

Squirrel-cage motors

1MJ · EEx de IIC type of protection

Order codes for special designs

Additional order suffix –Z with order code	Special designs	Motor type – Size			
		1MJ6	1MJ7	1MJ8	1MJ1

Motor protection

A11	Motor protection with PTC thermistor and 3 embedded temperature sensors for shutdown ¹⁾	71 – 200 ●	225 – 315	315 – 355	355 – 450
A12	Motor protection with PTC thermistor and 6 embedded temperature sensors for alarm and shutdown ¹⁾	71 – 200 ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲
A15	Motor protection with PTC thermistor for converter-fed operation with 3 embedded temperature sensors for shutdown ¹⁾	71 – 200 ●	225 – 315	315 – 355	355 – 450
A16	Motor protection with PTC thermistor for converter-fed operation with 6 embedded temperature sensors for alarm and shutdown ¹⁾	71 – 200 ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲

● Anti-condensation heating (order codes K45, K46) up to size 160 L not possible additionally.

▲ Anti-condensation heating (order codes K45, K46) not possible additionally. Exception: 1MJ7 31 .

Paint finish

K26	Special paintwork in RAL 7030 stone grey	Standard design (without order code)	225 – 315	315 – 355	355 – 450
M16	Special paintwork in RAL 1002 sand yellow	71 – 200	225 – 315 With order code Y54 and special paintwork RAL	315 – 355 With order code Y54 and special paintwork RAL	355 – 450 With order code Y54 and special paintwork RAL
M17	Special paintwork in RAL 1013 pearl white				
M18	Special paintwork in RAL 3000 flame red				
K27	Special paintwork in RAL 6011 mignonette green				
M19	Special paintwork in RAL 6021 pale green				
M20	Special paintwork in RAL 7001 silver grey				
K28	Special paintwork in RAL 7031 bluish grey				
L42	Special paintwork in RAL 7032 pebble grey				
M21	Special paintwork in RAL 7035 light grey				
M22	Special paintwork in RAL 9001 cream				
M23	Special paintwork in RAL 9002 grey white				
L43	Special paintwork in RAL 9005 jet black				
Y54 ● And special paintwork RAL....	Special paintwork in other colors: RAL 1015, 1019, 2003, 2004, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6019, 7000, 7004, 7011, 7016, 7022, 7033	71 – 200	225 – 315	315 – 355	355 – 450
Y53 ● And standard paintwork RAL....	Standard paintwork in other colors	–	225 – 315	315 – 355	355 – 450
K23	Unpainted (only cast iron parts primed)	71 – 200	225 – 315	315 – 355	355 – 450
K24	Unpainted, only primed	71 – 200	–	–	–

● Additional plain text required.

1) For appropriate certified 3RN1 tripping unit, see Catalog LV 10.

RAL No.	Name of color	RAL No.	Name of color
1015	Light ivory	5017	Traffic blue
1019	Grey beige	5018	Turquoise blue
2003	Pastel orange	5019	Capri blue
2004	Pure orange	6019	Pastel green
3007	Wine red	7000	Squirrel grey
5007	Black blue	7004	Signal grey
5009	Azure blue	7011	Iron grey
5010	Gentian blue	7016	Anthracite grey
5012	Light blue	7022	Umbra grey
5015	Sky blue	7033	Cement grey

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Mechanical design

K09	Terminal box on RHS (view onto drive end)	90 – 200	225 – 315	315 – 355	355 – 450
K10	Terminal box on LHS (view onto drive end)	90 – 200	225 – 315	315 – 355	355 – 450
K83	Rotation of terminal box by 90°, inserted from drive end	71 – 200	225 – 315	315 – 355	355 – 450
K84	Rotation of terminal box by 90°, inserted from non-drive end	71 – 200	225 – 315	315 – 355	355 – 450
K85	Rotation of terminal box by 180°	71 – 200	225 – 315	315 – 355	355 – 450
G50	Measuring nipples for SPM shock pulse measurement for bearing monitoring	180 – 200	225 – 315	315 – 355	355 – 450
K15	With cast-iron terminal box	71 – 200	225	–	–
K35	External metal fan	100 – 200	225 – 315	–	–
K52	Degree of protection IP56 (non-heavy-sea)	71 – 200	225 – 315	–	–
K53	Pressure-proof terminal box protection type EEx d IIC	71 – 160	225 – 315	315 – 355	355 – 450
K01	Vibrational severity grade R	71 – 200	225 – 315	315 – 355	355 – 450
K16	Second standard shaft end ¹⁾	71 – 200	225 – 315	315 – 355	355 – 450
K17	Radial sealing ring on drive end with flange types ²⁾	71 – 200	225 – 315	315 – 355	355 – 450
K20	Bearings for increased cantilever forces	180 – 200	225 – 250	–	–
		Vibrational severity grade R on request.			
K40	Regreasing device	180 – 200	225 – 250, Standard design from 280 and higher	Standard design	Standard design
L27	Insulated bearing cartridge	–	250 – 315	315 – 355	355 – 450
D01	CCC China Compulsory Certification	71 – 90 ³⁾	–	–	–
K30	VIK design ⁴⁾	71 – 200	225 – 315	315 – 355	355
K31	Extra rating plate, loose	71 – 200	225 – 315	315 – 355	355 – 450
Y82 ●	Extra rating plate	71 – 200	225 – 315	315 – 355	355 – 450
And order codes					
K37	Low noise version for 2-pole motors with clockwise rotation ⁵⁾	132 – 200	225 – 315	315 – 355	355 – 450
K38	Low noise version for 2-pole motors with anti-clockwise rotation ⁵⁾	132 – 200	225 – 315	315 – 355	355 – 450
K45	Anti-condensation heating for 230 V	71 – 200 ● ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲
K46	Anti-condensation heating for 115 V	71 – 200 ● ▲	225 – 315 ▲	315 – 355 ▲	355 – 450 ▲
L99	Wire-lattice pallet	71 – 160	–	–	–

● PTC thermistor (order codes A11, A15) up to size 160 L not available additionally.

▲ 6 PTC thermistors (order codes A12, A16) not available additionally. Exception: 1MJ7 31.

Certification

B02	Factory test certificate 2.3 acc. to EN 10 204	71 – 200	225 – 315	–	–
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Marine version – "Operation below deck" ⁶⁾ ⁷⁾

E00	Without certificate acc. to ABS 50 °C/CCS 45 °C/ RINA 45 °C Temperature class F used acc. to F	71 – 200	225 – 315	–	–
E11	Certified according to GL (Germanischer Lloyd) Germany, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 ⁸⁾	–	–
E21	Certified according to LRS (Lloyds Register of Shipping) Great Britain, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 ⁸⁾	–	–
E31	Certified according to BV (Bureau Veritas) France, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 ⁸⁾	–	–
E51	Certified according to DNV (Det Norske Veritas) Norway, CT 45 °C, Temperature class F used acc. to F	71 – 200	225 – 315 ⁸⁾	–	–

● Additional plain text required.

1) For 1MJ6/1MJ7 and vertical designs from frame size 180 M upwards available on request, low-noise version (2-pole) not possible.
Design with cover not available.

2) Not possible for size IM V 3, only for 4-pole to 8-pole motors for size 180 M upwards.

3) The following motors require a CCC certificate:
– 2-pole motors: ≤ 2.2 kW
– 4-pole motors: ≤ 1.1 kW
– 6-pole motors: ≤ 0.75 kW
– 8-pole motors: ≤ 0.55 kW

4) For 2-pole motors from size 315 S upwards, additional low-noise version is required. Order code K37 or K38.

5) The motors are up to 80 mm longer than normal. Second shaft end not possible.

6) Works test certificate 2.3 to EN 10 204 is also supplied (does not apply to Order Code **E00**). Individual acceptance test must be specified in plain text on ordering if required (price supplement).

7) For 1MJ motors of class F used acc. to class B, derating may be necessary.

8) The 1MJ7 motors do not have a type approval certificate (certificate only for individual acceptance test).