

# Squirrel-cage motors

## 1LA/1LG · Special designs

### Selection and ordering data · Order codes

Additional order suffix <b>-Z</b> with order code	Special designs	Motor type – Size					
		Aluminium			Cast iron		
		1LA7	1LA5	1LA9	1LA6	1LG4/1LG6	1LA8

#### Windings and motor protection

<b>C11</b>	Used acc. to class F (up to CT 40 °C) with service factor	56 – 160 <sup>4)</sup>	180 – 225 <sup>4)</sup>	56 – 200 <sup>3)</sup>	100 – 160	180 – 315 <sup>4)</sup>	315 – 450 Not possible with converter-fed operation
<b>C12</b>	Used acc. to class F (up to CT 40 °C) With increased power <sup>1)</sup>	56 – 160 <sup>4)</sup>	180 – 225 <sup>4)</sup>	56 – 200 <sup>3)</sup>	100 – 160	180 – 315 <sup>4)</sup>	315 – 450 Not possible w. converter-fed operation
<b>C13</b>	Used acc. to class F With increased coolant air temperature	56 – 160 <sup>4)</sup>	180 – 225 <sup>4)</sup>	56 – 200 <sup>3)</sup>	100 – 160	180 – 315 <sup>4)</sup>	315 – 450 Not possible with converter-fed operation
<b>Y52 ●</b>	Used acc. to class F – other requirements	56 – 160 <sup>4)</sup>	180 – 225 <sup>4)</sup>	56 – 200	100 – 160	180 – 315 <sup>4)</sup>	315 – 450 Not possible w. converter-fed operation
<b>A10</b>	PTC thermistor version for alarm on converter-fed operation in Zones 2, 21, 22 <sup>2)</sup>	56 – 160 <sup>4)</sup>	–	56 – 200	100 – 160	180 – 315 <sup>4)</sup>	–
<b>A11</b>	Motor protection by means of PTC thermistor with 3 embedded temperature sensors for shutdown <sup>2)</sup>	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	–
<b>A12</b>	Motor protection by means of PTC thermistor with 6 embedded temp. sensors for alarm and shutdown <sup>2)</sup>	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	Standard version
<b>A23</b>	Motor temperature sensing with embedded KTY 84-130 temperature sensors <sup>2)</sup>	56 – 160 <sup>4)</sup>	180 – 225 <sup>4)</sup>	56 – 200	100 – 160	180 – 315	315 – 450
<b>A25</b>	Motor temperature sensing with 2 embedded KTY 84-130 temperature sensors <sup>2)</sup>	–	–	–	–	180 – 315	–
<b>A61</b>	Installation of 6 PT100 G resistance thermometers	–	–	–	–	180 – 315	315 – 450
<b>A72</b>	Installation of 2 PT 100 screw-in resistance thermometers (basic circuit) for rolling-contact bearing	–	–	–	–	180 – 315	315 – 450

#### Paint finish

	Standard paintwork in RAL 7030 stone grey	–				Standard version	
<b>K26</b>	Special paintwork in RAL 7030 stone grey	Standard version (without order code)				180 – 315	315 – 450
<b>M16</b>	Special paintwork in RAL 1002 sand yellow	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>M17</b>	Special paintwork in RAL 1013 pearl white					180 – 315 With order code <b>Y54</b> and special paintwork RAL ....	315 – 450 With order code <b>Y54</b> and special paintwork RAL ....
<b>M18</b>	Special paintwork in RAL 3000 flame red						
<b>K27</b>	Special paintwork in RAL 6011 mignonette green						
<b>M19</b>	Special paintwork in RAL 6021 pale green						
<b>M20</b>	Special paintwork in RAL 7001 silver grey						
<b>K28</b>	Special paintwork in RAL 7031 bluish grey						
<b>L42</b>	Special paintwork in RAL 7032 pebble grey						
<b>M21</b>	Special paintwork in RAL 7035 light grey						
<b>M22</b>	Special paintwork in RAL 9001 cream						
<b>M23</b>	Special paintwork in RAL 9002 grey white						
<b>L43</b>	Special paintwork in RAL 9005 jet black						
<b>Y54 ●</b>	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	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>Y53 ●</b>	Standard paintwork in other colors	–	–	–	–	180 – 315	315 – 450
<b>K23</b>	Unpainted (only cast iron parts primed)	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K24</b>	Unpainted, only primed	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	–

- Additional plain text required.

1) The rating plate only shows the 50 Hz data.

2) For appropriate tripping unit, see Catalogue LV 10. In the case of pole-change motors with separate windings, twice the number of temperature sensors is required. When used in areas subject to explosion hazards, a certified tripping unit is necessary.

3) Not possible for the version with increased power.

4) Not possible for motors with special insulation up to 690 V.

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	Umbrage grey
5015	Sky blue	7033	Cement grey

Additional order suffix <b>-Z</b> with order code	Special designs	Motor type – Size					
		Aluminium			Cast iron		
		1LA7	1LA5	1LA9	1LA6	1LG4/1LG6	1LA8

#### Version for zones according to ATEX <sup>1)</sup>

<b>M72</b> <sup>2)</sup>	Version for Zone 2 for mains-fed operation EEx nA II T3 acc. to EN 50 021, Ex nA II T3 acc. to IEC 60 079-15	63 – 160	–	63 – 160 <sup>4)</sup>	100 – 160	180 – 315	315 – 450
<b>M73</b> <sup>2)3)5)</sup>	Version for Zone 2 for converter-fed operation EEx nA II T3 acc. to EN 50 021, Ex nA II T3 acc. to IEC 60 079-15	63 – 160	–	63 – 160 <sup>4)</sup>	100 – 160	180 – 315	315 – 450
<b>M34</b> <sup>6)</sup>	Version for Zone 21 for mains-fed operation	56 – 160	180 – 225	56 – 200 <sup>4)</sup>	100 – 160	180 – 315	–
<b>M38</b> <sup>5)6)</sup>	Version for Zone 21 for converter-fed operation	56 – 160	180 – 225	56 – 200 <sup>4)</sup>	100 – 160	180 – 315	–
<b>M35</b> <sup>7)</sup>	Version for Zone 22 for mains-fed operation	56 – 160	180 – 225	56 – 200 <sup>4)</sup>	100 – 160	180 – 315	315 – 450
<b>M39</b> <sup>5)7)</sup>	Version for Zone 22 for converter-fed operation	56 – 160	180 – 225	56 – 200 <sup>4)</sup>	100 – 160	180 – 315	315 – 450

#### Distributed drive systems

<b>G55</b> <sup>8)</sup>	ECOFAS motor plug Han-Drive 10e for 230 VΔ /400 VY	56 – 132	–	56 – 132 <sup>11)</sup>	–	–	–
<b>G56</b> <sup>8)</sup>	ECOFAS motor plug, EMC resistant, Han-Drive 10e for 230 VΔ /400 VY	56 – 132	–	–	–	–	–
<b>H90</b> <sup>9)</sup>	MICROSTARTER direct-on-line starter with 24 V DC activation, with M25 metric cable entry	63 – 112	–	–	–	–	–
<b>H91</b> <sup>9)</sup>	MICROSTARTER direct-on-line starter with 24 V DC activation, with HAN Q8 plug connectors	63 – 112	–	–	–	–	–
<b>H92</b> <sup>9)</sup>	MICROSTARTER direct-on-line starter with AS-Interface connection, with M25 metric cable entry	63 – 112	–	–	–	–	–
<b>H93</b> <sup>9)</sup>	MICROSTARTER direct-on-line starter with AS-Interface connection, with HAN Q8 plug connectors (ECOFAS)	63 – 112	–	–	–	–	–
<b>H94</b> <sup>9)</sup>	MICROSTARTER reversing starter with AS-Interface connection, with M25 metric cable entry	63 – 112	–	–	–	–	–
<b>H95</b> <sup>9)</sup>	MICROSTARTER reversing starter with AS-Interface connection, with HAN Q8 plug connectors (ECOFAS)	63 – 112	–	–	–	–	–

#### Marine version – "Operation below deck" <sup>10) 12) 14)</sup>

<b>E00</b>	Without certificate acc. to ABS 50 °C/CCS 45 °C/ RINA 45 °C temperature class F used acc. to F	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	–
<b>E10</b>	Individual acceptance from classification authority	–	–	–	–	180 – 315	315 – 450
<b>E11</b>	Certified according to GL (Germanischer Lloyd), Germany, CT 45 °C, temperature class F used acc. to F	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450 <sup>13)</sup>
<b>E21</b>	Certified according to LRS (Lloyds Register of Shipping), Great Britain, CT 45 °C, temperature class F used acc. to F	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450 <sup>13)</sup>
<b>E31</b>	Certified according to BV (Bureau Veritas), France, CT 45 °C, temperature class F used acc. to F	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450 <sup>13)</sup>
<b>E51</b>	Certified according to DNV (Det Norske Veritas), Norway, CT 45 °C, temperature class F used acc. to F	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450 <sup>13)</sup>
<b>E61</b>	Certified according to ABS (American Bureau of Shipping), USA, CT 50 °C, temperature class F used acc. to F	–	–	–	–	–	315 – 450 <sup>13)</sup>
<b>E71</b>	Certified according to CCS (Chinese Classification Society), China, CT 45 °C, temperature class F used acc. to F	–	–	–	–	–	315 – 450 <sup>13)</sup>
<b>E80</b>	Motor for use in shipping, higher ambient temperature and/or used acc. to F in accordance with B	–	–	–	–	–	315 – 450 <sup>13)</sup>

- 1) Modular installation and additional modules not possible; anti-condensation heating not possible up to size 200L. The designs for the zones are not possible for motors with UL(D31), CSA(D40) and with special insulation up to 690 V. For pole-change motors on request.
- 2) The motors have no rated voltage range.
- 3) To comply with the standard, the motor and converter must be tested as a unit. For 1LA8 motors, please specify constant torque drive or pump/compressor drive.

- 4) Not possible for the version with increased power.
- 5) PTC thermistors for temperature class B are included with this option.
- 6) Version for conductive dust particles, IP65 degree of protection.
- 7) Version only for non-conductive dust particles, IP55 degree of protection.
- 8) Not possible for pole-change motors. Only one sensor (temperature sensor or PTC thermistor) connectable.

- 9) The MICROSTARTER always contains one PTC thermistor with temperature sensors (option A11) and the associated evaluation electronics. It is possible for pole-change motors with two separate windings and motors other than 1LA7 to be used, on request.
- 10) Works test certificate 2.3 to EN 10204 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).

- 11) Not possible for 1LA9 size 132 motors with increased power.
- 12) Derating may be necessary in the case of (E) Exn (Zone 2) motors and 1LA9 motors with increased power.
- 13) The 1LA8 motors do not have a type approval test certificate (individual acceptance test required).
- 14) Utilization of temperature class F according to B can cause derating.

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		Aluminium			Cast iron		
		1LA7	1LA5	1LA9	1LA6	1LG4/1LG6	1LA8
<b>Modular assembly<sup>1)</sup></b>							
<b>H57<sup>2)</sup></b>	Mounting of 1XP8 001-1 rotary pulse encoder (HTL)	63 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>H58<sup>2)</sup></b>	Mounting of 1XP8 001-2 rotary pulse encoder (TTL)	63 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>G17<sup>2)</sup></b>	Mounting of separately driven fan	100 – 160	180 – 225	–	100 – 160	180 – 315 <sup>4)</sup>	–
<b>H61<sup>2)</sup></b>	Mounting of separately driven fan and 1XP8 001-1 rotary pulse encoder	100 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>H97<sup>2)</sup></b>	Mounting of separately driven fan and 1XP8 001-2 rotary pulse encoder	100 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>G26<sup>2)</sup></b>	Mounting of brake	63 – 160	180 – 225	–	–	180 – 315 <sup>4)</sup>	–
<b>H62<sup>2)</sup></b>	Mounting of brake and 1XP8 001-1 rotary pulse encoder	100 – 160	180 – 225	–	–	180 – 315	–
<b>H98<sup>2)</sup></b>	Mounting of brake and 1XP8 001-2 rotary pulse encoder	100 – 160	180 – 225	–	–	180 – 315	–
<b>H63<sup>2)</sup></b>	Mounting of brake and separately driven fan	100 – 160	180 – 225	–	–	180 – 315 <sup>4)</sup>	–
<b>H64<sup>2)</sup></b>	Mounting of brake, separately driven fan and 1XP8 001-1 rotary pulse encoder	100 – 160	180 – 225	–	–	180 – 315	–
<b>H99<sup>2)</sup></b>	Mounting of brake, separately driven fan and 1XP8 001-2 rotary pulse encoder	100 – 160	180 – 225	–	–	180 – 315	–
<b>K82</b>	Manual brake release with lever	63 – 160	180 – 225	–	–	180 – 315	–
<b>C00</b>	Brake supply voltage 24 V DC	63 – 160	180 – 225	–	–	180 – 315	–
<b>C01</b>	Brake supply voltage 400 V AC, 50 Hz	63 – 160	180 – 225	–	–	180 – 315	–
<b>C02</b>	Brake supply voltage 180 V DC for operation at MM411 ECOFAST	63 – 132 <sup>6)</sup>	–	–	–	–	–
<b>Additional modules<sup>1) 4)</sup></b>							
<b>H70</b>	Mounting of LL861 900 220 rotary pulse encoder	100 – 160	180 – 225	–	100 – 160	180 – 315	315 – 450
<b>H71</b>	Mounting of LL861 900 220 rotary pulse encoder to be provided	100 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>H78</b>	Prepared for mounting of LL861 900 220 rotary pulse encoder	100 – 160	180 – 225	–	100 – 160	180 – 315	315 – 450
<b>H72</b>	Mounting of HOG 9 D 1024 I rotary pulse encoder	100 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>H74</b>	Mounting of HOG 9 rotary pulse encoder to be provided	100 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>H79</b>	Prepared for mounting of HOG 9 D 1024 I rotary pulse encoder	100 – 160	180 – 225	–	100 – 160	180 – 315	–
<b>H73</b>	Mounting of HOG 10 D 1024 I rotary pulse encoder	100 – 160	180 – 225	–	–	180 – 315	315 – 450
<b>H75</b>	Mounting of HOG 10 rotary pulse encoder to be provided	100 – 160	180 – 225	–	–	180 – 315	–
<b>H80</b>	Prepared for mounting of HOG 10 D 1024 I rotary pulse encoder	100 – 160	180 – 225	–	–	180 – 315	315 – 450
<b>Y70 ●</b>	Mounting of special rotary pulse encoder	–	–	–	–	–	315 – 450
<b>Converter installation</b>							
<b>H15<sup>3)</sup></b>	Prepared for mounting the MMI	56 – 132	–	–	–	–	–
<b>Mechanical design</b>							
<b>K06</b>	Two-part plate on terminal block	–	–	–	–	200 – 315 <sup>5)</sup>	315 – 355. for 400 and 450 standard version
<b>K09</b>	Terminal box on RHS (view onto drive end)	80 – 160	180 – 225	80 – 200	100 – 160	180 – 315	Standard version
<b>K10</b>	Terminal box on LHS (view onto drive end)	80 – 160	180 – 225	80 – 200	100 – 160	180 – 315	315 – 450
<b>K11</b>	Terminal box on top, feet screwed on	–	–	–	–	180 – 315	–
<b>K83</b>	Rotation of terminal box by 90°, inserted from drive end	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K84</b>	Rotation of terminal box by 90°, inserted from non-drive end	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K85</b>	Rotation of terminal box by 180°	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>M46</b>	Bolt-type screw terminal for cable connection, accessories pack (3 units)	–	–	–	–	250 – 315 <sup>5)</sup>	–

● Additional plain text required.

1) Second shaft end not possible. Further modules are not possible in combination with the modular assembly system.

2) Order codes cannot be combined.

3) Converter mounting is possible in accordance with the COMBIMASTER spectrum for motors with 230 VΔ/400 VY voltage.

es. For further details, see Catalogues DA 51.3 and DA 64. Not possible for motors with special insulation for 690 V.

4) For 1LG4/1LG6 motors, the Order Codes **G17**, **G26** and **H63** for

frame sizes 225 can also be combined with all rotary pulse encoders listed under "Additional modules".

5) Not possible for designs for zones; standard version for VIK.

6) Not possible for pole-change motors.

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		Aluminium			Cast iron		
		1LA7	1LA5	1LA9	1LA6	1LG4/1LG6	1LA8
<b>M47</b>	Saddle terminals for cable lug free connection	–	–	–	–	250 – 315 <sup>1)</sup>	–
<b>D02</b>	Coolant temperature –50 °C to 40 °C	–	–	–	–	180 – 315	315 – 450
<b>D03</b>	Coolant temperature –40 °C to 40 °C	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>D04</b>	Coolant temperature –30 °C to 40 °C	56 – 160	180 – 225	56 – 160, from 180 standard	100 – 160	180 – 315	315 – 450
<b>D01</b>	CCC China Compulsory Certification	56 – 112 <sup>2)</sup>	–	56 – 90 <sup>2)</sup>	–	–	–
<b>D30</b>	Electrical acc. to NEMA MG1-12 <sup>3)</sup>	56 – 160	180 – 225	56 – 200 <sup>4)</sup>	100 – 160	180 – 315 <sup>4)</sup>	–
<b>D31</b>	Designed to UL with "recognition mark" <sup>5)</sup>	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	–
<b>D40</b>	Canadian standards (CSA) <sup>6)</sup>	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K01</b>	Vibrational severity grade R	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K16</b>	Second standard shaft end <sup>7)</sup>	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K17</b>	Radial sealing ring on drive end with flange types <sup>8)</sup>	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	–
<b>K20</b>	Bearing for increased cantilever forces <sup>9)</sup>	100 – 160	180 – 225	100 – 200	100 – 160	180 – 315	315 – 355
<b>K36</b>	Special bearing for drive end and non drive end, bearing size 63	–	–	–	–	180 – 250, from 280 standard <sup>10)</sup>	–
<b>K40</b>	Regreasing device	100 – 160	180 – 225	100 – 200 <sup>11)</sup>	100 – 160	180 – 250, standard version from 280 upwards	–
<b>L04</b>	Locating bearing non drive end	56 – 132, 160 standard version	–	56 – 132	100 – 132, 160 standard version	Standard version	–
<b>K94</b>	Locating bearing drive end	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	–
<b>L27</b>	Insulated bearing cartridge	–	–	–	–	225 – 315	Standard for operation on frequency converter
<b>M44</b>	Earth brushes for converter-fed operation	–	–	–	–	280 – 315	–
<b>L13</b>	External earthing	56 – 160	180 – 225	56 – 200	100 – 160	Standard version	–
<b>K30</b>	VIK design <sup>12)</sup>	56 – 160	–	56 – 160	100 – 160	180 – 315 <sup>13)</sup>	315 – 355
<b>K31</b>	Extra rating plate, loose	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K32</b>	With two additional lifting rings for IM V1 / IM V3	–	180 – 225	–	–	–	–
<b>Y82</b>	Extra rating plate	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>K37</b>	Low-noise design for 2-pole motors with clockwise direction of rotation	132 – 160	180 – 225	180 – 200	132 – 160	180 – 315 <sup>14)</sup>	315, for 355 – 450 standard version
<b>K38</b>	Low-noise design for 2-pole motors with anticlockwise direction of rotation	132 – 160	180 – 225	180 – 200	132 – 160	180 – 315 <sup>14)</sup>	315 – 450
<b>K45</b>	Anti-condensation heating for 230 V <sup>15)</sup>	56 – 160 <sup>3)</sup>	180 – 225 <sup>3)</sup>	56 – 200	100 – 160	180 – 315	315 – 450
<b>K46</b>	Anti-condensation heating for 115 V <sup>15)</sup>	56 – 160 <sup>3)</sup>	180 – 225 <sup>3)</sup>	56 – 200	100 – 160	180 – 315	315 – 450

• Additional plain text required.

1) Standard for designs for Zone 2, Zone 21, and VIK (Order Code **K30**).

2) 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

3) Not possible for motors with special insulation up to 690 V.

4) For designs in EPACT or UL standard version (no order code required).

5) Possible up to 600 V.

6) The rated voltage is shown on the rating plate.

7) Motors of size 315 - in vertical designs or two-pole - for version with second shaft end are available on request. Design with cover not available.

8) Not possible for type IM V3. Not available for 2-pole 1LG4/1LG6 motors.

9) Not possible for:  
2-pole 1LG4/1LG6 motors of size 315L in vertical design;  
2-pole 1LA8 motors, sizes 315 to 355;  
1LA8 motors in vertical design. Vibrational severity grade R on request.

10) Frame sizes 280 to 315 (standard version), but not available for 2-pole 1LG4/1LG6 motors with frame size 280.

11) Not possible for 1LA9 134–6.

12) Modular assembly, additional modules, anti-condensation heating up to frame size 200L and design for Zones 21/22 not available.  
For 2-pole motors 1LG4/1LG6 size 315, additional low noise version is required, order code K37 or K38. For 1LA8 motors, note power and dimensions. For motors 1LA8 353 to 357, the terminal box cannot be rotated by 4 x 90°.  
For motors with special insulation up to 690 V, on request.

13) Not possible for 2-pole 1LG4/1LG6 motors in size 315L and vertical designs; vibrational severity grade R on request.

14) Not required for 1LG6 motors because these motors are already noise optimized.

15) For 1LA motors in Zone 21, built-in anti-condensation heating is not possible up to size 200L. For Zones 2 and 22 on request.

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		1LA7	1LA5	1LA9	1LA6	1LG4/1LG6	1LA8
<b>Mechanical design (continued)</b>							
<b>L36</b>	Sheet metal fan cover	–	–	–	–	180 – 315	Standard version
<b>L99</b>	Wire-lattice pallet	56 – 160	180	56 – 180	–	–	–
<b>G50</b>	Measuring nipples for SPM shock pulse measurement for bearing monitoring	100 – 160	180 – 225	100 – 200	100 – 160	180 – 315	315 – 450
<b>H17</b>	Fan cowl for textile industry	80 – 160	180 – 225	112 – 132	100 – 160	–	–
<b>K15</b>	With cast-iron terminal box	–	–	–	–	180 – 225	–
<b>K35</b>	External metal fan	63 – 160	180 – 225	63 – 200	100 – 160	180 – 315	315 – 450
<b>K50</b>	Degree of protection IP65	100 – 160	180 – 225	56 – 200	100 – 160	180 – 315	–
<b>K52</b>	Degree of protection IP56 (non-heavy-sea)	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	315 – 450
<b>M32</b>	Mounting Y-Connection	63 – 160	–	–	–	–	–
<b>M33</b>	Mounting D-Connection	56 – 160	–	–	–	–	–
<b>M69</b>	Terminal strip for main and auxiliary terminals	63 – 90	–	–	–	–	–
<b>M58</b>	Next largest terminal box 1XB1 621	–	–	–	–	–	315
<b>L00</b>	Next largest terminal box	–	180 – 225	180 – 200	–	180 – 315	315 – 355 1)

### Notes on safety and commissioning/certification

<b>B00</b>	Without notes on safety and commissioning Notice of renouncement is required from the customer	56 – 160	180 – 225	56 – 200	–	–	–
<b>B01</b>	Complete with one set of safety and commissioning notes per wire-lattice pallet	56 – 160	180	56 – 180	–	–	–
<b>B02</b>	Factory test certificate 2.3 acc. to EN 10 204	56 – 160	180 – 225	56 – 200	100 – 160	180 – 315	Standard version

### Additional order codes for windings and motor protection

<b>C18</b>	Temperature class H at rated output and max. CT 40 °C	56 – 160	180 – 225	–	100 – 160	–	–
<b>A78</b>	Installation of 2 PT 100 screw-in resistance thermometers (three wire circuit) for rolling-contact bearing	–	–	–	–	280 – 315	–
<b>A80</b>	Installation of 2 double PT 100 screw-in resistance thermometers (three wire circuit) for rolling-contact bearing	–	–	–	–	280 – 315	–

1) For 1LA8 motors general terminal box 1XB1 631.