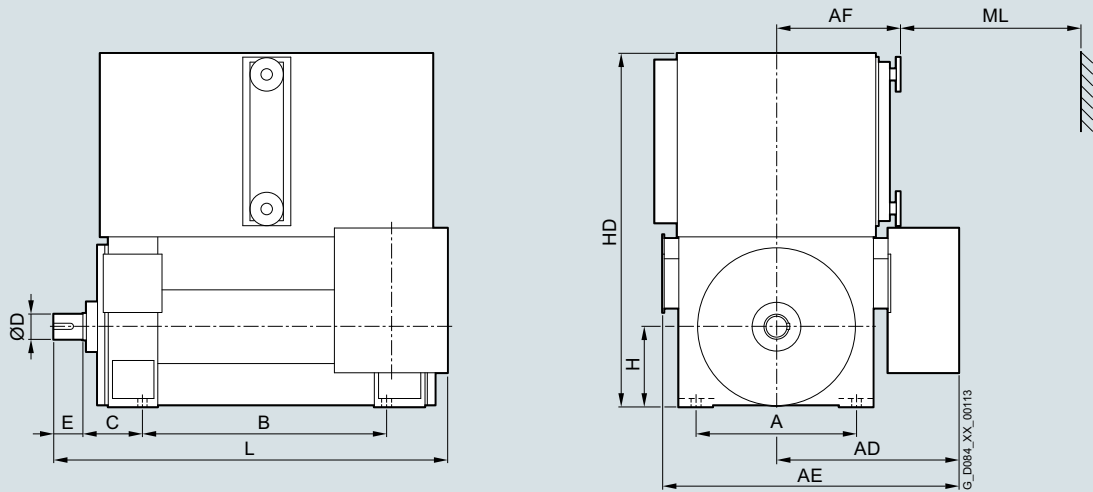
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings														
8-pole														
1RN1350-8....	2550	535	710	765	1275	1180	224	110	165	355	627	1610	1890	1130
1RN1352-8....	2700	590	710	765	1275	1180	224	110	165	355	627	1610	1890	1130
1RN1354-8....	2800	622	710	765	1275	1180	224	110	165	355	627	1610	1890	1130
1RN1356-8....	2950	680	710	765	1275	1180	224	110	165	355	627	1610	1890	1130
1RN1400-8....	3250	614	800	815	1370	1250	250	130	200	400	677	1840	2060	1240
1RN1402-8....	3350	649	800	815	1370	1250	250	130	200	400	677	1840	2060	1240
1RN1404-8....	3550	709	800	815	1370	1250	250	130	200	400	677	1840	2060	1240
1RN1406-8....	3750	768	800	815	1370	1250	250	130	200	400	677	1840	2060	1240
1RN1450-8....	4650	1008	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1452-8....	4850	1078	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1454-8....	5050	1138	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1456-8....	5250	1208	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1500-8....	6000	1444	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1502-8....	6350	1554	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1504-8....	6700	1684	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1506-8....	7100	1824	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1560-8....	9550	2441	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1562-8....	9750	2525	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1564-8....	10200	2684	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1566-8....	10700	2862	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1630-8....	13100	3216	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-8....	13550	3382	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-8....	13950	3477	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-8....	14550	3660	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



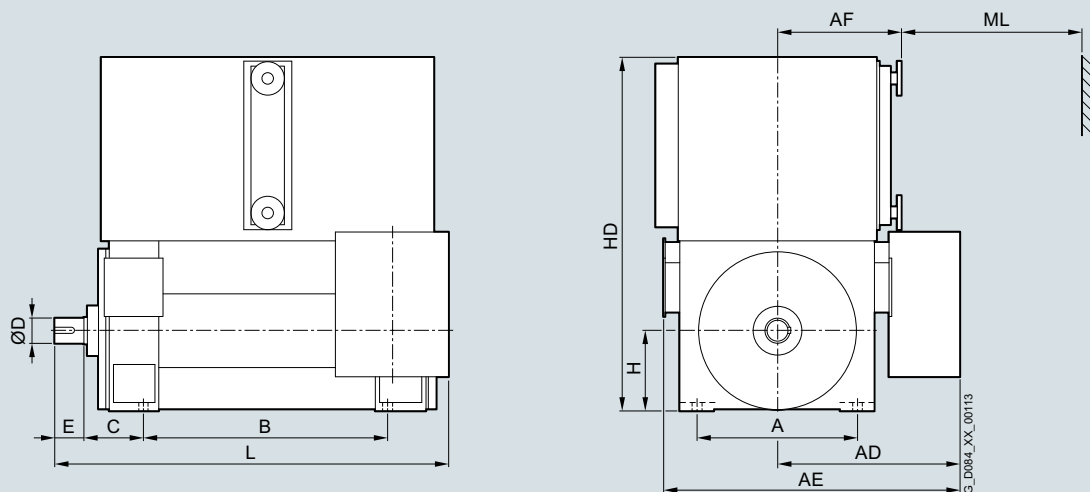
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings														
10-pole														
1RN1450-3	4700	1045	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1452-3	4900	1102	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1454-3	5050	1159	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1456-3	5250	1226	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1500-3	5950	1448	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1502-3	6250	1552	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1504-3	6600	1664	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1506-3	7000	1791	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1560-3	9100	2249	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1560-3	9100	2249	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1562-3	9650	2449	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1564-3	10100	2609	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1566-3	10600	2799	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1630-3	12250	3227	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-3	12900	3440	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-3	12500	3690	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-3	14350	3996	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



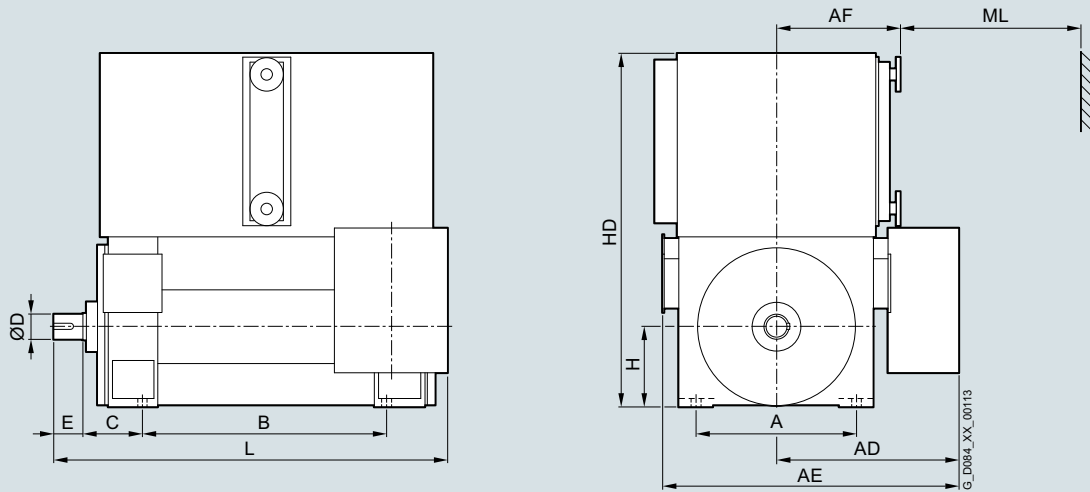
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings														
12-pole														
1RN1450-5	4650	1108	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1452-5	4850	1175	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1454-5	5050	1231	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1456-5	5250	1309	950	870	1480	1400	250	130	200	450	730	2070	2115	1340
1RN1500-5	6000	1458	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1502-5	6300	1561	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1504-5	6650	1682	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1506-5	7000	1807	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1560-5	9050	2399	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1560-5	9050	2399	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1562-5	9650	2619	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1564-5	10100	2809	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1566-5	10650	3009	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1630-5	12250	3393	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-5	12850	3629	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-5	13500	3884	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-5	14350	4224	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



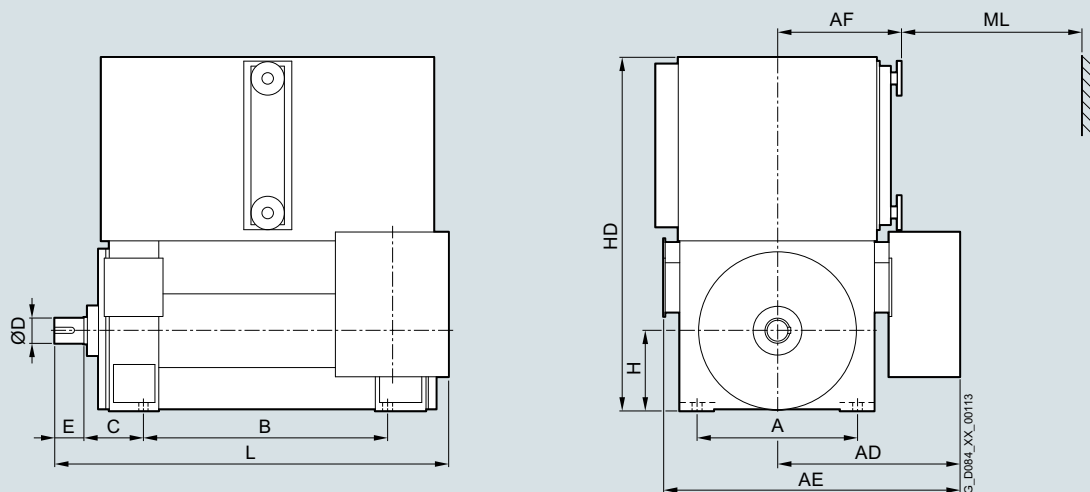
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings														
14-pole														
1RN1 500-7	5950	1461	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1 502-7	6300	1582	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1 504-7	6600	1693	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1 506-7	7000	1826	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1 560-7	9000	2469	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1 560-7	9000	2469	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1 562-7	9550	2699	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1 564-7	10000	2899	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1 566-7	10550	3119	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1 630-7	12200	3578	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1 632-7	12800	3831	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1 634-7	13400	4111	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1 636-7	14250	4477	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, anti-friction bearings														
16-pole														
1RN1500-9	5950	1466	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1502-9	6300	1578	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1504-9	6600	1689	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1506-9	6950	1823	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460
1RN1560-9	8900	2419	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1560-9	8950	2419	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730
1RN1562-9	9450	2619	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1564-9	10000	2899	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1566-9	10500	3119	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730
1RN1630-9	12150	3578	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-9	12750	3831	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-9	13350	4111	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-9	14200	4487	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930

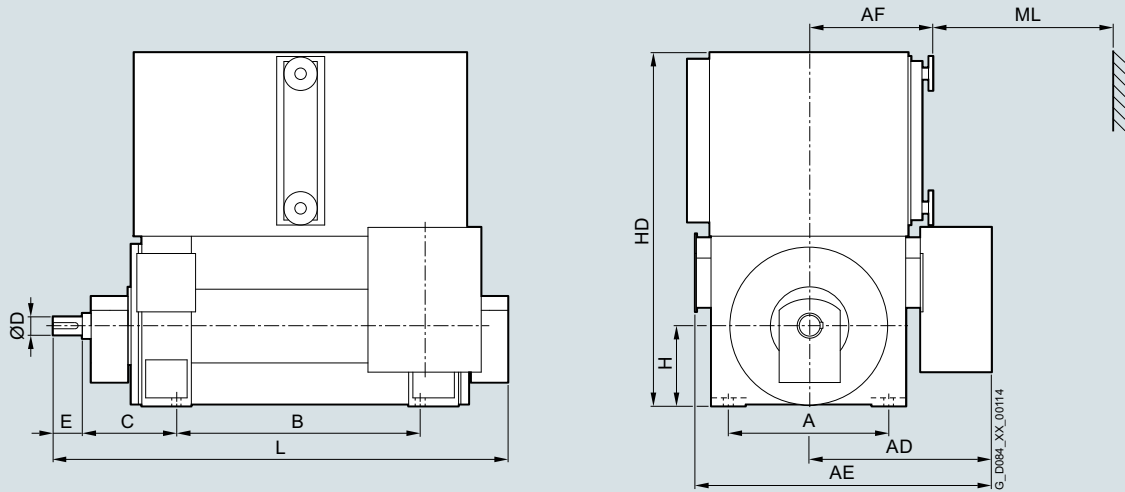
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 6.6 kV, IM B3 type of construction, sleeve bearings														
2-pole														
1RN1400-2....	3100	455	800	815	1370	1250	425	85	130	400	677	1840	2150	1240
1RN1402-2....	3200	474	800	815	1370	1250	425	85	130	400	677	1840	2150	1240
1RN1404-2....	3350	517	800	815	1370	1250	425	85	130	400	677	1840	2150	1240
1RN1406-2....	3500	547	800	815	1370	1250	425	85	130	400	677	1840	2150	1240
1RN1450-2....	4300	650	950	870	1480	1400	450	95	130	450	730	2070	2375	1340
1RN1452-2....	4450	680	950	870	1480	1400	450	95	130	450	730	2070	2375	1340
1RN1454-2....	4650	728	950	870	1480	1400	450	95	130	450	730	2070	2375	1340
1RN1456-2....	4850	778	950	870	1480	1400	450	95	130	450	730	2070	2375	1340
1RN1500-2....	5800	1145	1060	945	1615	1500	475	110	165	500	785	2230	2600	1460
1RN1502-2....	5950	1175	1060	945	1615	1500	475	110	165	500	785	2230	2600	1460
1RN1504-2....	6250	1258	1060	945	1615	1500	475	110	165	500	785	2230	2600	1460
1RN1506-2....	6600	1338	1060	1115	1785	1500	475	110	165	500	785	2230	2600	1460
1RN1560-2....	8600	1441	1250	1090	1915	1700	530	140	200	560	895	2380	2725	1730
1RN1562-2....	8950	1488	1250	1090	1915	1700	530	140	200	560	895	2380	2725	1730
1RN1564-2....	9550	1610	1250	1250	1270	1700	530	140	200	560	895	2380	2725	1730
1RN1566-2....	9900	1675	1250	1250	1270	1700	530	140	200	560	895	2380	2725	1730
1RN1630-2....	11950	1899	1400	1570	2510	1900	530	160	240	630	1020	2560	3140	1930
1RN1632-2....	12450	1989	1400	1570	2510	1900	530	160	240	630	1020	2560	3140	1930
1RN1634-2....	12900	2092	1400	1570	2510	1900	530	160	240	630	1020	2560	3140	1930
1RN1636-2....	13650	2207	1400	1570	2510	1900	530	160	240	630	1020	2560	3140	1930

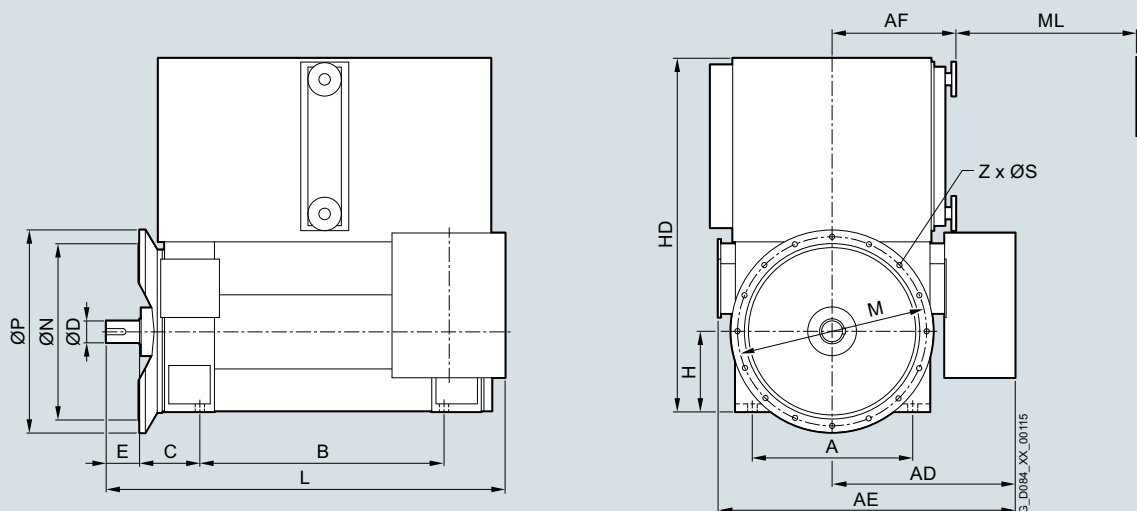
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



Motor type	Weight		Dimensions																
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

2-pole

1RN1350-2....	2450	400	710	765	1275	1180	224	85	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1352-2....	2500	415	710	765	1275	1180	224	85	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1354-2....	2600	433	710	765	1275	1180	224	85	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1356-2....	2650	447	710	765	1275	1180	224	85	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1400-2....	3200	528	800	815	1370	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1402-2....	3300	547	800	815	1370	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1404-2....	3400	579	800	815	1370	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1406-2....	3350	608	800	815	1370	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1450-2.... ¹⁾	4350	688	950	870	1480	1400	250	95	130	450	730	2070	2035	1340	1080	1000	1150	26	8
1RN1452-2.... ¹⁾	4500	718	950	870	1480	1400	250	95	130	450	730	2070	2035	1340	1080	1000	1150	26	8
1RN1454-2.... ¹⁾	4700	758	950	870	1480	1400	250	95	130	450	730	2070	2035	1340	1080	1000	1150	26	8
1RN1456-2.... ¹⁾	4900	808	950	870	1480	1400	250	95	130	450	730	2070	2035	1340	1080	1000	1150	26	8

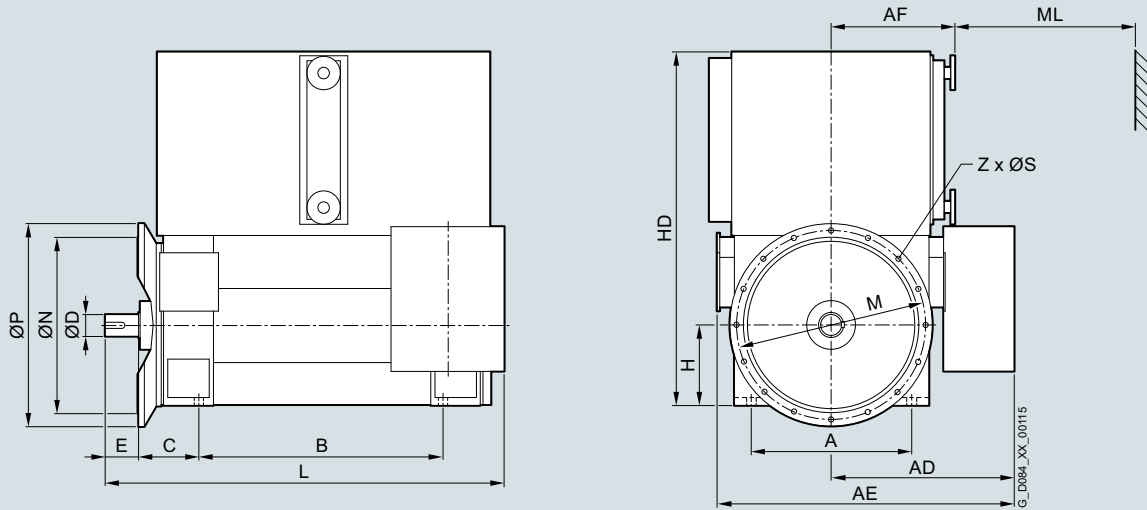
¹⁾ Not valid for 6.6 kV / 60 Hz.

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

4-pole

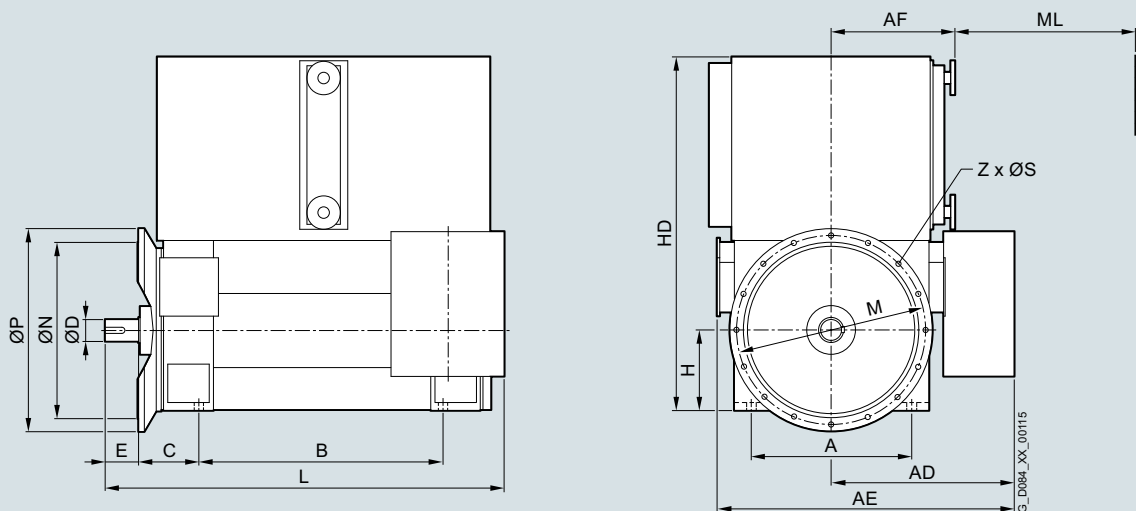
1RN1350-4....	2500	422	710	765	1275	1180	224	95	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1352-4....	2600	455	710	765	1275	1180	224	95	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1354-4....	2700	488	710	765	1275	1180	224	95	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1356-4....	2850	526	710	765	1275	1180	224	95	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1400-4....	3350	614	800	815	1370	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	22	8
1RN1402-4....	3450	649	800	815	1370	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	22	8
1RN1404-4....	3650	709	800	815	1370	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	22	8
1RN1406-4....	3800	768	800	815	1370	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	22	8
1RN1450-4....	4600	829	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1452-4....	4850	899	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1454-4....	5050	949	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1456-4....	5300	1019	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1500-4....	5800	1190	1060	945	1615	1500	280	150	200	500	785	2230	2280	1460	1180	1120	1250	26	16
1RN1502-4....	6000	1270	1060	945	1615	1500	280	150	200	500	785	2230	2280	1460	1180	1120	1250	26	16
1RN1504-4....	6300	1360	1060	945	1615	1500	280	150	200	500	785	2230	2280	1460	1180	1120	1250	26	16
1RN1506-4....	6750	1460	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460	1180	1120	1250	26	16
1RN1560-4....	9550	2044	1250	1090	1915	1700	315	170	240	560	895	2380	2530	1730	1320	1250	1400	26	16
1RN1562-4....	9900	2136	1250	1270	2090	1700	315	170	240	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1564-4....	10200	2214	1250	1270	2090	1700	315	170	240	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1566-4....	10350	2249	1250	1270	2090	1700	315	170	240	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1630-4....	12650	2586	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-4....	13200	2741	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-4....	13800	2875	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-4....	14350	3056	1400	1570	2510	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

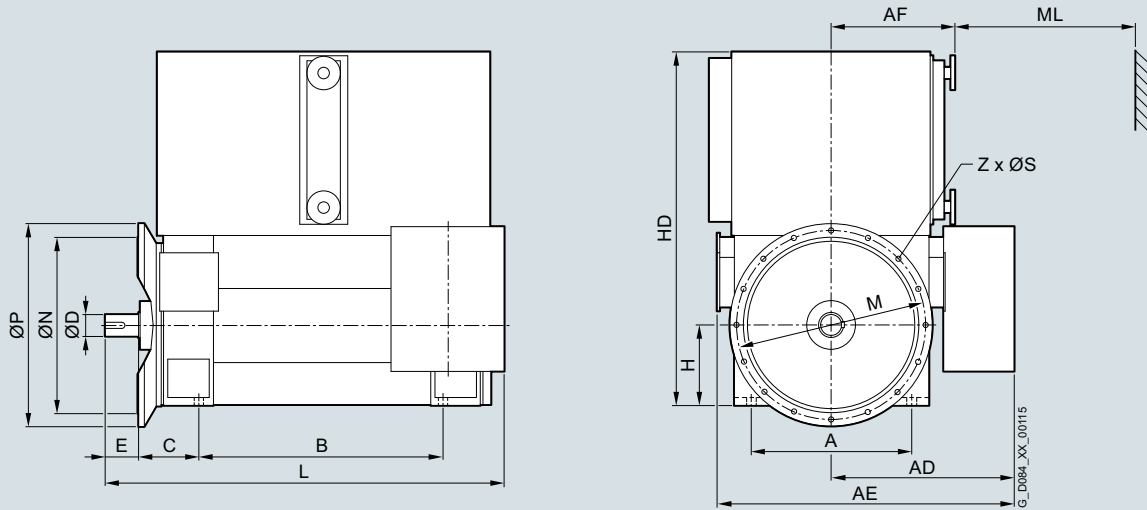
6-pole

1RN1350-6....	2650	535	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1352-6....	2750	590	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1354-6....	2850	622	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1356-6....	3000	680	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1400-6....	3500	759	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1402-6....	3700	811	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1404-6....	3850	875	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1406-6....	4100	943	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1450-6....	4800	1008	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1452-6....	5000	1078	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1454-6....	5150	1138	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1456-6....	5400	1208	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1500-6....	6100	1444	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1502-6....	6450	1554	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1504-6....	6800	1684	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1506-6....	7250	1824	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1560-6....	9700	2441	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730	1320	1250	1400	26	16
1RN1562-6....	9900	2525	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1564-6....	10400	2684	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1566-6....	10900	2862	1250	1270	2090	1700	315	190	280	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1630-6....	13300	3216	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-6....	13800	3382	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-6....	14200	3477	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-6....	14750	3660	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters
Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 6.6 kV, IM B35 type of construction, anti-friction bearings

8-pole																			
1RN1350-8....	2650	535	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1352-8....	2750	590	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1354-8....	2850	622	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1356-8....	3000	680	710	765	1275	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1400-8....	3500	759	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1402-8....	3700	811	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1404-8....	3850	875	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1406-8....	4100	943	800	815	1370	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1450-8....	4800	1008	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1452-8....	5000	1078	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1454-8....	5150	1138	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1456-8....	5400	1208	950	870	1480	1400	250	130	200	450	730	2070	2115	1340	1080	1000	1150	26	8
1RN1500-8....	6100	1444	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1502-8....	6450	1554	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1504-8....	6800	1684	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1506-8....	7250	1824	1060	945	1615	1500	280	160	240	500	785	2230	2320	1460	1180	1120	1250	26	16
1RN1560-8....	9700	2441	1250	1090	1915	1700	315	190	280	560	895	2380	2530	1730	1320	1250	1400	26	16
1RN1562-8....	9900	2525	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1564-8....	10400	2684	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1566-8....	10900	2862	1250	1090	1915	1700	315	190	280	560	895	2380	2555	1730	1320	1250	1400	26	16
1RN1630-8....	13300	3216	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-8....	13800	3382	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-8....	14200	3477	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-8....	14750	3660	1400	1570	2510	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

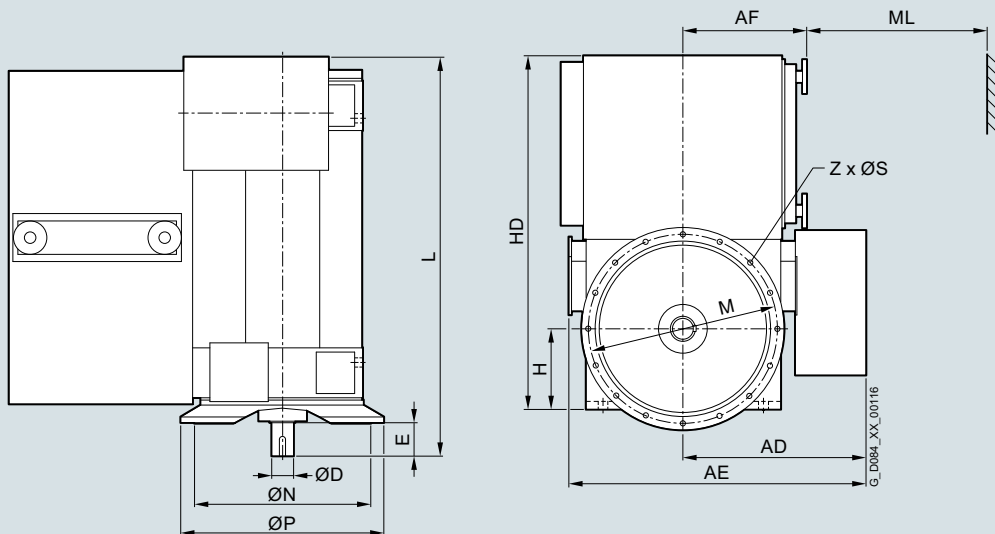
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



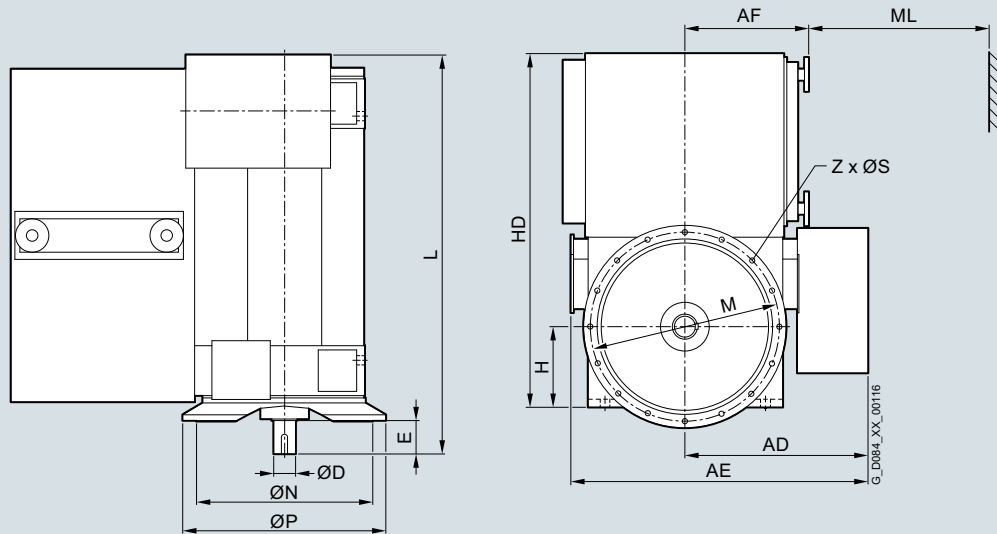
Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 6.6 kV, IM V1 type of construction, anti-friction bearings																
4-pole																
1RN1350-4....	2500	422	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1352-4....	2600	455	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1354-4....	2700	488	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1356-4....	2800	526	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1400-4....	3350	614	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1402-4....	3450	649	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1404-4....	3650	709	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1406-4....	3800	768	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1450-4....	4650	823	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-4....	4900	893	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-4....	5100	943	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-4....	5350	1013	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-4....	1181	5850	935	1605	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-4....	1261	6050	935	1605	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-4....	1351	6350	935	1605	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-4....	1451	6750	935	1605	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-4....	9600	2021	1090	1915	170	240	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1562-4....	9950	2113	1270	2090	170	240	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1564-4....	10300	2191	1270	2090	170	240	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1566-4....	10450	2226	1270	2090	170	240	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1630-4....	12900	2586	1570	2510	200	280	630	2480	2560	2820	1930	1320	1250	1400	26	16
1RN1632-4....	13450	2741	1570	2510	200	280	630	2480	2560	2820	1930	1320	1250	1400	26	16
1RN1634-4....	14050	2875	1570	2510	200	280	630	2480	2560	2820	1930	1320	1250	1400	26	16
1RN1636-4....	14650	3056	1570	2510	200	280	630	2480	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

6-pole

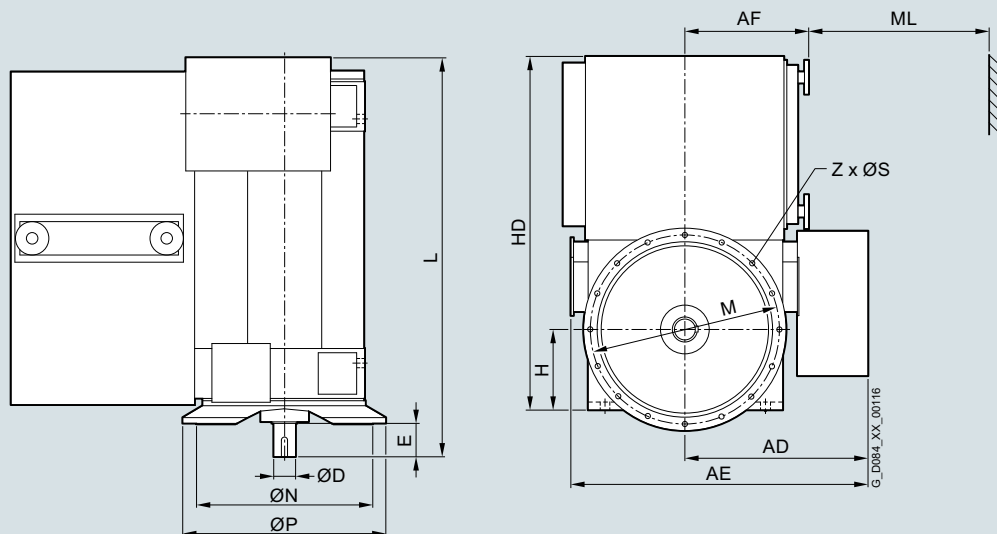
1RN1350-6....	2600	535	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1352-6....	2750	590	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1354-6....	2850	622	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1356-6....	3000	680	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1400-6....	3450	759	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1402-6....	3650	811	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1404-6....	3800	875	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1406-6....	4050	943	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1450-6....	4850	1003	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-6....	5050	1073	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-6....	5250	1133	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-6....	5450	1203	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-6....	6150	1437	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-6....	6500	1547	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-6....	6900	1677	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-6....	7300	1817	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-6....	9750	2418	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1562-6....	9950	2502	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1564-6....	10400	2661	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1566-6....	11000	2839	1270	2090	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1630-6....	13600	3216	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-6....	14100	3382	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-6....	14450	3477	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-6....	15050	3660	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

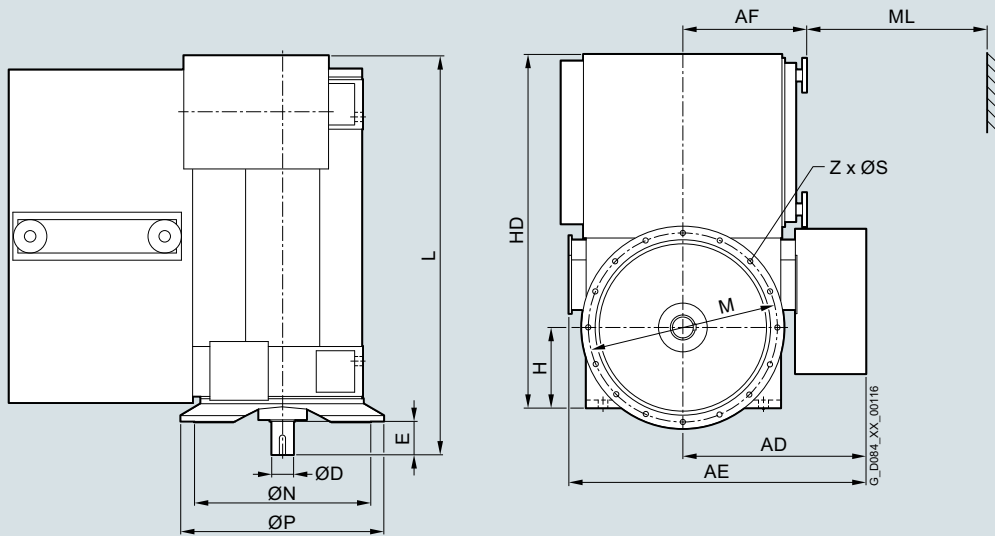
8-pole																
1RN1350-8....	2600	535	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1352-8....	2750	590	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1354-8....	2850	622	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1356-8....	3000	680	765	1275	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1400-8....	3450	759	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1402-8....	3650	811	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1404-8....	3800	875	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1406-8....	4050	943	815	1370	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1450-8....	4850	1003	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-8....	5050	1073	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-8....	5250	1133	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-8....	5450	1203	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-8....	6150	1437	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-8....	6500	1547	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-8....	6900	1677	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-8....	7300	1817	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-8....	9750	2418	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1562-8....	9950	2502	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1564-8....	10400	2661	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1566-8....	11000	2839	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1630-8....	13600	3216	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-8....	14100	3382	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-8....	14450	3477	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-8....	15050	3660	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

10-pole

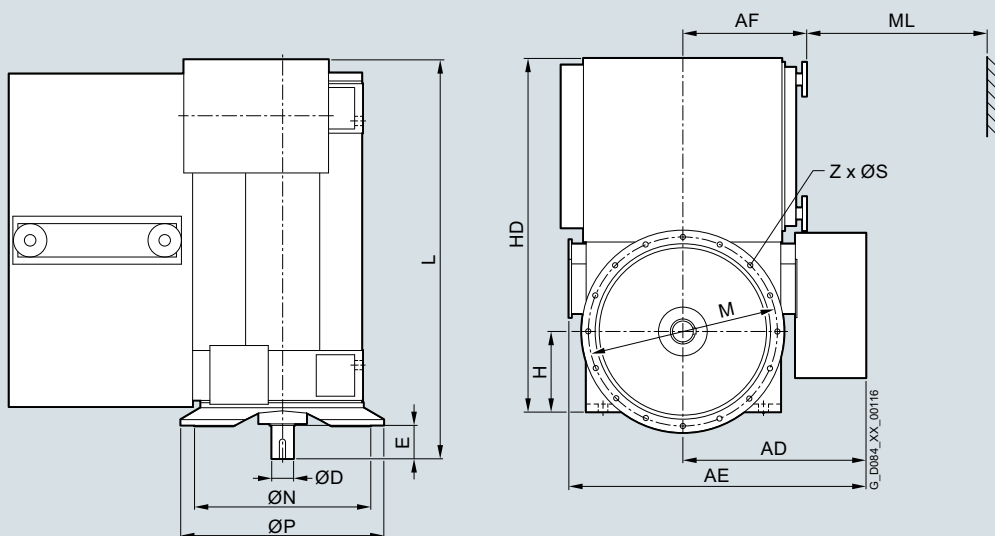
1RN1450-3	4900	1045	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-3	5050	1102	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-3	5200	1159	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-3	5450	1226	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-3	6150	1448	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-3	6450	1552	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-3	6800	1664	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-3	7200	1791	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-3	9250	2149	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1560-3	9250	2149	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1562-3	9750	2340	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1564-3	10200	2493	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1566-3	10700	2674	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1630-3	12800	3227	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-3	13400	3440	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-3	13000	3690	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-3	14900	3996	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

12-pole

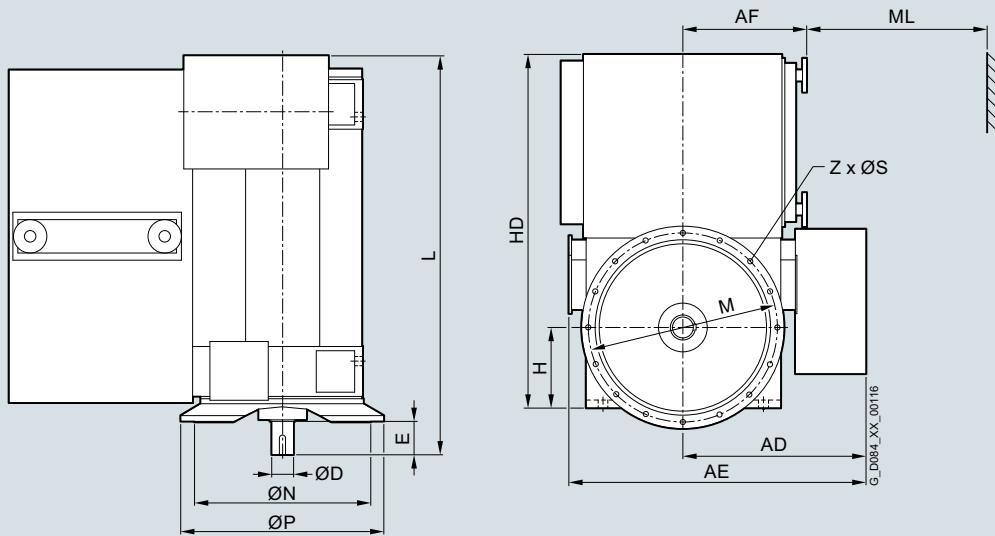
1RN1450-5	4850	1108	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-5	5050	1175	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-5	5250	1231	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-5	5450	1309	860	1455	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-5	6150	1458	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-5	6500	1561	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-5	6800	1682	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-5	7200	1807	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-5	9200	2294	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1560-5	9200	2294	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1562-5	9800	2503	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1564-5	10200	2685	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1566-5	10700	2874	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1630-5	12800	3393	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-5	13400	3629	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-5	14050	3884	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-5	14850	4224	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

14-pole

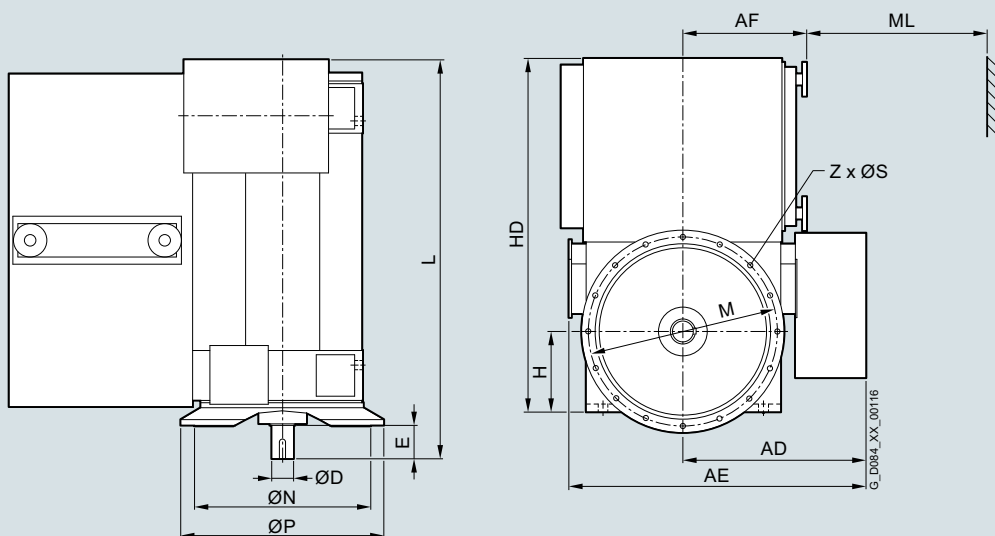
1RN1500-7	6150	1461	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-7	6500	1582	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-7	6750	1693	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-7	7200	1826	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-7	9200	2469	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1560-7	9200	2469	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1562-7	9750	2699	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1564-7	10200	2899	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1566-7	10750	3119	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1630-7	12750	3578	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-7	13350	3831	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-7	13950	4111	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-7	14800	4477	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 6.6 kV, IM V1 type of construction, anti-friction bearings

16-pole

1RN1500-9	6150	1466	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-9	6450	1578	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-9	6750	1689	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-9	7150	1823	935	1605	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-9	9150	2419	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1560-9	9200	2419	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1562-9	9650	2619	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1564-9	10200	2899	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1566-9	10750	3119	1090	1915	190	280	560	895	2380	2575	1730	1320	1250	1400	26	16
1RN1630-9	12700	3578	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-9	13300	3831	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-9	13900	4111	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-9	14750	4487	1570	2510	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

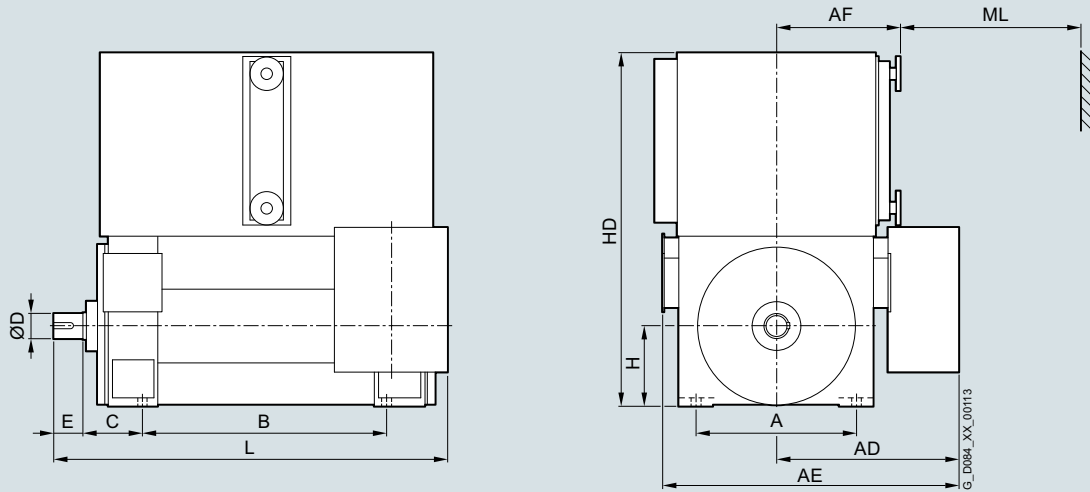
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



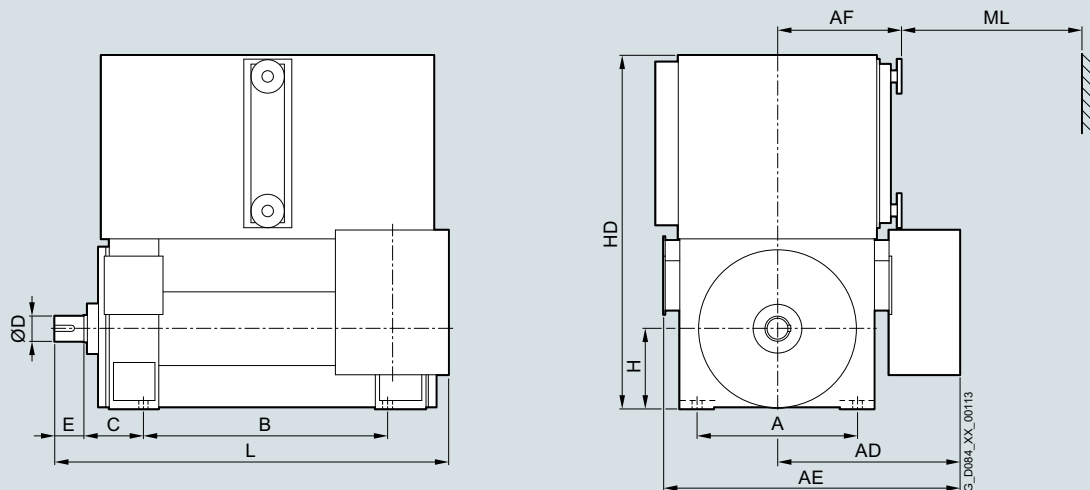
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
2-pole														
1RN1352-2....	2500	415	710	935	1445	1180	224	85	130	355	627	1610	1890	1130
1RN1354-2....	2600	433	710	935	1445	1180	224	85	130	355	627	1610	1890	1130
1RN1356-2....	2650	447	710	935	1445	1180	224	85	130	355	627	1610	1890	1130
1RN1400-2....	3200	528	800	985	1545	1250	250	85	130	400	677	1840	2060	1240
1RN1402-2....	3300	547	800	985	1545	1250	250	85	130	400	677	1840	2060	1240
1RN1404-2....	3400	579	800	985	1545	1250	250	85	130	400	677	1840	2060	1240
1RN1406-2....	3550	608	800	985	1545	1250	250	85	130	400	677	1840	2060	1240
1RN1450-2....	4300	688	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340
1RN1452-2....	4400	718	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340
1RN1454-2....	4600	758	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340
1RN1456-2....	4800	808	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



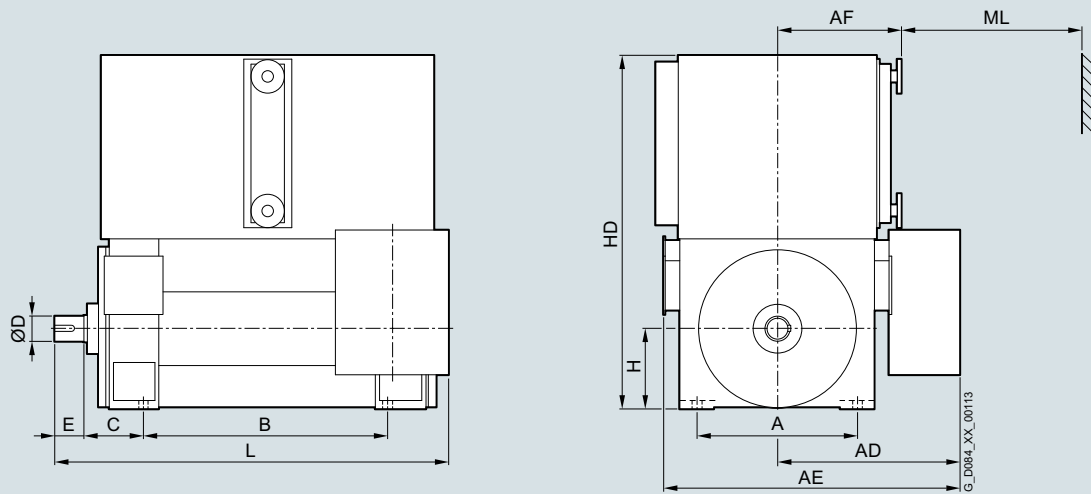
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
4-pole														
1RN1354-4....	2650	455	710	935	1445	1180	224	95	130	355	627	1610	1890	1130
1RN1356-4....	2700	488	710	935	1445	1180	224	95	130	355	627	1610	1890	1130
1RN1358-4....	2850	526	710	935	1445	1180	224	95	130	355	627	1610	1890	1130
1RN1400-4....	3300	614	800	985	1545	1250	250	110	165	400	677	1840	2060	1240
1RN1402-4....	3400	649	800	985	1545	1250	250	110	165	400	677	1840	2060	1240
1RN1404-4....	3600	709	800	985	1545	1250	250	110	165	400	677	1840	2060	1240
1RN1406-4....	3800	768	800	985	1545	1250	250	110	165	400	677	1840	2060	1240
1RN1450-4....	4500	829	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1452-4....	4700	899	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1454-4....	4950	949	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1456-4....	5200	1019	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1500-4....	5700	1190	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460
1RN1502-4....	6000	1270	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460
1RN1504-4....	6200	1360	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460
1RN1506-4....	6550	1460	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460
1RN1560-4....	9400	2044	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730
1RN1562-4....	9750	2136	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730
1RN1564-4....	10050	2214	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730
1RN1566-4....	10200	2249	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730
1RN1630-4....	12150	2586	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930
1RN1632-4....	12700	2741	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930
1RN1634-4....	13200	2875	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930
1RN1636-4....	13950	3056	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



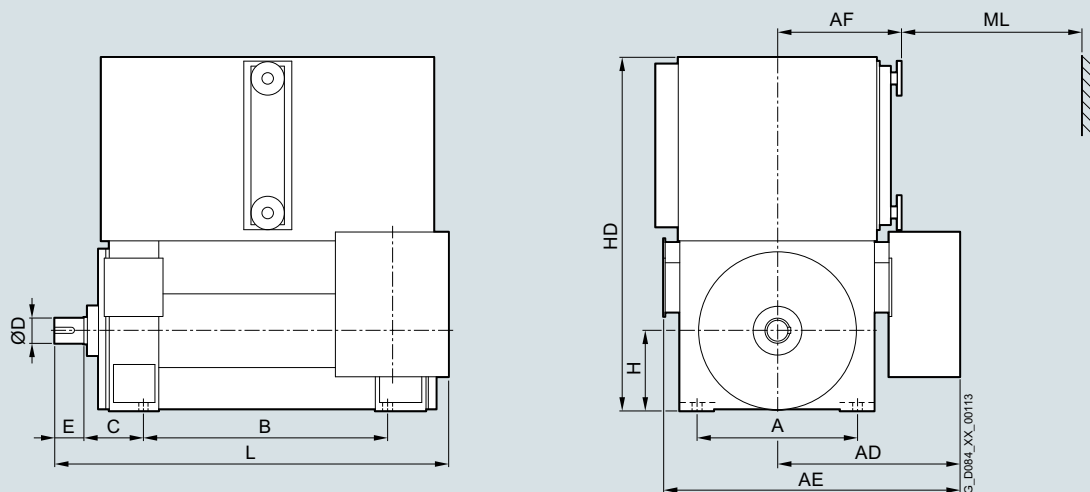
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
6-pole														
1RN1352-6....	2850	551	710	935	1445	1180	224	110	165	355	627	1610	1890	1130
1RN1354-6....	2850	565	710	935	1445	1180	224	110	165	355	627	1610	1890	1130
1RN1356-6....	3000	598	710	935	1445	1180	224	110	165	355	627	1610	1890	1130
1RN1400-6....	3500	696	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1402-6....	3600	738	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1404-6....	3850	806	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1406-6....	4000	863	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1450-6....	4700	1008	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1452-6....	4900	1078	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1454-6....	5100	1138	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1456-6....	5300	1208	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1500-6....	6050	1444	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1502-6....	6350	1554	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1504-6....	6700	1684	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1506-6....	7100	1824	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1560-6....	9450	2441	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1562-6....	9650	2525	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1564-6....	10100	2684	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1566-6....	10650	2862	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1630-6....	12850	3216	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-6....	13400	3382	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-6....	13650	3477	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-6....	14250	3660	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



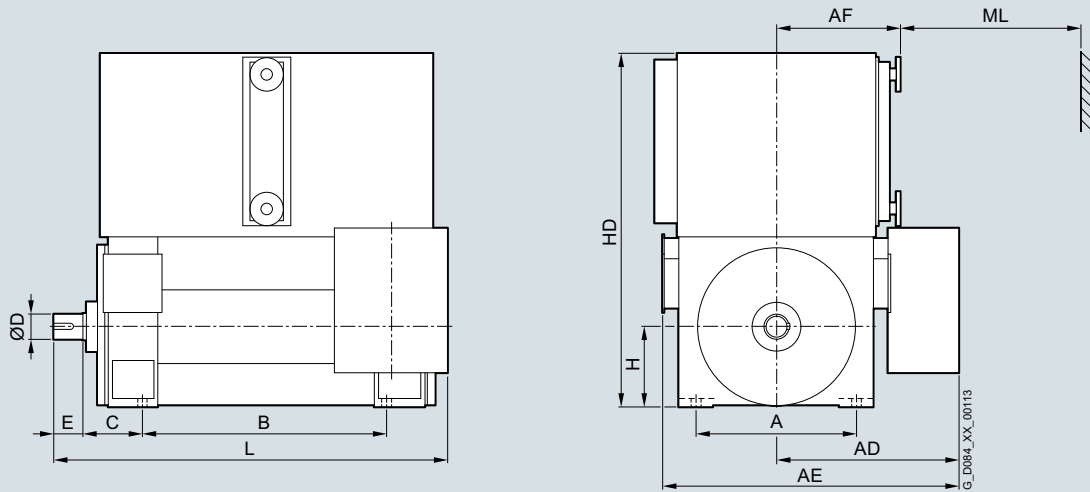
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
8-pole														
1RN1400-8....	3500	696	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1402-8....	3600	738	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1404-8....	3850	806	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1406-8....	4000	863	800	985	1545	1250	250	130	200	400	677	1840	2060	1240
1RN1450-8....	4700	1008	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1452-8....	4900	1078	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1454-8....	5100	1138	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1456-8....	5300	1208	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1500-8....	6050	1444	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1502-8....	6350	1554	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1504-8....	6700	1684	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1506-8....	7100	1824	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1560-8....	9450	2441	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1562-8....	9650	2525	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1564-8....	10100	2684	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1566-8....	10650	2862	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1630-8....	12850	3216	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-8....	13400	3382	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-8....	13650	3477	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-8....	14250	3660	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



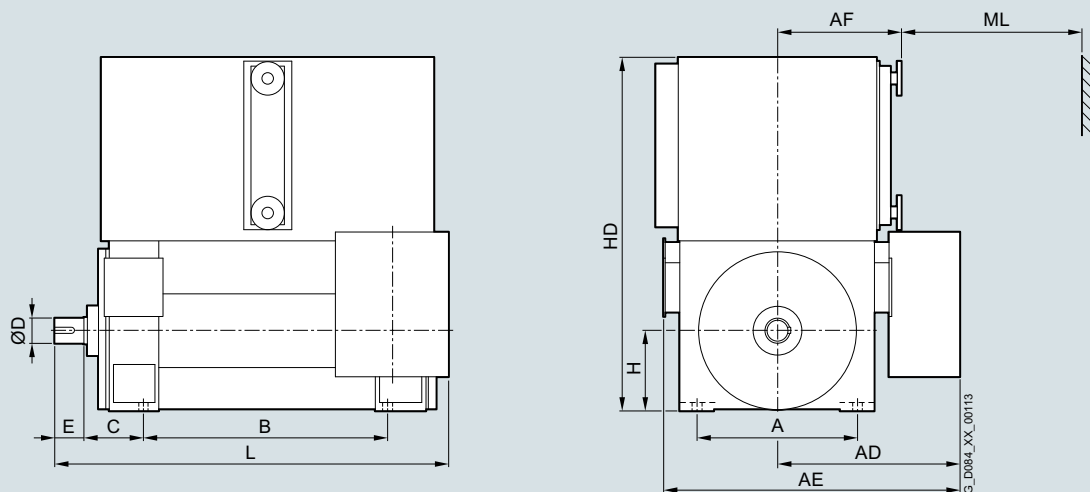
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
10-pole														
1RN1450-3	4600	1045	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1452-3	4750	1102	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1454-3	4950	1159	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1456-3	5150	1226	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340
1RN1500-3	5900	1448	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1502-3	6200	1552	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1504-3	6550	1664	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1506-3	6950	1791	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1560-3	9000	2249	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1560-3	9000	2249	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1562-3	9500	2449	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1564-3	9950	2609	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1566-3	10500	2799	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1630-3	12150	3227	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-3	12700	3440	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-3	13350	3690	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-3	14200	3996	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



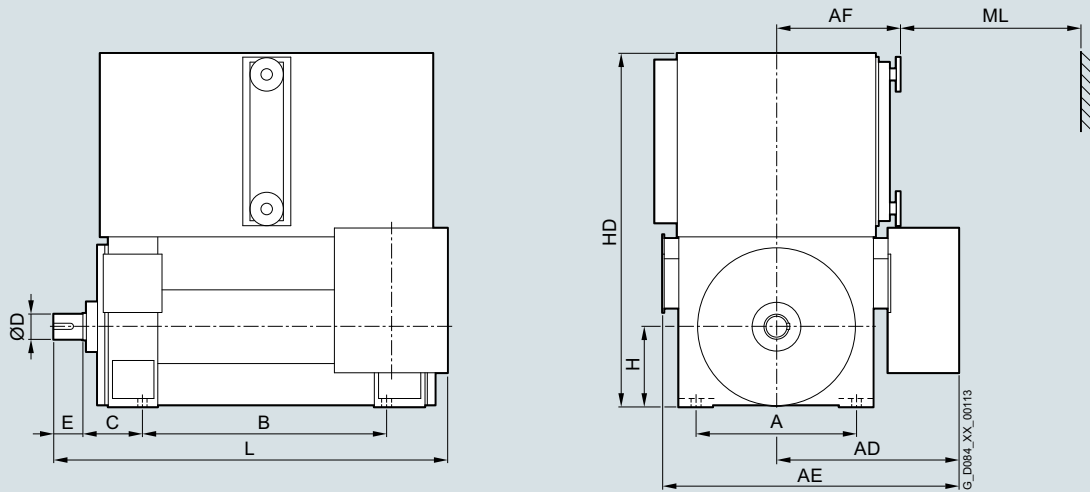
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
12-pole														
1RN1500-5	5900	1458	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1502-5	6200	1561	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1504-5	6550	1682	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1506-5	6950	1807	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1560-5	9000	2399	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1560-5	9000	2399	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1562-5	9550	2619	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1564-5	10000	2809	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1566-5	10550	3009	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1630-5	12150	3393	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-5	12750	3629	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-5	13350	3884	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-5	14150	4224	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



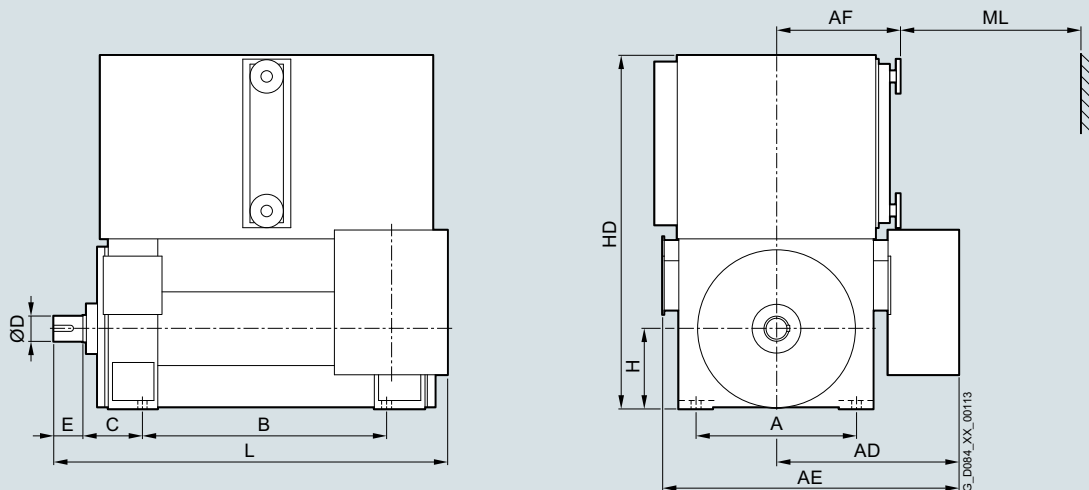
Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
14-pole														
1RN1500-7	6200	1582	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1502-7	6200	1582	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1504-7	6550	1693	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1506-7	6950	1826	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1560-7	8900	2469	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1560-7	8950	2469	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1562-7	9500	2699	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1564-7	9950	2899	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1566-7	10450	3119	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1630-7	12050	3578	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-7	12650	3831	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-7	13300	4111	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-7	14050	4477	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, anti-friction bearings														
16-pole														
1RN1500-9	5850	1466	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1502-9	6150	1578	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1504-9	6500	1689	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1506-9	6900	1823	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460
1RN1560-9	8850	2419	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1560-9	8900	2419	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1562-9	9350	2619	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1564-9	9900	2899	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1566-9	10400	3119	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730
1RN1630-9	12000	3578	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1632-9	12550	3831	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1634-9	13150	4111	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930
1RN1636-9	14000	4487	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930

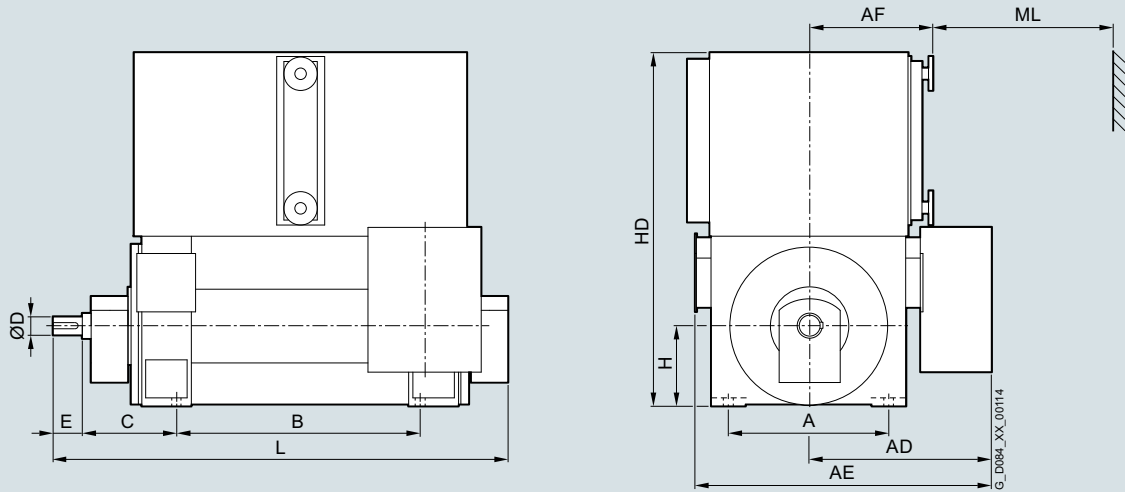
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



Motor type	Weight		Dimensions											
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm
Up to 10 kV, IM B3 type of construction, sleeve bearings														
2-pole														
1RN1400-2....	3200	455	800	985	1545	1250	425	85	130	400	677	1840	2150	1240
1RN1402-2....	3250	474	800	985	1545	1250	425	85	130	400	677	1840	2150	1240
1RN1404-2....	3400	517	800	985	1545	1250	425	85	130	400	677	1840	2150	1240
1RN1406-2....	3550	547	800	985	1545	1250	425	85	130	400	677	1840	2150	1240
1RN1450-2....	4400	650	950	1040	1600	1400	450	95	130	450	730	2070	2375	1340
1RN1452-2....	4500	680	950	1040	1600	1400	450	95	130	450	730	2070	2375	1340
1RN1454-2....	4700	728	950	1040	1600	1400	450	95	130	450	730	2070	2375	1340
1RN1456-2....	4900	778	950	1040	1600	1400	450	95	130	450	730	2070	2375	1340
1RN1500-2....	5850	1145	1060	1115	1785	1500	475	110	165	500	785	2230	2600	1460
1RN1502-2....	6000	1175	1060	1115	1785	1500	475	110	165	500	785	2230	2600	1460
1RN1504-2....	6300	1258	1060	1115	1785	1500	475	110	165	500	785	2230	2600	1460
1RN1506-2....	6650	1338	1060	1115	1785	1500	475	110	165	500	785	2230	2600	1460
1RN1560-2....	8600	1441	1250	1200	2025	1700	530	140	200	560	895	2380	2725	1730
1RN1562-2....	9000	1488	1250	1200	2025	1700	530	140	200	560	895	2380	2725	1730
1RN1564-2....	9500	1610	1250	1200	2025	1700	530	140	200	560	895	2380	2725	1730
1RN1566-2....	9850	1675	1250	1200	2025	1700	530	140	200	560	895	2380	2725	1730
1RN1630-2....	11750	1899	1400	1330	2270	1900	530	160	240	630	1020	2560	3140	1930
1RN1632-2....	12200	1989	1400	1330	2270	1900	530	160	240	630	1020	2560	3140	1930
1RN1634-2....	12800	2092	1400	1330	2270	1900	530	160	240	630	1020	2560	3140	1930
1RN1636-2....	13450	2207	1400	1330	2270	1900	530	160	240	630	1020	2560	3140	1930

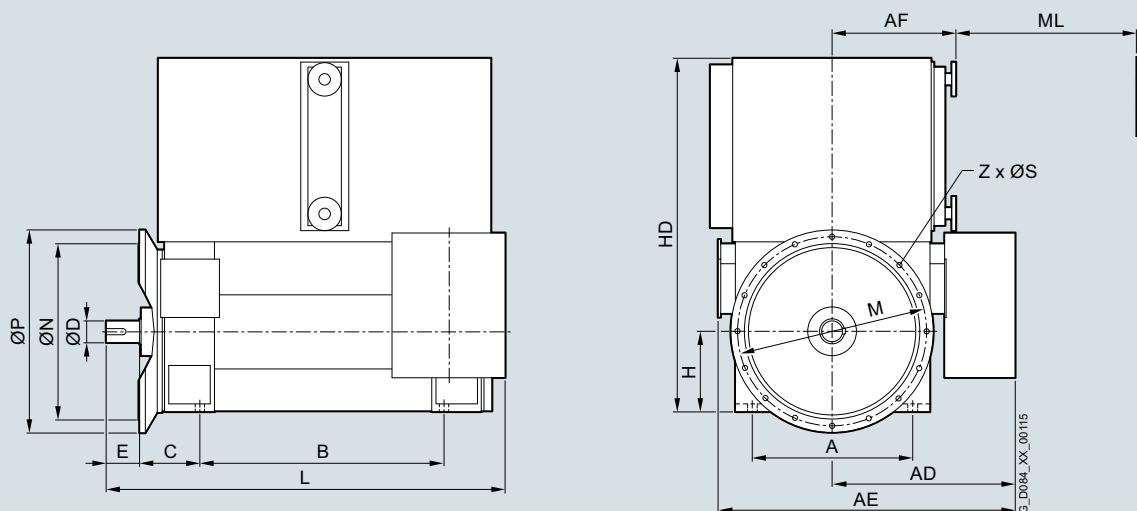
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



Motor type	Weight		Dimensions																
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 10 kV, IM B35 type of construction, anti-friction bearings

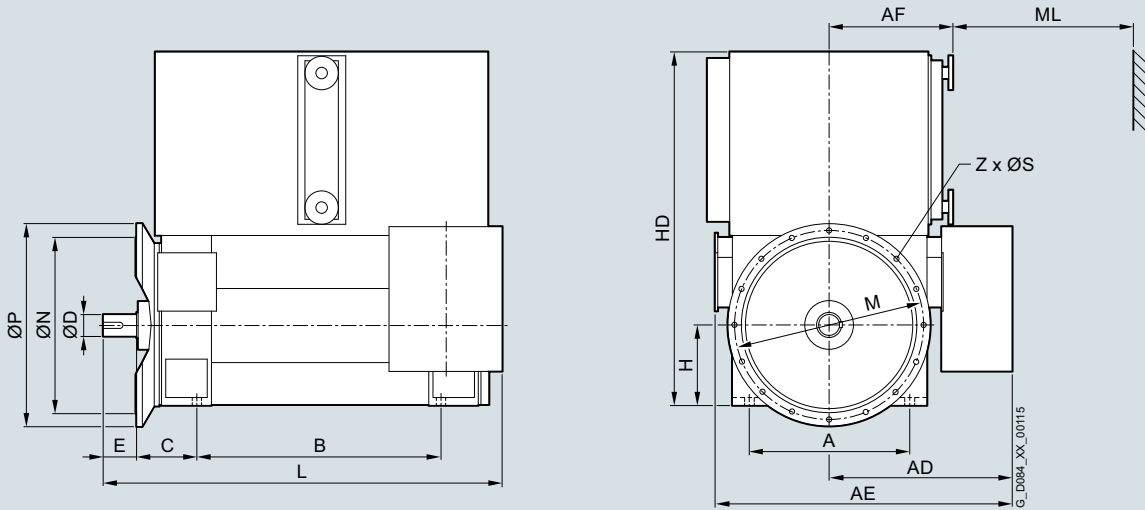
2-pole

1RN1352-2....	2550	415	710	765	1445	1180	224	85	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1354-2....	2700	433	710	765	1445	1180	224	85	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1356-2....	2700	447	710	765	1445	1180	224	85	130	355	627	1610	1890	1130	840	780	900	22	8
1RN1400-2....	3250	528	800	985	1545	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1402-2....	3350	547	800	985	1545	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1404-2....	3500	579	800	985	1545	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1406-2....	3650	608	800	985	1545	1250	250	85	130	400	677	1840	2060	1240	940	880	1000	22	8
1RN1450-2....	4400	688	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340	1080	1000	1150	26	8
1RN1452-2....	4550	718	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340	1080	1000	1150	26	8
1RN1454-2....	4750	758	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340	1080	1000	1150	26	8
1RN1456-2....	4950	808	950	1040	1600	1400	250	95	130	450	730	2070	2140	1340	1080	1000	1150	26	8

Motors for operation on line or with SINAMICS PERFECT HARMONY converters
Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 10 kV, IM B35 type of construction, anti-friction bearings

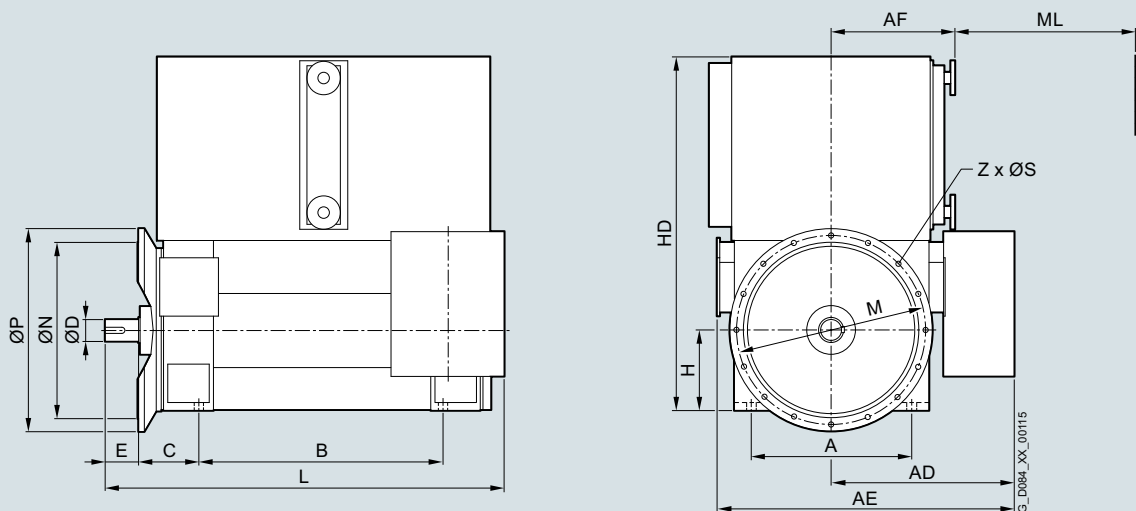
4-pole																			
1RN1354-4....	2700	455	710	935	1445	1180	224	95	130	355	627	1610	1890	1130	840	780	900	6	8
1RN1356-4....	2800	488	710	935	1445	1180	224	95	130	355	627	1610	1890	1130	840	780	900	6	8
1RN1358-4....	2950	526	710	935	1445	1180	224	95	130	355	627	1610	1890	1130	840	780	900	6	8
1RN1400-4....	3350	614	800	985	1545	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	6	8
1RN1402-4....	3450	649	800	985	1545	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	6	8
1RN1404-4....	3650	709	800	985	1545	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	6	8
1RN1406-4....	3850	768	800	985	1545	1250	250	110	165	400	677	1840	2060	1240	940	880	1000	6	8
1RN1450-4....	4600	829	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	6	8
1RN1452-4....	4850	899	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	6	8
1RN1454-4....	5050	949	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	6	8
1RN1456-4....	5350	1019	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	6	8
1RN1500-4....	5800	1190	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460	1180	1120	1250	26	16
1RN1502-4....	6100	1270	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460	1180	1120	1250	26	16
1RN1504-4....	6350	1360	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460	1180	1120	1250	26	16
1RN1506-4....	6700	1460	1060	1115	1785	1500	280	150	200	500	785	2230	2355	1460	1180	1120	1250	26	16
1RN1560-4....	9500	2044	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-4....	9850	2136	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-4....	10150	2214	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-4....	10300	2249	1250	1200	2025	1700	315	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-4....	12350	2586	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-4....	12950	2741	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-4....	13400	2875	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-4....	14150	3056	1400	1330	2270	1900	315	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 10 kV, IM B35 type of construction, anti-friction bearings

6-pole

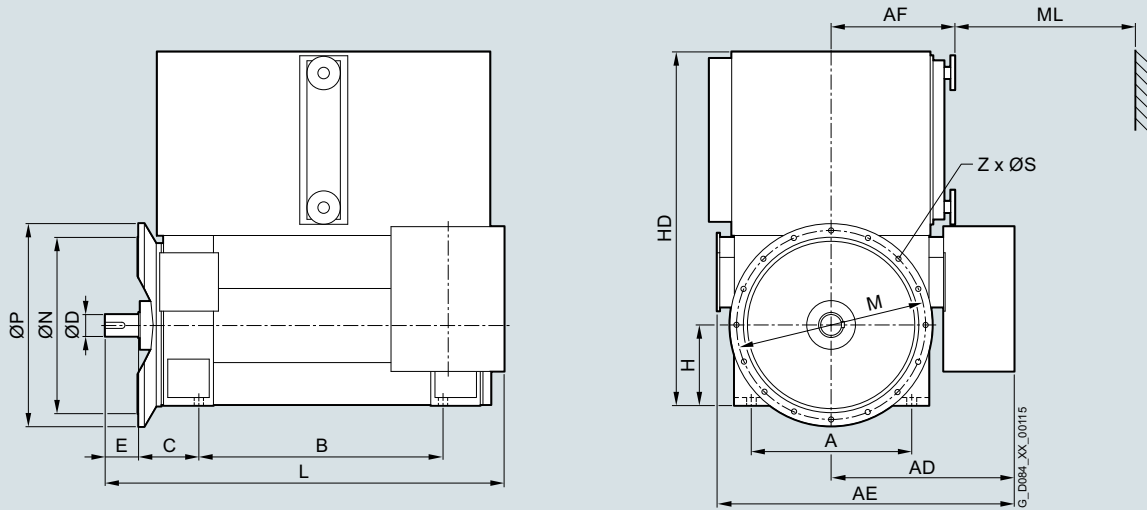
1RN1352-6....	2900	551	710	935	1445	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1354-6....	2950	565	710	935	1445	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1356-6....	3050	598	710	935	1445	1180	224	110	165	355	627	1610	1890	1130	840	780	900	22	8
1RN1400-6....	3550	696	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1402-6....	3700	738	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1404-6....	3900	806	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1406-6....	4100	863	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1450-6....	4800	1008	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1452-6....	5050	1078	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1454-6....	5250	1138	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1456-6....	5450	1208	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1500-6....	6150	1444	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1502-6....	6500	1554	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1504-6....	6800	1684	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1506-6....	7250	1824	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1560-6....	9650	2441	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-6....	9850	2525	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-6....	10300	2684	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-6....	10850	2862	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-6....	13100	3216	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-6....	13600	3382	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-6....	13900	3477	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-6....	14450	3660	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions															
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm

Up to 10 kV, IM B35 type of construction, anti-friction bearings

8-pole

1RN1400-8....	3550	696	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1402-8....	3700	738	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1404-8....	3900	806	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1406-8....	4100	863	800	985	1545	1250	250	130	200	400	677	1840	2060	1240	940	880	1000	22	8
1RN1450-8....	4800	1008	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1452-8....	5050	1078	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1454-8....	5250	1138	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1456-8....	5450	1208	950	1040	1600	1400	250	130	200	450	730	2070	2220	1340	1080	1000	1150	26	8
1RN1500-8....	6150	1444	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1502-8....	6500	1554	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1504-8....	6800	1684	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1506-8....	7250	1824	1060	1115	1785	1500	280	160	240	500	785	2230	2395	1460	1180	1120	1250	26	16
1RN1560-8....	9650	2441	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-8....	9850	2525	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-8....	10300	2684	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-8....	10850	2862	1250	1200	2025	1700	315	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-8....	13100	3216	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-8....	13600	3382	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-8....	13900	3477	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-8....	14450	3660	1400	1330	2270	1900	315	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

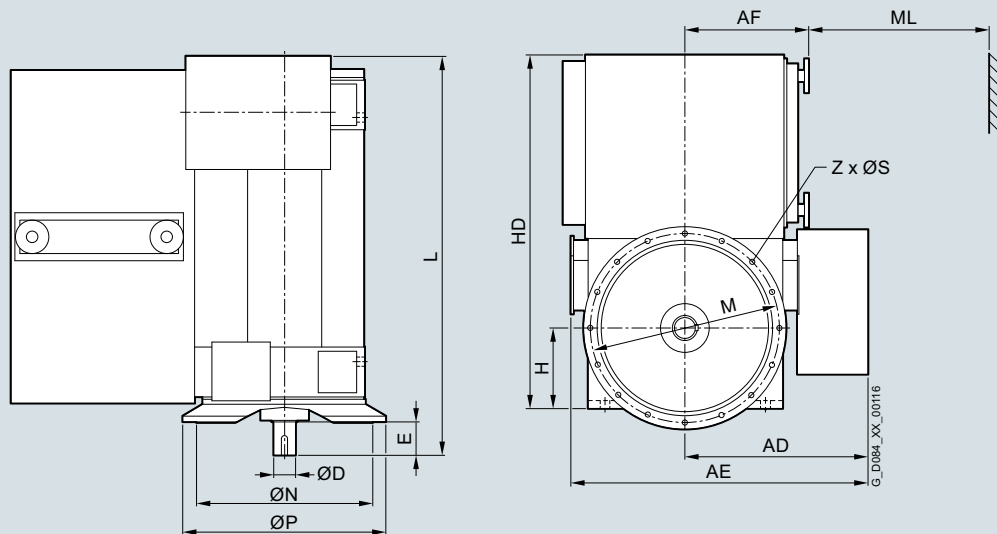
Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)

The following data also apply to explosion-protected motors 1SL1 (Ex ec).



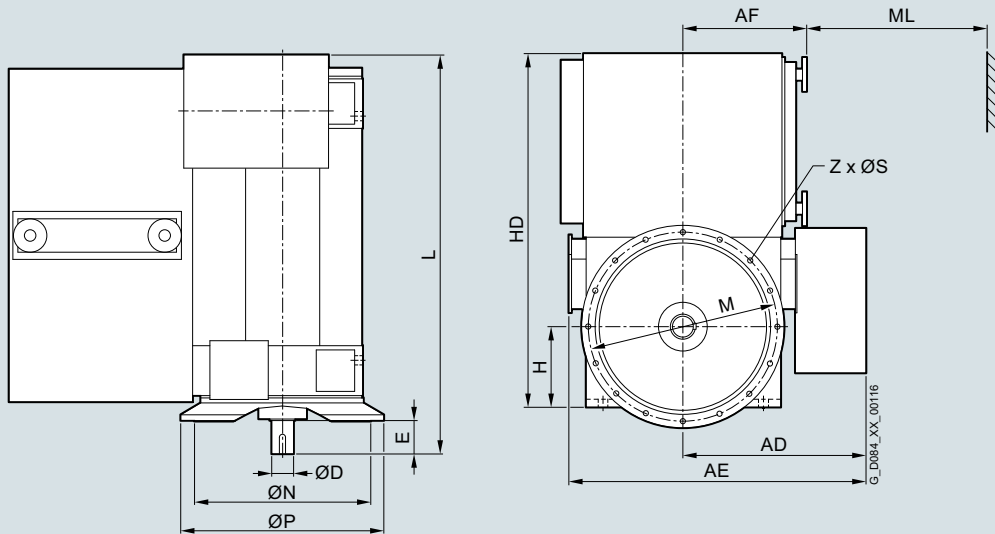
Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
Up to 10 kV, IM V1 type of construction, anti-friction bearings																
4-pole																
1RN1354-4....	2650	486	935	1445	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1356-4....	2750	525	935	1445	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1358-4....	2850	545	935	1445	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1400-4....	3300	614	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1402-4....	3400	649	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1404-4....	3600	709	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1406-4....	3800	768	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1450-4....	4600	823	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-4....	4850	893	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-4....	5050	943	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-4....	5350	1013	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-4....	5850	1181	1015	1685	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-4....	6100	1261	1015	1685	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-4....	6350	1351	1015	1685	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-4....	6700	1451	1015	1685	150	200	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-4....	9500	2021	1200	2025	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-4....	9850	2113	1200	2025	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-4....	10150	2191	1200	2025	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-4....	10350	2226	1200	2025	170	240	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-4....	12600	2586	1330	2270	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-4....	13200	2741	1330	2270	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-4....	13700	2875	1330	2270	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-4....	14450	3056	1330	2270	200	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 10 kV, IM V1 type of construction, anti-friction bearings

6-pole

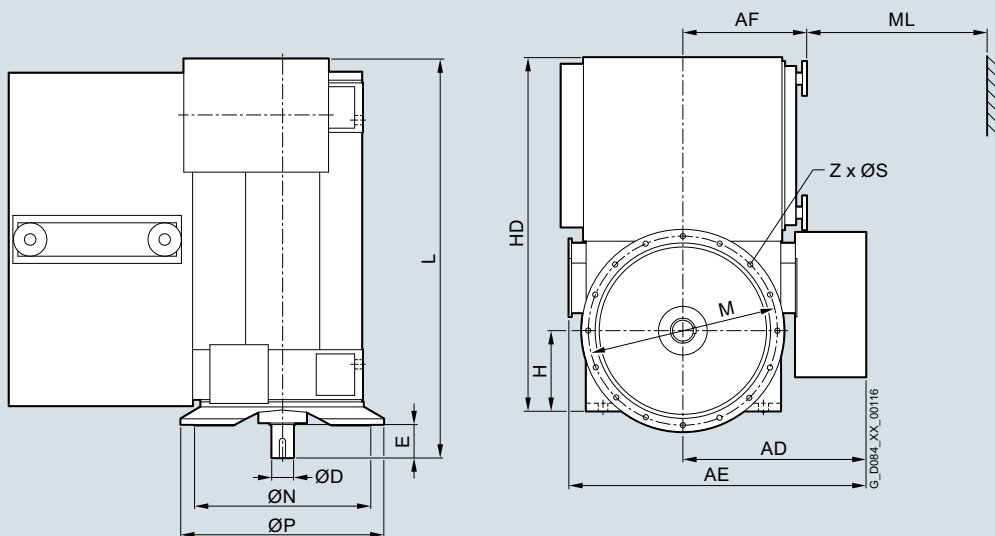
1RN1352-6....	2850	590	935	1445	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1354-6....	2900	622	935	1445	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1356-6....	3050	680	935	1445	95	130	355	620	1610	1890	1130	840	780	900	22	8
1RN1400-6....	3500	759	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1402-6....	3650	811	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1404-6....	3900	875	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1406-6....	4050	943	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1450-6....	4800	1003	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-6....	5050	1073	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-6....	5250	1133	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-6....	5450	1203	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-6....	6150	1437	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-6....	6500	1547	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-6....	6800	1677	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-6....	7250	1817	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-6....	9650	2418	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-6....	9900	2502	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-6....	10350	2661	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-6....	10850	2839	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-6....	13400	3216	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-6....	13900	3382	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-6....	14200	3477	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-6....	14750	3660	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 10 kV, IM V1 type of construction, anti-friction bearings

8-pole

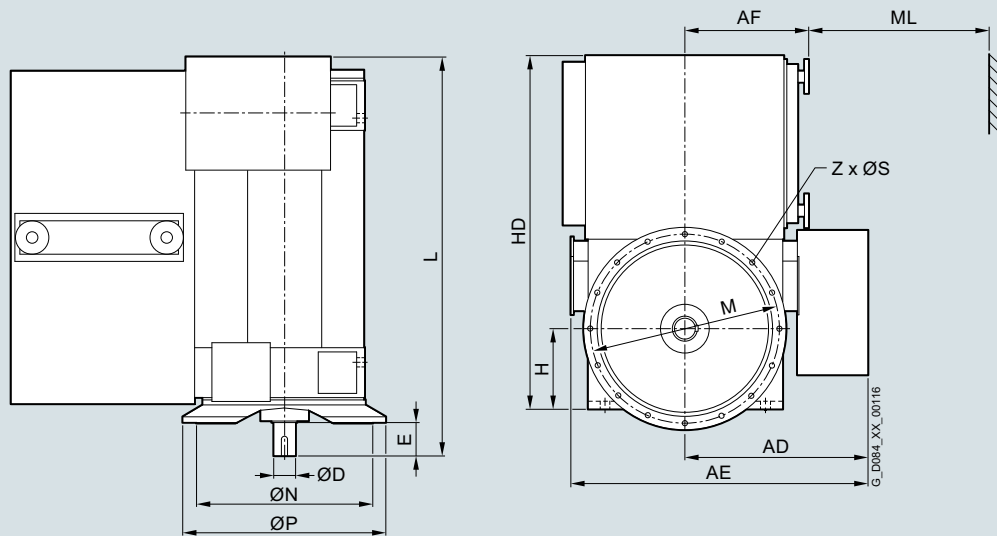
1RN1400-8....	3500	759	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1402-8....	3650	811	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1404-8....	3900	875	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1406-8....	4050	943	985	1545	120	165	400	670	1840	2060	1240	940	880	1000	22	8
1RN1450-8....	4800	1003	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-8....	5050	1073	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-8....	5250	1133	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-8....	5450	1203	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-8....	6150	1437	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-8....	6500	1547	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-8....	6800	1677	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-8....	7250	1817	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-8....	9650	2418	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-8....	9900	2502	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-8....	10350	2661	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-8....	10850	2839	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-8....	13400	3216	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-8....	13900	3382	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-8....	14200	3477	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-8....	14750	3660	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 10 kV, IM V1 type of construction, anti-friction bearings

10-pole

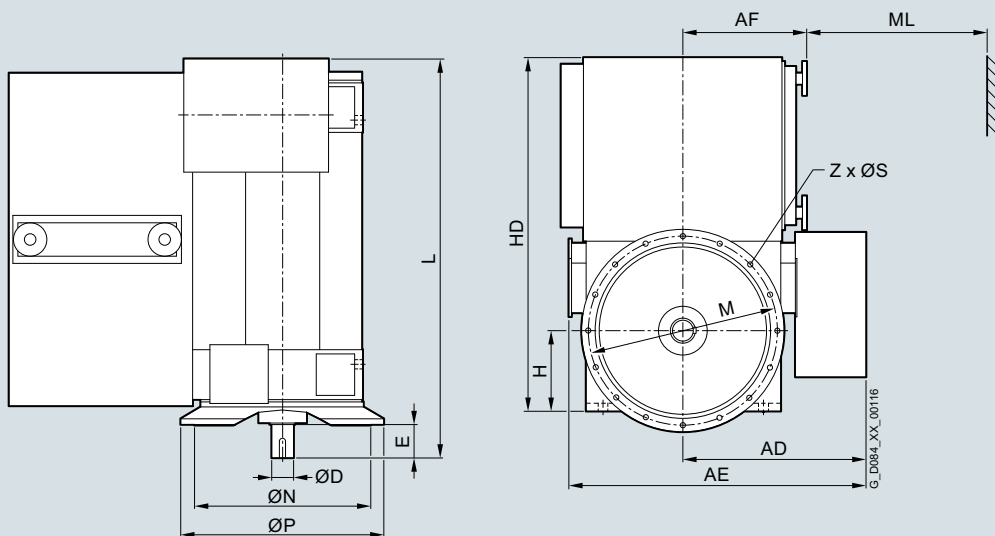
1RN1450-3	4700	1045	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1452-3	4900	1102	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1454-3	5100	1159	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1456-3	5300	1226	940	1535	130	200	450	730	2070	2150	1340	1080	1000	1150	26	8
1RN1500-3	6100	1448	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-3	6400	1552	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-3	6750	1664	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-3	7100	1791	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-3	9200	2227	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1560-3	9200	2227	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-3	9700	2427	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-3	10500	2587	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-3	10700	2777	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-3	12650	3227	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-3	13200	3440	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-3	13850	3690	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-3	14700	3996	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 10 kV, IM V1 type of construction, anti-friction bearings

12-pole

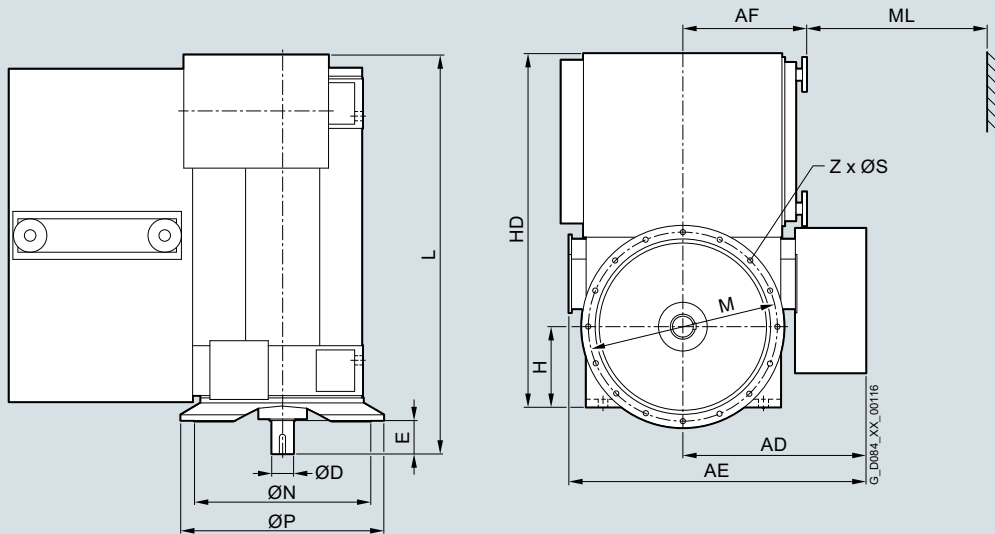
1RN1500-5	6050	1458	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-5	6400	1561	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-5	6750	1682	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-5	7150	1807	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-5	9200	2377	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1560-5	9200	2377	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-5	9750	2597	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-5	10200	2789	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-5	10750	2987	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-5	12650	3393	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-5	13250	3629	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-5	13850	3884	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-5	14650	4224	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

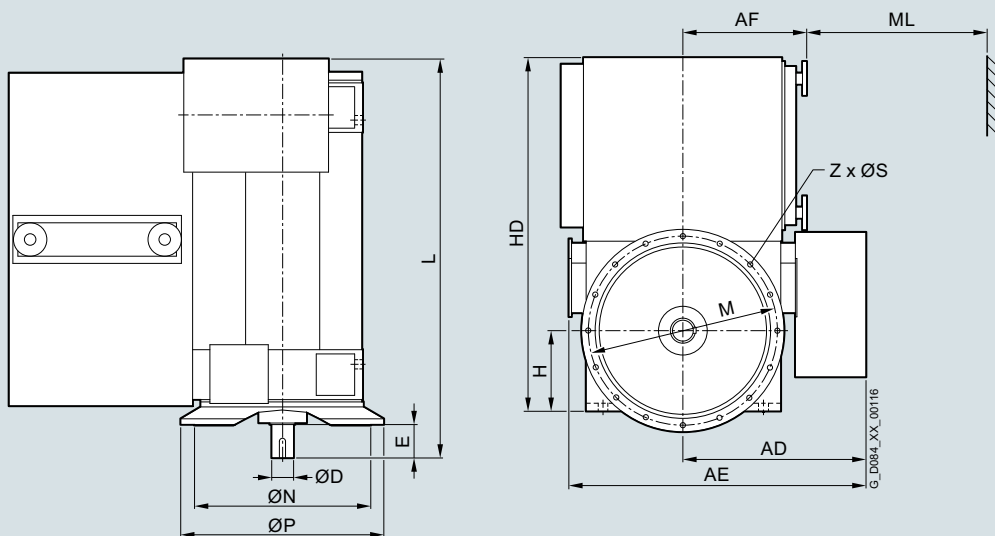
Up to 10 kV, IM V1 type of construction, anti-friction bearings

14-pole

1RN1500-7	6400	1582	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-7	6400	1582	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-7	6750	1693	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-7	7100	1826	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-7	9100	2469	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1560-7	9150	2469	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-7	9700	2699	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-7	10150	2899	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-7	10650	3119	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-7	12550	3578	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-7	13150	3831	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-7	13800	4111	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-7	14550	4477	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Motors for operation on line or with SINAMICS PERFECT HARMONY converters

Air/water-cooled motors

SIMOTICS HV Series A-compact PLUS 1RN1, 1SL1**Dimensional drawings** (continued)

Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

Up to 10 kV, IM V1 type of construction, anti-friction bearings

16-pole

1RN1500-9	6050	1466	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1502-9	6350	1578	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1504-9	6700	1689	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1506-9	7100	1823	1015	1685	160	240	500	785	2230	2330	1460	1180	1120	1250	26	16
1RN1560-9	9150	2419	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1560-9	9150	2419	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1562-9	9600	2619	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1564-9	10100	2899	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1566-9	10650	3119	1200	2025	190	280	560	895	2380	2545	1730	1320	1250	1400	26	16
1RN1630-9	12500	3578	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1632-9	13050	3831	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1634-9	13650	4111	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16
1RN1636-9	14500	4487	1330	2270	220	280	630	1020	2560	2820	1930	1320	1250	1400	26	16

Marine versions



3/2	Orientation
3/6	Options
3/10	Selection and ordering data
3/14	Dimensional drawings

Marine versions

Orientation

Overview

A-Compact PLUS in a marine design have been designed for below-deck operation on ships. If the motors are intended for on deck operation or for off-shore applications, then these must be explicitly ordered using an additional order code. The reason for this is that in these cases special measures are required.

The thermal utilization of the motors is adapted to the generally higher ambient temperatures onboard ships. If the application demands compliance with additional regulations, such as explosion protection, the appropriate motor series must be chosen.

The motors onboard ships are subdivided into three importance categories by the marine classification societies in collaboration with customers, depending on the field of application:

- **Essential Service for Propulsion** or also Primary Essential Service
- **Essential Service** or also Secondary Essential Service or Important Service
- **Non-Essential Service** or also Non-Important Service

As the assignment of a drive to one of the importance categories has a direct impact on the scope of the marine options, this must be known when ordering the motor.

The following services of the motor manufacturer are associated with the categories:

	Importance category		
	Essential Service for Propulsion	Essential Service	Non-Essential Service
Typical applications	Propeller drive, thruster (if used as main drive/declared as propulsion)	Thrusters, lateral thrust units, anchor winches, bilge and ballast pumps, fire-fighting pumps	Pumps for service water
Version	In accordance with the regulations of the classification society		In accordance with ambient conditions of the classification society
Acceptance test certificate	Acceptance test certificate 3.2 according to EN10204		Acceptance test certificate 3.1 according to EN 10204 ¹⁾
Individual acceptance by classification society	Will be performed. Motor is assigned an individual certificate of the classification society.		Not necessary
Ordering several identical motors	Differentiation between the first motor and additional ones must be realized when ordering using an order code.		No distinction
Rating plate data	Information about ambient conditions of the classification society		
Stamp of the classification society	Stamp on the shaft ²⁾ and enclosure		No stamp

Classification authorities

Society	Abbreviation	Location
American Bureau Of Shipping	ABS	USA
Bureau Veritas	BV	France
China Classification Society	CCS	China
Det Norske Veritas Germanischer Lloyd	DNV GL	Norway
Lloyds Register	LR	UK

¹⁾ Certificate is not stipulated by the classification society but it is issued according to the internal quality standards within the scope of a routine test.

²⁾ Provided that it is specified that the classification society supervises construction.

Benefits

The marine motors offer the user a number of advantages and benefits:

- Cast iron and steel versions can be supplied for corrosive atmospheres especially for high humidity levels and salt laden air
- Increased corrosion protection using specially designed paint finishes is available
- Suitable for direct on line and converter operation (low voltage)
- In depth know-how regarding customer requirements
- Worldwide service network with 24-hour service hotline for motors and converters

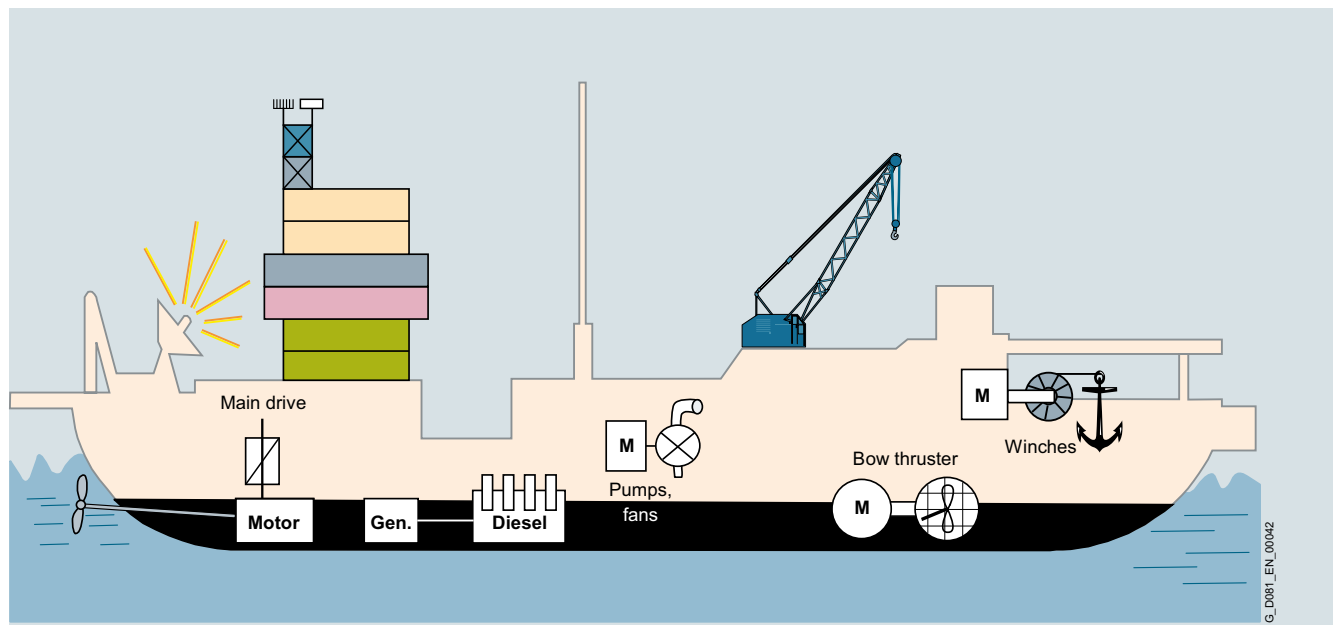
Application

The marine motors are designed for square load application with supply from grid or converter, constant torque application and detail de-rating parameters are on request:

Applications onboard ships as main and auxiliary drives below deck, e.g.:

- Fans (air conditioning, refrigeration plants)
- Pumps (for fire-extinguishing water, fuels, oils)
- Winches (anchor winches, warping winches, lifting gear)
- Compressors
- Bow thruster drives
- Main propulsion drives

The motors are also suitable for other low voltage industry application, different cooling types can be fulfilled on request.



Typical areas of application

Marine versions

Orientation

Technical data

Regulations of the individual classification societies for motors:

Classification society	Coolant temperature CT		Admissible temperature rise limit according to the classification society			Rated power limit for individual acceptance test kW	Construction supervision mandatory
	Water cooling °C	Air cooling °C	Temperature class 130 (B) K	155 (F), $P_{rated} < 5000$ kW K	155 (F), $P_{rated} \geq 5000$ kW K		
LR	32	45	70	95	90	≥ 100	≥ 100 kW
BV	32	45	75	100	95	≥ 100	≥ 500 kW
DNV GL	32	45	75	100	100	≥ 300	–
ABS	32	50	70	95	90	≥ 100	–
CCS	32	45	75	100	95	All power ratings	All power ratings

A-Compact PLUS in a marine design

A-Compact PLUS motor for marine applications must be ordered with the classification-specific options. This ensures that both the mechanical design of motor, and the tests are performed exactly in accordance with the instructions provided by the respective classification society.

There are four categories of classification-specific options:

- Design options define the marine-compatible technical design in accordance with the definitions of the classification society
- Certification options define the scope of test certificates
- Test options define the scope of the individual tests
- Additional options for deviations and special conditions: specify the customer's request for participation in the tests at the factory, or define coolant temperatures that differ from the requirements of the classification society (additional plain text required)

The options of the importance categories listed above are combined with each other depending on the class of importance, classification society and other conditions.

If motors are to be designed according to the specifications of several classification societies, a special inquiry is necessary.

Motors for Non-Essential Services

The technical design is in accordance with the ambient operating conditions specified by the classification society.

One of the marine design options X00, X01, X12¹⁾, X03 or X06 must be specified depending on the classification society. Acceptance inspections are not required. There is no distinction between ordering an individual motor or several ones.

Non-Essential Service	Options according to the classification society				
	ABS	BV	CCS	DNV GL	LR
Technical version	X00	X01	X12 ¹⁾	X03	X06

Motors for Essential Services

The technical design is in accordance with the regulations of the classification society: Option X10, X11, X12, X13 and X16. An acceptance test certificate 3.2 according to EN 10204 and a product certificate of classification society is provided with each motor. Depending on the classification society, the test steps are defined by options X30 to X42 for the first motor (even numbers) and X31 to X43 for the additional motors (uneven numbers). Options J70 to J82 or J71 to J83 define the expenditure for certifying the motor.

Essential Service	Options according to the classification society				
	ABS	BV	CCS	DNV GL	LR
Technical version	X10	X11	X12	X13	X16
Certification					
• First motor	J70	J72	J74	J76	J82
• Additional motors	J71	J73	J75	J77	J83
Scope of the tests and presence of representatives of the classification society					
• First motor	X30	X32	X34	X36	X42
• Additional motors	X31	X33	X35	X37	X43
Tests in presence of representatives of the customer (in addition to the inspector of the classification society)	X99				
Conditions deviating from classification requirements must be fulfilled	E80				

¹⁾ Non-Essential Service must be handled by CCS just like an Essential Service.

Technical data (continued)**Motors for Essential Services for Propulsion**

The technical design is in accordance with the regulations of the classification society: Option X20, X21, X22, X23 and X26. An acceptance test certificate 3.2 according to EN 10204 and a product certificate of classification society is provided with each motor. Depending on the classification society, the test steps are defined by options X60 to X72 for the first motor (even numbers) and X61 to X73 for the additional motors (uneven numbers). Options N40 to N52 or N41 to N53 define the expenditure for certifying the motor.

Essential Service for Propulsion	Options according to the classification society				
	ABS	BV	CCS	DNV GL	LR
Technical version	X20	X21	X22	X23	X26
Certification					
• First motor	N40	N42	N44	N46	N52
• Additional motors	N41	N43	N45	N47	N53
Scope of the tests and presence of representatives of the classification society					
• First motor	X60	X62	X64	X66	X72
• Additional motors	X61	X63	X65	X67	X73
Tests in presence of representatives of the customer (in addition to the inspector of the classification society)	X99				
Conditions deviating from classification requirements must be fulfilled	E80				

Option E80 is used if a different coolant temperature CT is required. The CT must also be specified in plain text, e.g. CT55.

Standard terminal boxes to connect to the line supply

The 1XB1 631 terminal box is used for twelve single core cables or twenty-four single core cables. The standard cable inlet will be undrilled. The 1XB7 750 terminal box is used for twenty-four single core cables or forty-eight single core cables. The standard cable inlet will be undrilled. It is possible to change star connection or delta connection if available. The terminal box arrangement is listed in below table.

Shaft height	Standard main terminal box		
	-4	-6	-8
	1XB7 750 and 1XB1 631 Up to 1000 V / 50 Hz		
450			
452	1 x 1XB7 750		
454			
456	1 x 1XB7 750		
500	1 x 1XB7 750	1 x 1XB7 750	
502			
504			
506			
560		1 x 1XB7 750,	
562		1 x 1XB1 631	
564			
566			2 x 1XB7 750
630			2 x 1XB7 750
632			
634			
636			

Shaft height	Standard main terminal box		
	-4	-6	-8
	1XB7 750 Up to 1000 V / 60 Hz		
450	1 x 1XB7 750		
452			
454			
456	1 x 1XB7 750	1 x 1XB7 750	
500	1 x 1XB7 750	1 x 1XB7 750	
502			
504		1 x 1XB7 750,	
506		1 x 1XB1 631	
560		1 x 1XB7 750,	
562		1 x 1XB1 631	2 x 1XB7 750
564			
566			2 x 1XB7 750
630			2 x 1XB7 750
632			
634			
636			

Note:

One 1XB1 631 terminal box is for one separated winding system. One 1XB7 750 terminal box can be for one or two separated winding systems. For the parameters of the terminal boxes, please refer to page 1/5.

Marine versions

Options

Options

Order Code	Description
Monitoring of stator windings	
A23	1 temperature sensor KTY 84-130
A65	6 slot resistance thermometers PT 100 without surge limiter for 2-, 3- or 4-wire circuit configurations from the terminals ¹⁾
2 x A65	12 slot resistance thermometers PT 100 without surge limiter for 2-, 3- or 4-wire circuit configurations from the terminals ¹⁾
Monitoring of bearings	
A40	2 resistance thermometers PT 100, for 2-, 3- or 4-wire circuit configuration, without evaluation unit for roller bearings ¹⁾
A42	2 double resistance thermometers PT100 for 2-, 3- or 4-wire circuit configuration, without evaluation unit for roller bearings ¹⁾
G50	Shock pulse measuring nipple, for rolling contact bearings
H05	Shock pulse measurement, fixed sensors and connection box, for rolling contact bearings
H07	Shock pulse measurement (SPM), complete alarm box, for rolling contact bearings
Monitoring of ventilation	
A44	1 resistance thermometer PT 100 for 2-, 3- or 4-wire circuit configuration from terminals, for cold air ¹⁾
A45	1 resistance thermometer PT 100 for 2-, 3- or 4-wire circuit configuration from terminals, for warm air ¹⁾
A46	1 double resistance thermometer PT 100 for 2-, 3- or 4-wire circuit configuration from terminals, for cold air ¹⁾
A47	1 double resistance thermometer PT 100 for 2-, 3- or 4-wire circuit configuration from terminals, for warm air ¹⁾
A86	1 dial type thermometer for cold air with 2 closing contacts
A87	1 dial type thermometer for warm air with 2 closing contacts
Special winding	
C20	Special winding
Heater	
M12	Anti-condensation heater, voltage 110 ... 120 V
M13	Anti-condensation heater, voltage 220 ... 240 V
Terminal box mounting positions	
K10	Terminal box on left hand side
K83	Terminal box rotated by 90°, cable entry from DE
K84	Terminal box rotated by 90°, cable entry from NDE
K85	Terminal box rotated by 180°, cable entry from top
Auxiliary terminal box	
M50	Larger auxiliary terminal box, material cast iron
M51	Larger auxiliary terminal box, material stainless steel
M52	Separate auxiliary terminal box for anti-condensation heating

¹⁾ In standard configuration 2 terminals are allocated per PT100 temperature sensor. 3- or 4-wire temperature monitoring system can be connected by using cable end sleeves for crimping 2 leads into one sleeve. For this purpose twin sleeves are available from several suppliers. Different configurations of auxiliary terminals for separate 3-terminal or 4-terminal connections are available on request.

Options (continued)

Order Code	Description
	Direction of rotation
K97	Clockwise rotation (viewed from DE) ¹⁾
k98	Counter-clockwise rotation (viewed from DE) ¹⁾
K99	Bi-directional rotation ¹⁾
	Mechanical options
L17	Mounting of provided coupling
L31	Bolts and shims and taper dowels for mounting motors to a steel foundation
L32	Threaded bolts, armature plates, sole plates, shims, leveling plates and taper dowels for mounting motor on a concrete foundation or concrete base
L33	T-head bolts, foundation bolt sleeves, sole plates, shims, leveling plates and taper dowels for mounting motor on a concrete foundation or concrete base
Y55	Non-standard drive-side shaft end longer, shorter or thinner than normal (if technically feasible)
P45	Stainless steel external bolts
	Special coating
K26	Special coating in standard color RAL7030
Y53	Standard coating in non-standard color, color:
Y54	Special coating in non-standard color, color:
	Name plate
Y82	Additional name plate with order data
	Documentation
B21	Documentation on CD
B22	Documentation by email
B23	Documentation printed on paper
B34	Document "Standard test procedure"
B35	Document "Balancing report"
B36	Document "Test description"
B37	Document "Load characteristics"
B38	Document "Recommended spare parts"
B41	Document "Instrumentation data sheets"
B45	Document "Manufacturing work schedule", update monthly
D00	Documentation language German
D56	Documentation language Russian
D72	Documentation language Italian
D76	Documentation language English
D77	Documentation language French
D78	Documentation language Spanish
D79	Documentation language Portuguese
D84	Documentation language Chinese (simplified)

¹⁾ Bi-directional rotation is standard design of low voltage motor version, single direction is available on request.

Marine versions

Options

Options (continued)

Order Code	Description
Testing	
F01	Factory routine test, witnessed
F03	Construction supervision at main drives (visual check witnessed)
F14	Plot of the no-load characteristic and determining the iron and friction losses, unwitnessed
F15	Plot of the no-load characteristic and determining the iron and friction losses, witnessed
F16	Measurement of locked rotor characteristic and determining of locked rotor losses, unwitnessed
F17	Measurement of locked rotor characteristic and determining of locked rotor losses, witnessed
F26	Measurement of dielectric loss factor (tan delta) on built-in stator winding, unwitnessed
F27	Measurement of dielectric loss factor (tan delta) on built-in stator winding, witnessed
F28	Noise measurement under no-load conditions, without noise analysis, unwitnessed
F29	Noise measurement under no-load conditions, without noise analysis, witnessed
F34	Plot of the current and torque characteristic when accelerating, unwitnessed
F35	Plot of the current and torque characteristic when accelerating, witnessed
F38	Overspeed test, unwitnessed soft mounted acc. to EN 60034-14 for 45.-2-50Hz-AFB / 45.-2-60Hz-SB / 50.-2-60Hz-SB, SH56 and SH63 must be checked
F39	Overspeed test, witnessed soft mounted acc. to EN 60034-14 for 45.-2-50Hz-AFB / 45.-2-60Hz-SB / 50.-2-60Hz-SB, SH56 and SH63 must be checked
Special design for marine	
F52	Measurement of the starting torque and starting (inrush) current, unwitnessed
F53	Measurement of the starting torque and starting (inrush) current, witnessed
F82	Type test with heat run for horizontal motors, unwitnessed
F83	Type test with heat run for horizontal motors, witnessed
F92	Type test with heat run for vertical motors, unwitnessed ¹⁾
F93	Type test with heat run for vertical motors, witnessed ¹⁾
H88	Electronic pulse generator HOG11 without shaft earthing
K52	Degree of protection IP56 non-heavy-sea
M59	Cable gland with MCT frame special for marine motors
Certification for the first motor ordered	
J70	Certification for the first motor ordered according to ABS for Essential Service
J72	Certification for the first motor ordered according to BV for Essential Service
J74	Certification for the first motor ordered according to CCS for Essential Service
J76	Certification for the first motor ordered according to DNV GL for Essential Service
J82	Certification for the first motor ordered according to LR for Essential Service
Certification for the second motor ordered	
J71	Certification for the second and additional motors ordered according to ABS for Essential Service
J73	Certification for the second and additional motors ordered according to BV for Essential Service
J75	Certification for the second and additional motors ordered according to CCS for Essential Service
J77	Certification for the second and additional motors ordered according to DNV GL for Essential Service
J83	Certification for the second and additional motors ordered according to LR for Essential Service
Essential Service for Propulsion	
N40	Certification for the first motor ordered according to ABS for Essential Service Propulsion
N41	Certification for the second and additional motors ordered according to ABS for Essential Service Propulsion
N42	Certification for the first motor ordered according to BV for Essential Service Propulsion
N43	Certification for the second and additional motors ordered according to BV for Essential Service Propulsion
N44	Certification for the first motor ordered according to CCS for Essential Service Propulsion
N45	Certification for the second and additional motors ordered according to CCS for Essential Service Propulsion
N46	Certification for the first motor ordered according to DNV GL for Essential Service Propulsion
N47	Certification for the second and additional motors ordered according to DNV GL for Essential Service Propulsion
N52	Certification for the first motor ordered according to LR for Essential Service Propulsion
N53	Certification for the second and additional motors ordered according to LR for Essential Service Propulsion

¹⁾ Possible only in horizontal position with special bearings for testing.

Options (continued)

Order Code	Description
	Non-Essential Service
X00	Version according to ABS for Non-Essential Service
X01	Version according to BV for Non-Essential Service
X12	Version according to CCS for Essential Service
X03	Version according to DNV GL for Non-Essential Service
X06	Version according to LR for Non-Essential Service
	Essential Service
X10	Version according to ABS for Essential Service
X11	Version according to BV for Essential Service
X12	Version according to CCS for Essential Service
X13	Version according to DNV GL for Essential Service
X16	Version according to LR for Essential Service
	Essential Service Propulsion
X20	Version according to ABS for Essential Service Propulsion
X21	Version according to BV for Essential Service Propulsion
X22	Version according to CCS for Essential Service Propulsion
X23	Version according to DNV GL for Essential Service Propulsion
X26	Version according to LR for Essential Service Propulsion
	Test for the first motor ordered
X30	Tests for the first motor ordered according to ABS for Essential Service
X32	Tests for the first motor ordered according to BV for Essential Service
X34	Tests for the first motor ordered according to CCS for Essential Service
X36	Tests for the first motor ordered according to DNV GL for Essential Service
X42	Tests for the first motor ordered according to LR for Essential Service
	Test for the second and additional motors ordered
X31	Tests for the second and additional motors ordered according to ABS for Essential Service
X33	Tests for the second and additional motors ordered according to BV for Essential Service
X35	Tests for the second and additional motors ordered according to CCS for Essential Service
X37	Tests for the second and additional motors ordered according to DNV GL for Essential Service
X43	Tests for the second and additional motors ordered according to LR for Essential Service
	Tests for the first motor ordered
X60	Tests for the first motor ordered according to ABS for Essential Service Propulsion
X62	Tests for the first motor ordered according to BV for Essential Service Propulsion
X64	Tests for the first motor ordered according to CCS for Essential Service Propulsion
X66	Tests for the first motor ordered according to DNV GL for Essential Service Propulsion
X72	Tests for the first motor ordered according to LR for Essential Service Propulsion
	Test for the second and additional motors ordered
X61	Tests for the second and additional motors ordered according to ABS for Essential Service Propulsion
X63	Tests for the second and additional motors ordered according to BV for Essential Service Propulsion
X65	Tests for the second and additional motors ordered according to CCS for Essential Service Propulsion
X67	Tests for the second and additional motors ordered according to DNV GL for Essential Service Propulsion
X73	Tests for the second and additional motors ordered according to LR for Essential Service Propulsion
	Supplementary
X99	Tests in the presence of representatives of the customer (together with the inspector of the classification society)
E80	Conditions deviating from the classification requirements

Marine versions

Selection and ordering data

Selection and ordering data

Rated power P_{rated} 155 (F) kW	Article No.	Operating data for 1RN1 at rated output for utilization 155 (F)								
		Rated speed	Efficiency	Power factor	Rated current at 675 V	Rated torque	Break-down torque	Cooling water flow rate	Moment of inertia	Mechanical speed limit
		n_{rated} rpm	η %	$\cos \varphi$ [-]	I_{rated} A	T_{rated} Nm	T_B/T_{rated} [-]	38 °C m ³ /h	J kgm ²	n_{max} rpm
675 V, 50 Hz										
4-pole, 1500 rpm										
1500	1RN1452-4MQ0	1480	95.4	0.90	2 x 750	9680	2.8	11	21.0	1910
1600	1RN1452-4MV0	1477	95.3	0.90	2 x 800	10342	2.7	11	21.0	1910
1800	1RN1456-4MQ0	1482	95.7	0.90	2 x 890	11600	3.2	11	25.0	1910
2000	1RN1500-4MQ0	1485	95.6	0.89	2 x 1000	12864	2.5	14	38.8	1800
2240	1RN1502-4MQ0	1485	95.6	0.89	2 x 1125	14406	2.5	14	42.9	1800
2500	1RN1504-4MQ0	1486	96.0	0.89	2 x 1250	16064	2.7	14	47.2	1800
6-pole, 1000 rpm										
1500	1RN1500-6MQ0	993	96.0	0.86	2 x 780	14430	2.5	14	55.2	1200
1600	1RN1500-6MV0	992	96.0	0.86	2 x 830	15403	2.3	14	55.2	1200
1800	1RN1502-6MQ0	992	96.1	0.86	2 x 930	17329	2.3	14	61.5	1200
2000	1RN1504-6MQ0	993	96.2	0.86	2 x 1025	19244	2.5	14	68.2	1200
2240	1RN1506-6MQ0	991	96.3	0.87	2 x 1150	21580	2.2	14	75.8	1200
2500	1RN1560-6MR0	992	96.4	0.86	3 x 850	24068	2.4	23	124.6	1200
2800	1RN1562-6MR0	992	96.5	0.85	3 x 967	26945	2.6	23	129.0	1200
3000	1RN1562-6MS0	992	96.4	0.86	3 x 1034	28893	2.4	23	129.0	1200
3150	1RN1564-6MR0	992	96.5	0.86	3 x 1084	30331	2.5	23	140.2	1200
3500	1RN1566-6MR0	992	96.6	0.86	3 x 1200	33695	2.5	23	152.6	1200
8-pole, 750 rpm										
2500	1RN1566-8MR0	743	96.4	0.85	4 x 650	32142	2.1	23	152.6	1200
2800	1RN1630-8MR0	744	96.5	0.81	4 x 763	35931	2.2	23	205.7	1200
3150	1RN1632-8MR0	744	96.5	0.83	4 x 838	40444	2.1	23	220.6	1200
3500	1RN1632-8MS0	743	96.6	0.82	4 x 950	44962	2.1	23	220.6	1200
		Type of construction								
		See page 1/10								

Note:

Ratings are defined for sinusoidal supply, based on IEC 60034-2-1:2007. The ratings for converter operation depend on the converter and its settings and cannot be predetermined.

I_{rated} : total rated current

For number of terminal boxes please refer to page 3/5. Electrical data is based on 1RN1 (IC81W) with cooling water 38 °C. Other cooling types on request.

Motor type
(repeated)

Partial load data for square-law torque drive

 P/P_{rated} 155 (F) = 75 % P/P_{rated} 155 (F) = 50 % P/P_{rated} 155 (F) = 25 % P n η $\cos \varphi$ P n η $\cos \varphi$ P n η $\cos \varphi$

kW

rpm

%

[-]

kW

rpm

%

[-]

kW

rpm

%

[-]

Square-law torque drive

4-pole

1RN1452-4MQ0.	1125	1345	95.4	0.89	750	1175	95.4	0.86	375	932	94.9	0.77
1RN1452-4MV0.	1200	1342	95.4	0.89	800	1173	95.3	0.87	400	931	94.9	0.79
1RN1456-4MQ0.	1350	1346	95.7	0.88	900	1176	95.6	0.86	450	934	95.0	0.75
1RN1500-4MQ0.	1500	1349	95.6	0.88	1000	1178	95.5	0.87	500	935	95.2	0.79
1RN1502-4MQ0.	1680	1349	95.7	0.89	1120	1179	95.6	0.88	560	935	95.3	0.80
1RN1504-4MQ0.	1875	1350	96.0	0.88	1250	1180	95.9	0.86	625	936	95.5	0.79

6-pole

1RN1500-6MQ0.	1125	902	96.0	0.84	750	788	95.9	0.80	375	625	95.2	0.68
1RN1500-6MV0.	1200	901	96.0	0.84	800	787	95.9	0.81	400	625	95.3	0.70
1RN1502-6MQ0.	1350	901	96.1	0.85	900	787	96.0	0.82	450	625	95.5	0.71
1RN1504-6MQ0.	1500	902	96.2	0.84	1000	788	96.1	0.81	500	625	95.5	0.71
1RN1506-6MQ0.	1680	901	96.4	0.87	1120	787	96.3	0.85	560	624	95.9	0.77
1RN1560-6MR0.	1875	901	96.4	0.85	1250	787	96.3	0.82	625	625	95.8	0.73
1RN1562-6MR0.	2100	902	96.5	0.83	1400	788	96.3	0.80	700	625	95.6	0.67
1RN1562-6MS0.	2250	901	96.5	0.84	1500	787	96.3	0.81	750	625	95.7	0.69
1RN1564-6MR0.	2363	901	96.6	0.85	1575	787	96.4	0.82	788	625	95.8	0.70
1RN1566-6MR0.	2625	901	96.6	0.85	1750	787	96.5	0.82	875	625	95.9	0.70

8-pole

1RN1566-8MR0.	1875	675	96.4	0.83	1250	590	96.2	0.79	625	468	95.6	0.67
1RN1630-8MR0.	2100	676	96.5	0.78	1400	591	96.2	0.74	700	469	95.4	0.60
1RN1632-8MR0.	2363	676	96.5	0.81	1575	590	96.3	0.77	788	469	95.6	0.64
1RN1632-8MS0.	2625	675	96.6	0.79	1750	590	96.4	0.76	875	468	95.7	0.64

Marine versions

Selection and ordering data

Selection and ordering data

Rated power P_{rated} 155 (F) kW	Article No.	Operating data for 1RN1 at rated output for utilization 155 (F)								
		Rated speed	Efficiency	Power factor	Rated current at 675 V	Rated torque	Break-down torque	Cooling water flow rate	Moment of inertia	Mechanical speed limit
		n_{rated} rpm	η %	$\cos \varphi$ [-]	I_{rated} A	T_{rated} Nm	T_B/T_{rated} [-]	38 °C m ³ /h	J kgm ²	n_{max} rpm
675 V, 60 Hz										
4-pole, 1800 rpm										
1500	1RN1450-4MQ1 ■	1778	95.1	0.90	2 x 750	8055	2.6	11	19.0	1910
1600	1RN1450-4MV1 ■	1776	95.1	0.90	2 x 800	8604	2.4	11	19.0	1910
1800	1RN1452-4MQ1 ■	1778	95.4	0.90	2 x 900	9667	2.6	11	21.0	1910
2000	1RN1456-4MQ1 ■	1780	95.5	0.90	2 x 990	10728	3.0	11	25.0	1910
2240	1RN1500-4MQ1 ■	1783	95.2	0.89	2 x 1125	11996	2.3	14	38.8	1800
2500	1RN1502-4MQ1 ■	1786	95.6	0.89	2 x 1250	13371	2.6	14	42.9	1800
6-pole, 1200 rpm										
1500	1RN1454-6MQ1 ■	1190	96.0	0.86	2 x 780	12037	2.5	11	35.0	1910
1600	1RN1456-6MQ1 ■	1191	96.0	0.86	2 x 830	12835	2.5	11	38.0	1910
1800	1RN1500-6MQ1 ■	1192	96.0	0.86	2 x 930	14419	2.4	14	55.2	1200
2000	1RN1500-6MV1 ■	1191	96.1	0.86	2 x 1025	16034	2.2	14	55.2	1200
2240	1RN1502-6MQ1 ■	1192	96.3	0.86	2 x 1150	17952	2.3	14	61.5	1200
2500	1RN1504-6MQ1 ■	1193	96.5	0.84	3 x 884	20009	2.7	14	68.2	1200
2800	1RN1560-6MR1 ■	1193	96.4	0.86	3 x 967	22420	2.6	23	124.6	1200
3150	1RN1560-6MS1 ■	1191	96.4	0.87	3 x 1067	25252	2.3	23	124.6	1200
3500	1RN1562-6MR1 ■	1189	96.4	0.87	3 x 1184	28102	2.0	23	129.0	1200
8-pole, 900 rpm										
2500	1RN1562-8MR1 ■	893	96.4	0.84	4 x 663	26739	2.1	23	129.0	1200
2800	1RN1566-8MR1 ■	894	96.5	0.84	4 x 738	29924	2.3	23	152.6	1200
3000	1RN1566-8MS1 ■	893	96.5	0.84	4 x 788	32086	2.2	23	152.6	1200
3150	1RN1630-8MR1 ■	894	96.5	0.82	4 x 850	33638	2.3	23	205.7	1200
3500	1RN1632-8MR1 ■	894	96.5	0.82	4 x 950	37371	2.2	23	220.6	1200
		Type of construction								
		■ See page 1/10								

Note:

Ratings are defined for sinusoidal supply, based on IEC 60034-2-1:2007. The ratings for converter operation depend on the converter and its settings and cannot be predetermined.

I_{rated} : total rated current

For number of terminal boxes please refer to page 3/5. Electrical data is based on 1RN1 (IC81W) with cooling water 38 °C. Other cooling types on request.

Motor type
(repeated)

Partial load data for square-law torque drive

 P/P_{rated} 155 (F) = 75 % P/P_{rated} 155 (F) = 50 % P/P_{rated} 155 (F) = 25 % P n η $\cos \varphi$ P n η $\cos \varphi$ P n η $\cos \varphi$

kW

rpm

%

[-]

kW

rpm

%

[-]

kW

rpm

%

[-]

Square-law torque drive

4-pole

1RN1450-4MQ1.	1125	1616	95.2	0.89	750	1412	95.1	0.88	375	1120	94.6	0.81
1RN1450-4MV1.	1200	1614	95.1	0.89	800	1410	95.1	0.88	400	1119	94.7	0.82
1RN1452-4MQ1.	1350	1616	95.4	0.89	900	1411	95.3	0.87	450	1120	94.9	0.80
1RN1456-4MQ1.	1500	1618	95.6	0.90	1000	1413	95.3	0.87	500	1122	94.8	0.80
1RN1500-4MQ1.	1680	1620	95.2	0.89	1120	1415	95.1	0.88	560	1123	94.7	0.84
1RN1502-4MQ1.	1875	1622	95.6	0.89	1250	1417	95.4	0.88	625	1125	94.9	0.81

6-pole

1RN1454-6MQ1.	1125	1081	96.0	0.85	750	945	95.8	0.81	375	750	95.1	0.71
1RN1456-6MQ1.	1200	1082	96.0	0.85	800	945	95.8	0.81	400	750	95.1	0.70
1RN1500-6MQ1.	1350	1083	96.0	0.85	900	946	95.9	0.82	450	751	95.3	0.72
1RN1500-6MV1.	1500	1082	96.1	0.85	1000	945	96.0	0.83	500	750	95.5	0.74
1RN1502-6MQ1.	1680	1083	96.3	0.86	1120	946	96.2	0.83	560	751	95.6	0.73
1RN1504-6MQ1.	1875	1084	96.5	0.82	1250	947	96.2	0.77	625	752	95.6	0.64
1RN1560-6MR1.	2100	1084	96.4	0.85	1400	947	96.2	0.81	700	751	95.5	0.71
1RN1560-6MS1.	2363	1082	96.4	0.86	1575	946	96.3	0.83	788	750	95.7	0.74
1RN1562-6MR1.	2625	1081	96.4	0.87	1750	944	96.3	0.85	875	749	95.9	0.78

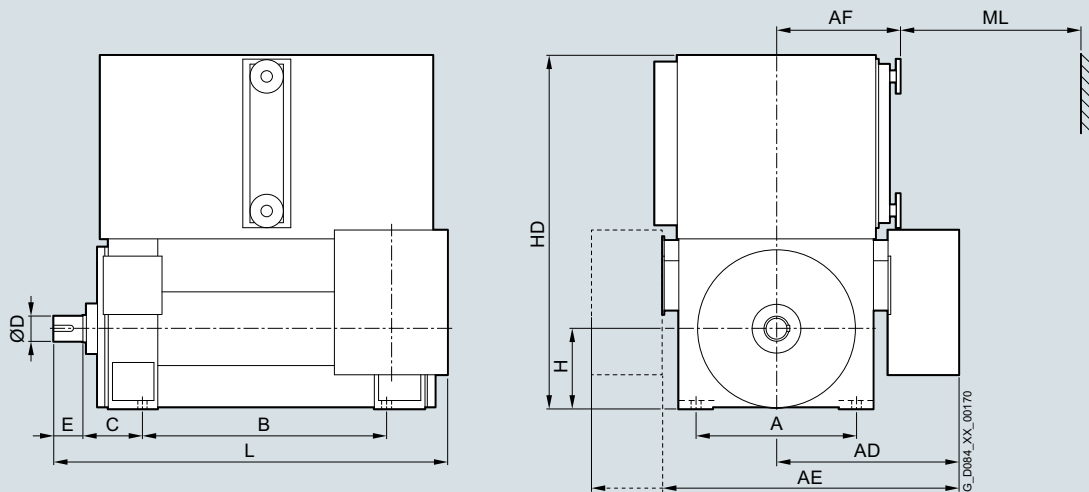
8-pole

1RN1562-8MR1.	1875	811	96.4	0.82	1250	709	96.2	0.78	625	562	95.5	0.66
1RN1566-8MR1.	2100	812	96.5	0.82	1400	709	96.3	0.78	700	563	95.6	0.66
1RN1566-8MS1.	2250	811	96.5	0.83	1500	709	96.3	0.79	750	562	95.7	0.68
1RN1630-8MR1.	2363	813	96.5	0.80	1575	710	96.2	0.75	788	563	95.4	0.63
1RN1632-8MR1.	2625	813	96.5	0.80	1750	710	96.2	0.75	875	563	95.4	0.63

Marine versions

Dimensional drawings

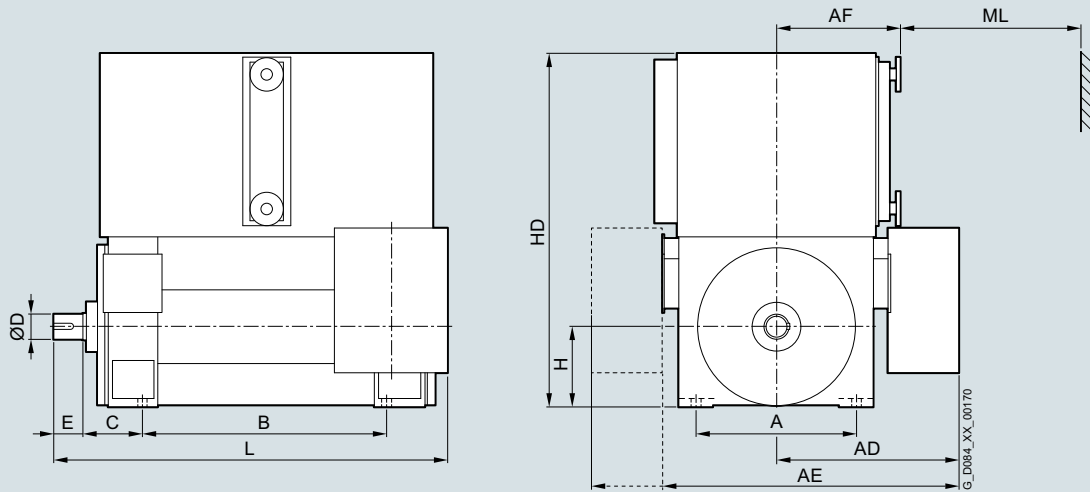
Dimensional drawings



Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	
675 V, 50 Hz, IM B3 type of construction, anti-friction bearings															
4-pole															
1RN1452-4	5000	890	950	1040	1650	1400	250	130	200	450	742	2040	2295	1480	
1RN1456-4	5500	1010	950	1040	1650	1400	250	130	200	450	742	2040	2295	1480	
1RN1500-4	6100	1184	1060	1115	1800	1500	280	150	200	500	820	2215	2445	1630	
1RN1502-4	6300	1264	1060	1115	1800	1500	280	150	200	500	820	2215	2445	1630	
1RN1504-4	6650	1354	1060	1115	1800	1500	280	150	200	500	820	2215	2445	1630	
6-pole															
1RN1500-6	6400	1436	1060	1115	1800	1500	280	160	240	500	820	2215	2485	1630	
1RN1502-6	6750	1546	1060	1115	1800	1500	280	160	240	500	820	2215	2485	1630	
1RN1504-6	7150	1676	1060	1115	1800	1500	280	160	240	500	820	2215	2485	1630	
1RN1506-6	7550	1816	1060	1115	1800	1500	280	160	240	500	820	2215	2485	1630	
1RN1560-6	9800	2430	1250	1270	2415	1700	315	190	280	560	910	2155	2685	1810	
1RN1562-6	9950	2514	1250	1270	2415	1700	315	190	280	560	910	2155	2685	1810	
1RN1564-6	10400	2673	1250	1270	2415	1700	315	190	280	560	910	2155	2685	1810	
1RN1566-6	10900	2851	1250	1270	2415	1700	315	190	280	560	910	2155	2685	1810	
8-pole															
1RN1566-8	11000	2851	1250	1270	2530	1700	315	190	280	560	910	2155	2685	1810	
1RN1630-8	13550	3173	1400	1370	2735	1900	315	220	280	630	1018	2355	2880	2020	
1RN1632-8	14000	3339	1400	1370	2735	1900	315	220	280	630	1018	2355	2880	2020	

3

Dimensional drawings (continued)

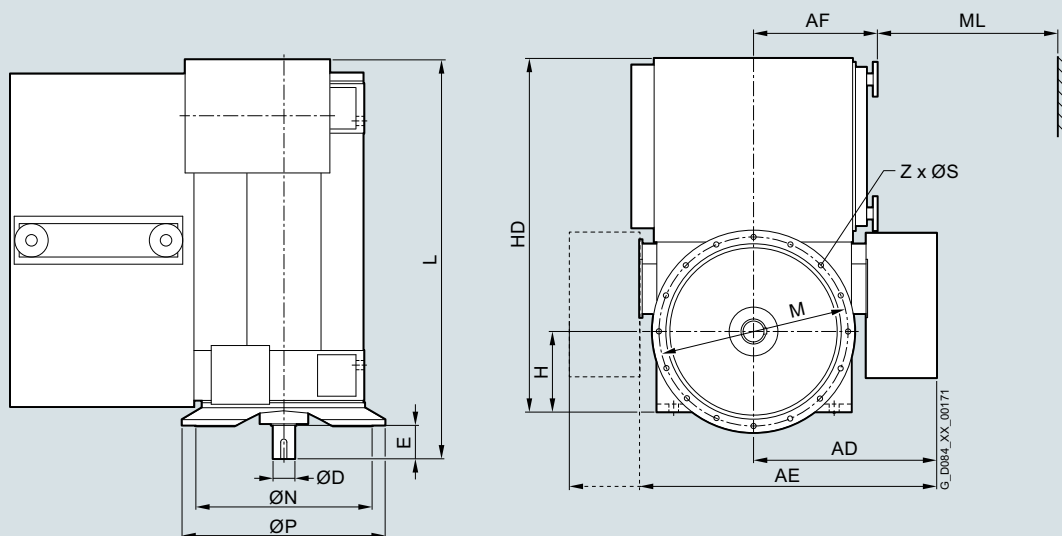


Motor type	Weight		Dimensions												
	Motor kg	Rotor kg	A mm	AD mm	AE mm	B mm	C mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	
675 V, 60 Hz, IM B3 type of construction, anti-friction bearings															
4-pole															
1RN1450-4	4800	820	950	1040	1650	1400	250	130	200	450	742	2040	2295	1480	
1RN1452-4	5000	890	950	1040	1650	1400	250	130	200	450	742	2040	2295	1480	
1RN1456-4	5500	1010	950	1040	1650	1400	250	130	200	450	742	2040	2295	1480	
1RN1500-4	6100	1184	1060	1115	1800	1500	280	150	200	500	820	2215	2445	1630	
1RN1502-4	6300	1264	1060	1115	1800	1500	280	150	200	500	820	2215	2445	1630	
6-pole															
1RN1454-6	5400	1129	950	1040	1650	1400	250	130	200	450	742	2040	2295	1480	
1RN1456-6	5550	1199	950	1040	1650	1400	250	130	200	450	742	2040	2295	1480	
1RN1500-6	6400	1436	1060	1115	1800	1500	280	160	240	500	820	2215	2485	1630	
1RN1502-6	6750	1546	1060	1115	1800	1500	280	160	240	500	820	2215	2485	1630	
1RN1504-6	7150	1676	1060	1115	2110	1500	280	160	240	500	820	2215	2485	1630	
1RN1560-6	9800	2430	1250	1270	2415	1700	315	190	280	560	910	2155	2685	1810	
1RN1562-6	9950	2514	1250	1270	2415	1700	315	190	280	560	910	2155	2685	1810	
8-pole															
1RN1562-8	10050	2514	1250	1270	2530	1700	315	190	280	560	910	2155	2685	1810	
1RN1566-8	11000	2851	1250	1270	2530	1700	315	190	280	560	910	2155	2685	1810	
1RN1630-8	13550	3173	1400	1370	2735	1900	315	220	280	630	1018	2355	2880	2020	
1RN1632-8	14000	3339	1400	1370	2735	1900	315	220	280	630	1018	2355	2880	2020	

Marine versions

Dimensional drawings

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm

675 V, 50 Hz, IM V1 type of construction, anti-friction bearings

4-pole

1RN1452-4	5200	895	1070	1710	130	200	450	742	2040	2295	1480	1080	1000	1150	26	8
1RN1456-4	5650	1015	1070	1710	130	200	450	742	2040	2295	1480	1080	1000	1150	26	8
1RN1500-4	6250	1184	1145	1860	150	200	500	820	2215	2445	1630	1180	1120	1250	26	16
1RN1502-4	6500	1264	1145	1860	150	200	500	820	2215	2445	1630	1180	1120	1250	26	16
1RN1504-4	6800	1354	1145	1860	150	200	500	820	2215	2445	1630	1180	1120	1250	26	16

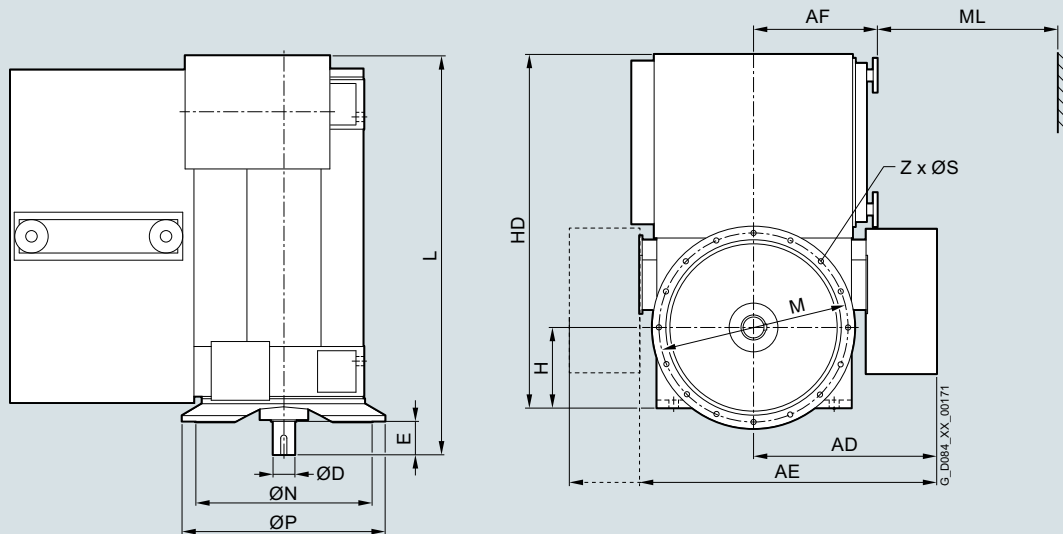
6-pole

1RN1500-6	6550	1437	1145	1860	160	240	500	820	2215	2485	1630	1180	1120	1250	26	16
1RN1502-6	6900	1547	1145	1860	160	240	500	820	2215	2485	1630	1180	1120	1250	26	16
1RN1504-6	7300	1677	1145	1860	160	240	500	820	2215	2485	1630	1180	1120	1250	26	16
1RN1506-6	7700	1817	1145	1860	160	240	500	820	2215	2485	1630	1180	1120	1250	26	16
1RN1560-6	10000	2421	1270	2415	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
1RN1562-6	10150	2505	1270	2415	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
1RN1564-6	10600	2664	1270	2415	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
1RN1566-6	11100	2842	1270	2415	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16

8-pole

1RN1566-8	11200	2842	1270	2530	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
1RN1630-8	13850	3175	1370	2735	220	280	630	1018	2355	2880	2020	1320	1250	1400	26	16
1RN1632-8	14350	3341	1370	2735	220	280	630	1018	2355	2880	2020	1320	1250	1400	26	16

Dimensional drawings (continued)



Motor type	Weight		Dimensions													
	Motor kg	Rotor kg	AD mm	AE mm	D mm	E mm	H mm	AF mm	HD mm	L mm	ML mm	M mm	N mm	P mm	S mm	Z mm
675 V, 60 Hz, IM V1 type of construction, anti-friction bearings																
4-pole																
1RN1450-4	4950	825	1070	1710	130	200	450	742	2040	2295	1480	1080	1000	1150	26	8
1RN1452-4	5200	895	1070	1710	130	200	450	742	2040	2295	1480	1080	1000	1150	26	8
1RN1456-4	5650	1015	1070	1710	130	200	450	742	2040	2295	1480	1080	1000	1150	26	8
1RN1500-4	6250	1184	1145	1860	150	200	500	820	2215	2445	1630	1180	1120	1250	26	16
1RN1502-4	6500	1264	1145	1860	150	200	500	820	2215	2445	1630	1180	1120	1250	26	16
6-pole																
1RN1454-6	5550	1134	1070	1710	130	200	450	742	2040	2295	1480	1080	1000	1150	26	8
1RN1456-6	5700	1204	1070	1710	130	200	450	742	2040	2295	1480	1080	1000	1150	26	8
1RN1500-6	6550	1437	1145	1860	160	240	500	820	2215	2485	1630	1180	1120	1250	26	16
1RN1502-6	6900	1547	1145	1860	160	240	500	820	2215	2485	1630	1180	1120	1250	26	16
1RN1504-6	7300	1677	1145	2170	160	240	500	820	2215	2485	1630	1180	1120	1250	26	16
1RN1560-6	10000	2421	1270	2415	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
1RN1562-6	10150	2505	1270	2415	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
8-pole																
1RN1562-8	10250	2505	1270	2530	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
1RN1566-8	11200	2842	1270	2530	190	280	560	910	2155	2685	1810	1320	1250	1400	26	16
1RN1630-8	13850	3175	1370	2735	220	280	630	1018	2355	2880	2020	1320	1250	1400	26	16
1RN1632-8	14350	3341	1370	2735	220	280	630	1018	2355	2880	2020	1320	1250	1400	26	16

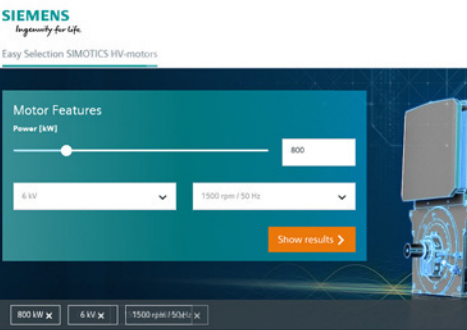
Marine versions

Dimensional drawings

Notes

3

Selection and configuration tools



SIMOTICS HV A-compact PLUS	
Type of construction	IM B3 (IM1001)
Ex-protection	Safe area
Coating	Water
Type of cooling	IC 81W
Protection	IP55
▼ more	

SIMOTICS HV A-compact PLUS	
Type of construction	IM B3 (IM1001)
Ex-protection	Safe area
Coating	Air
Type of cooling	IC 611
Protection	IP55
▼ more	

SIMOTICS H	
Type of construction	
Ex-protection	
Coating	
Type of cooling	
Protection	
▼ more	

4/2
4/2

Easy Selection SIMOTICS HV motors
Drive Technology Configurator

Selection and configuration tools

Overview

Easy Selection SIMOTICS HV motors

The Easy Selection SIMOTICS HV motors provides a fast and easy motor selection in an early quotation phase. Based on the key search criteria, power, number of poles and voltage, the tool provides the required motor types in a simple comparison view.

For each selection result, technical data sheets, drawings and price information are available.

Drive Technology Configurator

The Drive Technology Configurator supports when configuring the optimum drive technology products for the specific application. With or without detailed product knowledge, based on detailed search criteria the tool helps to find the right product and allows a detailed configuration of all available options.

In addition to all this, comprehensive documentation comprising technical data sheets, 2D dimensional drawings and 3D models, certificates, etc. can be selected.

Access to selection and configuration tools

- Easy Selection SIMOTICS HV motors:
www.siemens.com/hv-easy
- Drive Technology Configurator:
www.siemens.com/dt-configurator

Service & Support



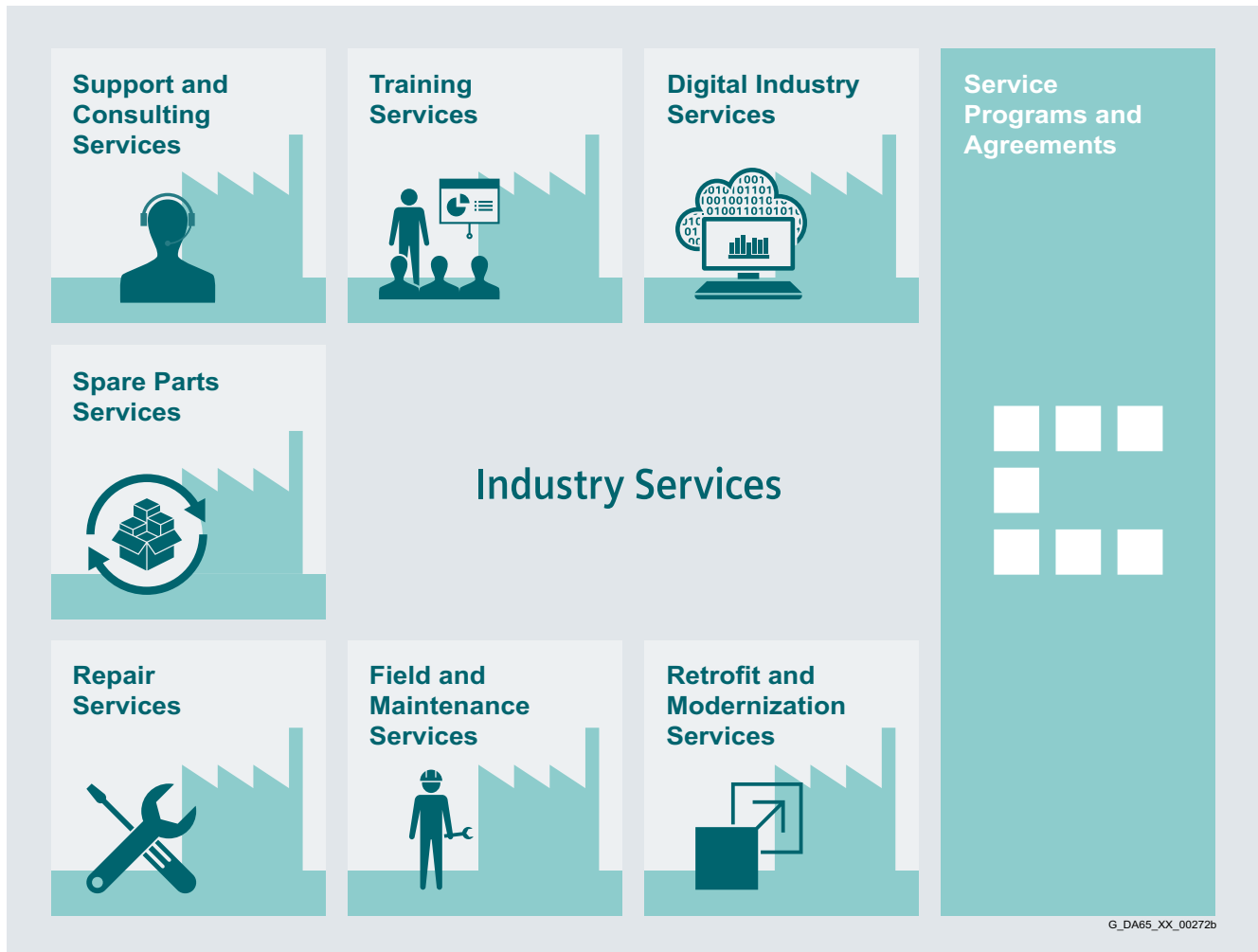
5/2

Industry Services

Service & Support

Industry Services

Overview



Keep your business running and shaping your digital future – with Industry Services

Optimizing the productivity of your equipment and operations can be a challenge, especially with constantly changing market conditions. Working with our service experts makes it easier. We understand your industry's unique processes and provide the services needed so that you can better achieve your business goals.

You can count on us to maximize your uptime and minimize your downtime, increasing your operations' productivity and reliability. When your operations have to be changed quickly to meet a new demand or business opportunity, our services give you the flexibility to adapt. Of course, we take care that your production is protected against cyber threats. We assist in keeping your operations as energy and resource efficient as possible and reducing your total cost of ownership. As a trendsetter, we ensure that you can capitalize on the opportunities of digitalization and by applying data analytics to enhance decision making: You can be sure that your plant reaches its full potential and retains this over the longer lifespan.

You can rely on our highly dedicated team of engineers, technicians and specialists to deliver the services you need – safely, professionally and in compliance with all regulations. We are there for you, where you need us, when you need us.

www.siemens.com/ida-service

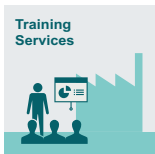
Overview

**Digital Industry Services**

Digital Industry Services make your industrial processes transparent to gain improvements in productivity, asset availability, and energy efficiency.

Production data is generated, filtered and translated with intelligent analytics to enhance decision-making.

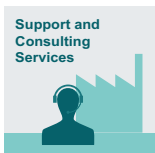
This is done whilst taking data security into consideration and with continuous protection against cyber-attack threats.

**Training Services**

From the basics and advanced to specialist skills, SITRAIN courses provide expertise right from the manufacturer – and encompass the entire spectrum of Siemens products and systems for the industry.

SITRAIN courses for medium-voltage converters are offered at various locations.

www.siemens.com/sitrain

**Support and Consulting Services**

Industry Online Support site for comprehensive information, application examples, FAQs and support requests.

Technical and Engineering Support for advice and answers for all inquiries about functionality, handling, and fault clearance.

**Spare Parts**

Spare Parts Services are available worldwide for smooth and fast supply of spare parts – and thus optimal plant availability. Genuine spare parts are available for up to ten years. Logistic experts take care of procurement, transport, custom clearance, storage and order management. Reliable logistics processes ensure that components reach their destination as needed.

Since not all spare parts can be kept in stock at all times, Siemens offers a preventive measure for spare parts provisioning on the customer's premises with optimized **Spare Parts Packages** for individual products, custom-assembled drive components and entire integrated drive trains – including risk consulting.

Asset Optimization Services help you design a strategy for parts supply where your investment and carrying costs are reduced and the risk of obsolescence is avoided.

Asset Optimization Services help you design a strategy for parts supply where your investment and carrying costs are reduced and the risk of obsolescence is avoided.

**Repair Services**

Repair Services are offered on-site and in regional repair centers for fast restoration of faulty devices' functionality.

Also available are extended repair services, which include additional diagnostic and repair measures, as well as emergency services.

**Field and Maintenance Services**

Siemens specialists are available globally to provide expert field and maintenance services, including commissioning, functional testing, preventive maintenance and fault clearance.

All services can be included in customized service agreements with defined reaction times or fixed maintenance intervals.

**Retrofit and Modernization Services**

Provide a cost-effective solution for the expansion of entire plants, optimization of systems or upgrading existing products to the latest technology and software, e.g. migration services for automation systems.

Service experts support projects from planning through commissioning and, if desired over the entire extended lifespan, e.g. Retrofit for Integrated Drive Systems for an extended lifetime of your machines and plants.

**Service Programs and Agreements**

A technical Service Program or Agreement enables you to easily bundle a wide range of services into a single annual or multi-year agreement.

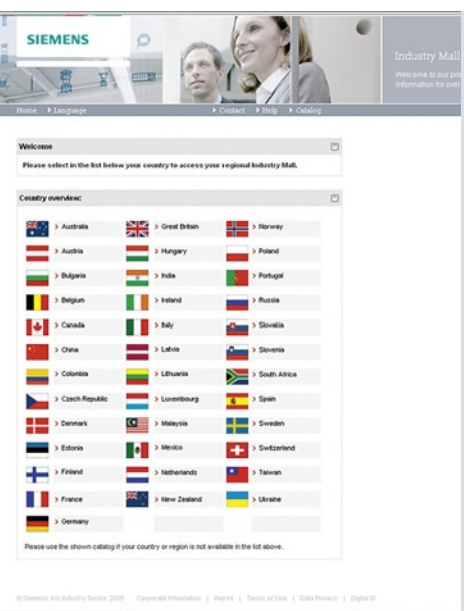
You pick the services you need to match your unique requirements or fill gaps in your organization's maintenance capabilities.

Programs and agreements can be customized as KPI-based and/or performance-based contracts.

Service & Support
Industry Services

Notes

Appendix



6/2

Partner

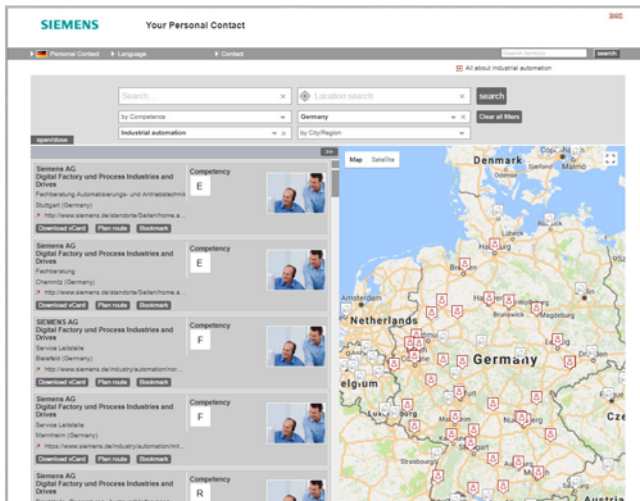
6/3

Conditions of sale and delivery

Appendix

Partner

Partner at Siemens



At your service locally, around the globe for consulting, sales, training, service, support, spare parts on the entire portfolio of Digital Industries.

Your partner can be found in our Personal Contacts Database at: www.siemens.com/automation-contact

You start by selecting

- the required competence,
- products and branches,
- a country and a city

or by a

- location search or free text search.

1. General Provisions

By using this catalog you can purchase products (hardware, software and services) described therein from Siemens Aktiengesellschaft subject to the following Terms and Conditions of Sale and Delivery (hereinafter referred to as "T&C"). Please note that the scope, the quality and the conditions for supplies and services, including software products, by any Siemens entity having a registered office outside Germany, shall be subject exclusively to the General Terms and Conditions of the respective Siemens entity. The following T&C apply exclusively for orders placed with Siemens Aktiengesellschaft, Germany.

1.1 For customers with a seat or registered office in Germany

For customers with a seat or registered office in Germany, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for installation work the "General Conditions for Erection Works – Germany"¹⁾ ("Allgemeine Montagebedingungen – Deutschland" (currently only available in German)) and/or
- for stand-alone software products and software products forming a part of a product or project, the "General License Conditions for Software Products for Automation and Drives for Customers with a Seat or registered Office in Germany"¹⁾ and/or
- for consulting services the "General Terms and Conditions for Consulting Services of the Division DF – Germany"¹⁾ and/or
- for other supplies and/or services the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"¹⁾.

In case such supplies and/or services should contain Open Source Software, the conditions of which shall prevail over the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry"¹⁾, a notice will be contained in the scope of delivery in which the applicable conditions for Open Source Software are specified. This shall apply mutatis mutandis for notices referring to other third party software components.

1.2 For customers with a seat or registered office outside Germany

For customers with a seat or registered office outside Germany, the following terms and conditions apply subordinate to T&C:

- for products, which include specific terms and conditions in the description text, these specific terms and conditions shall apply and subordinate thereto,
- for services the "International Terms & Conditions for Services"¹⁾ supplemented by "Software Licensing Conditions"¹⁾ and/or
- for consulting services the "General Terms and Conditions for Consulting Services of the Division DF – Germany"¹⁾ and/or
- for other supplies of hard- and software the "International Terms & Conditions for Products"¹⁾ supplemented by "Software Licensing Conditions"¹⁾

1.3 For customers with master or framework agreement

To the extent our supplies and/or services offered are covered by an existing master or framework agreement, the terms and conditions of that agreement shall apply instead of T&C.

2. Prices

The prices are in € (Euro) ex point of delivery, exclusive of packaging.

The sales tax (value added tax) is not included in the prices. It shall be charged separately at the respective rate according to the applicable statutory legal regulations.

Prices are subject to change without prior notice. We will charge the prices valid at the time of delivery.

To compensate for variations in the price of raw materials (e.g. silver, copper, aluminum, lead, gold, dysprosium and neodym), surcharges are calculated on a daily basis using the so-called metal factor for products containing these raw materials. A surcharge for the respective raw material is calculated as a supplement to the price of a product if the basic official price of the raw material in question is exceeded.

The metal factor of a product indicates the basic official price (for those raw materials concerned) as of which the surcharges on the price of the product are applied, and with what method of calculation.

An exact explanation of the metal factor can be downloaded at:

www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

To calculate the surcharge (except in the cases of dysprosium and neodym), the official price from the day prior to that on which the order was received or the release order was effected is used.

To calculate the surcharge applicable to dysprosium and neodym ("rare earths"), the corresponding three-month basic average price in the quarter prior to that in which the order was received or the release order was effected is used with a one-month buffer (details on the calculation can be found in the explanation of the metal factor).

3. Additional Terms and Conditions

The dimensions are in mm. In Germany, according to the German law on units in measuring technology, data in inches apply only to devices for export.

Illustrations are not binding.

Insofar as there are no remarks on the individual pages of this catalog – especially with regard to data, dimensions and weights given – these are subject to change without prior notice.

¹⁾ The text of the Terms and Conditions of Siemens AG can be downloaded at www.siemens.com/automation/salesmaterial-as/catalog/en/terms_of_trade_en.pdf

Appendix

Conditions of sale and delivery

4. Export Regulations

We shall not be obligated to fulfill any agreement if such fulfillment is prevented by any impediments arising out of national or international foreign trade or customs requirements or any embargoes and/or other sanctions.

Export may be subject to license. We shall indicate in the delivery details whether licenses are required under German, European and US export lists.

Our products are controlled by the U.S. Government (when labeled with "ECCN" unequal "N") and authorized for export only to the country of ultimate destination for use by the ultimate consignee or end-user(s) herein identified. They may not be resold, transferred, or otherwise disposed of, to any other country or to any person other than the authorized ultimate consignee or end-user(s), either in their original form or after being incorporated into other items, without first obtaining approval from the U.S. Government or as otherwise authorized by U.S. law and regulations.

The export indications can be viewed in advance in the description of the respective goods on the Industry Mall, our online catalog system. Only the export labels "AL" and "ECCN" indicated on order confirmations, delivery notes and invoices are authoritative.

Products labeled with "AL" unequal "N" are subject to European / national export authorization. Products without label, with label "AL:N" / "ECCN:N", or label "AL:9X9999" / "ECCN: 9X9999" may require authorization from responsible authorities depending on the final end-use, or the destination.

If you transfer goods (hardware and/or software and/or technology as well as corresponding documentation, regardless of the mode of provision) delivered by us or works and services (including all kinds of technical support) performed by us to a third party worldwide, you must comply with all applicable national and international (re-)export control regulations.

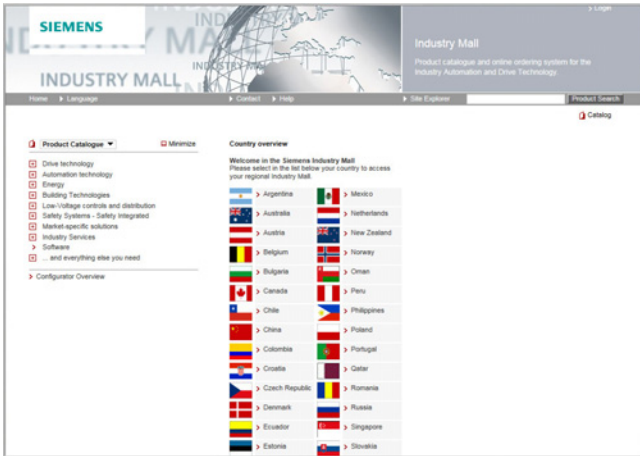
If required for the purpose of conducting export control checks, you (upon request by us) shall promptly provide us with all information pertaining to the particular end customer, final disposition and intended use of goods delivered by us respectively works and services provided by us, as well as to any export control restrictions existing in this relation.

The products listed in this catalog may be subject to European/German and/or US export regulations. Any export requiring approval is therefore subject to authorization by the relevant authorities.

Errors excepted and subject to change without prior notice.

Selection and ordering at Siemens Industry Mall, Catalog CA 01, downloading and ordering catalogs

Easy product selection and ordering: Industry Mall and Interactive Catalog CA 01



Industry Mall

The Industry Mall is a Siemens AG Internet ordering platform. It provides you with online access to a comprehensive product spectrum that is presented in an informative, well-organized way.

Powerful search functions help you select the required products, while configurators enable you to configure complex product and system components quickly and easily. CAx data are also available for you to use.

Data transfer allows the entire procedure, from selection through ordering to tracking and tracing, to be carried out online. Availability checks, individual customer discounting, and quotation preparation are also possible.

www.siemens.com/industrymall



Interactive Catalog CA 01 – Products for automation and drives

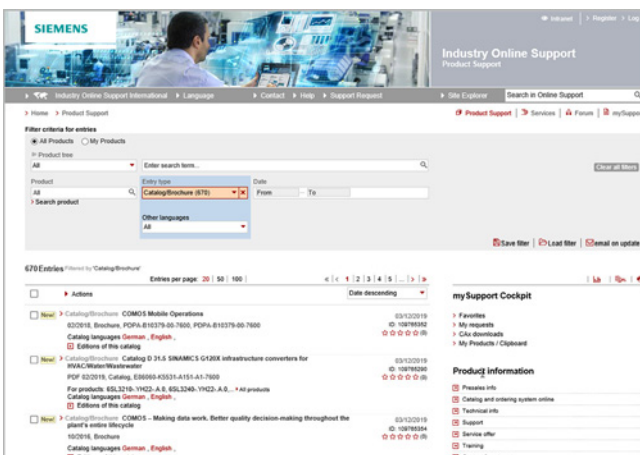
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Produced in Germany
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All product designations may be trademarks or product names of Siemens AG or other companies whose use by third parties for their own purposes could violate the rights of the owners.

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks.

In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept.

Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place.

For additional information on industrial security measures that may be implemented, please visit

<https://www.siemens.com/industrialsecurity>

Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats.

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