

Low-Voltage Motors N-compact **Standardline** Operation on supply system

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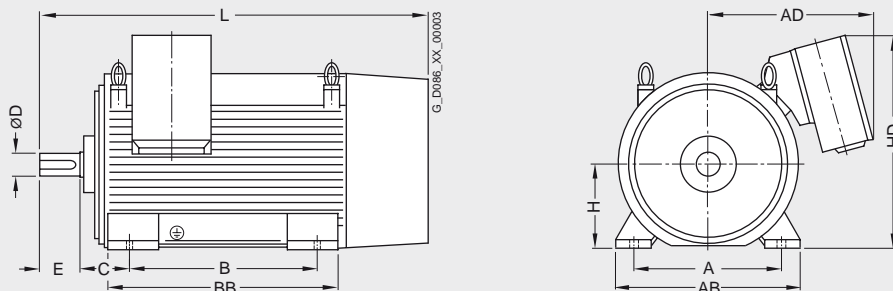
Options

Option description	Order code	Comment
Standardline design	B20	Always state
Motor temperature sensing by KTY 84-130 temperature sensor	A23	
Motor temperature sensing by 6 PT100 resistance thermometers	A61	In basic circuit
2 screw-in PT100 resistance thermometers in basic circuit for rolling-contact bearings	A72	
Measuring nipple for SPM shock pulse measurement for bearing inspection	G50	
Connection box on RHS (view onto DE)	K09	Standard
Connection box on LHS (view onto DE)	K10	
Anti-condensation heating for 230 V	K45	
Anti-condensation heating for 115 V	K46	
Cable entry, maximum configuration	K57	
Rotation of the connection box through 90°, entry from DE	K83	
Rotation of the connection box through 90°, entry from NDE	K84	
Rotation of the connection box through 180°	K85	
Next larger connection box 1XB1 631	L00	
Auxiliary connection box 1XB3 020	L97	
Auxiliary connection box 1XB9 014	M88	
Next larger connection box 1XB1 621 with shaft height 315	M58	The next larger size of connection box is recommended when cables with cross sections >185 mm ² are installed for motors with shaft height 315.
Standard paint finish in a color different from RAL 7030	Y53	Plain text required

Dimensional drawings

Design:

Type IM B3, rolling-contact bearing, degree of protection IP55, cooling method IC 441



Type	Weight approx. kg	A mm	AB mm	AD mm	B mm	BB mm	C mm	H mm	HD mm	L mm	D mm	E mm
4-pole												
1LA8315-4AB.0	1300	560	680	570	630	780	180	315	825	1410	85	170
1LA8317-4AB.0	1500	560	680	570	630	780	180	315	825	1410	85	170
1LA8353-4AB.0	1900	630	780	710	800	980	200	355	905	1635	95	170
1LA8355-4AB.0	2000	630	780	710	800	980	200	355	905	1635	95	170
1LA8357-4AB.0	2200	630	780	840	800	980	200	355	945	1635	95	170

For further information see Catalog D 81.1
(Order No. E86060-K5581-A111-A1-7600).

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More information

Power cables

As specified in the table below, parallel feeders are required to connect the motors (see also Catalog D 81.1, Part 1 "Motor connection and connection boxes", "Parallel feeders"):

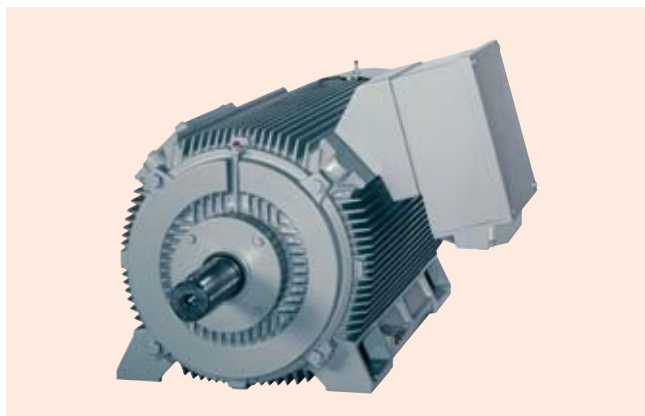
Voltage	1LA8 . . .				
	315	317	353	355	357
400 V	•	•	•	•	•
500 V			•	•	

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Low-Voltage Motors N-compact Standardline

Operation on supply system

Overview



The N-compact series sets the modern worldwide standard for large three-phase low-voltage motors. Many details of the motors' design make them durable and so robust that they are always capable of withstanding extreme stresses.

In terms of technical design, the N-compact Standardline series is identical to the familiar 1LA8 N-compact motors which are described in Catalog D 81.1 (Order No. E86060-K5581-A111-A1-7600).

Standardline is intentionally designed to focus the N-compact series on meeting the requirements of drives for pumps, fans and compressors:

- Power range 250 to 500 kW
- Supply voltages 400 V, 500 V and 690 V at a frequency of 50 Hz
- 4-pole
- Type of construction IM B3

Benefits

Standardization has made it possible to further optimize order handling and production processes.

Benefits to the customer:

- Significant reduction in delivery time to only 4 weeks
- State-of-the-art technology and quality which is already in use worldwide

Technical specifications

Further information about general technical data and the design and construction of the N-compact motor series can be found in Catalog D 81.1 (Order No. E86060-K5581-A111-A1-7600) and in the electronic Catalog CA 01 on CD-ROM (Order No. E86060-D4001-A110-C5-7600).

Selection and Ordering Data

Type IM B3, degree of protection IP55, temperature class F, utilization in accordance with temperature class B

Rated power kW	Order No. + order codes for further options	Operating values at rated output						Starting torque with direct starting torque	Starting current as multiple of rated current	Stalling torque	Torque class CL	Moment of inertia J kgm ²
		Rated speed rpm	Efficiency η with 4/4 load %	3/4 load %	Power factor $\cos \varphi$	Rated current at 400 V A	Rated torque Nm					
3AC 400 V, 50 Hz												
1500 rpm, 4-pole												
250	1LA8315-4AB 0-Z + B20	1488	96.0	96.0	0.88	425	1600	1.9	6.5	2.8	13	3.6
315	1LA8317-4AB 0-Z + B20	1488	96.3	96.3	0.88	540	2020	2.0	6.8	2.8	13	4.4
355	1LA8353-4AB 0-Z + B20	1488	96.3	96.3	0.87	610	2280	2.1	6.5	2.6	13	6.1
400	1LA8355-4AB 0-Z + B20	1488	96.4	96.4	0.87	690	2570	2.1	6.5	2.6	13	6.8
500	1LA8357-4AB 0-Z + B20	1488	96.8	96.8	0.88	850	3210	2.1	6.5	2.4	13	8.5
Voltage distinctive number:												
400 V Δ /690 V Υ — 6												
500 V Δ — 5												

Ordering example:

Low-voltage motor
N-compact Standardline basic version
400 V Δ , 50 Hz, 1500 rpm, 4-pole, 355 kW
with option K45: Anti-condensation heating for 230 V

**1LA8353-4AB60-Z
+B20+K45**