



Selection and ordering data (continued)

توجه: مشخصات در سری قدیمی و سری جدید مشابه یکدیگرند (GP 1LA7 & 1LE1)

| Operating values at rated power | | | | | | | | | | | | | | Aluminum series 1LE1002 | | Article No. | |
|--|------------------------------------|----------------------|----------------------|----------------------------|------------------------------|------------------------------|------------------------------|----------------------------------|-----------------------------|-----------------------------------|-----------------------------------|--------------------------------|--------------------|-------------------------|--------------|---------------------|---------|
| P_{rated} 50 Hz/ P50 | P_{rated} 60 Hz/ P60 1) | Frame size | n_{rated} 50 Hz | T_{rated} 50 Hz | η_{rated} 50 Hz, 4/4 | η_{rated} 50 Hz, 3/4 | η_{rated} 50 Hz, 2/4 | $\cos\phi_{rated}$ 50 Hz, 4/4 | I_{rated} 50 Hz, 400 V | $T_{LR}/$ T_{rated} 50 Hz | $I_{LR}/$ I_{rated} 50 Hz | $T_B/$ T_{rated} 50 Hz | L_{pfA} 50 Hz | L_{WA} 50 Hz | 1LE1002 | $m_{IM B3}$ | J |
| kW | kW | FS | rpm | Nm | % | % | % | A | | | | | | | kg | kgm ² | |
| • Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B) | | | | | | | | | | | | | | | | | |
| 4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz ¹⁾ | | | | | | | | | | | | | | | | | |
| 0.12 | 0.14 | 63 M | 1360 | 0.84 | 50.0 | 47.3 | 39.1 | 0.71 | 0.85 | 1.6 | 2.5 | 1.8 | 48 | 55 | 1LE1002-0BB2 | 4 | 0.00029 |
| 0.18 | 0.21 | 63 M | 1360 | 1.3 | 57.0 | 55.1 | 47.8 | 0.71 | 1.12 | 1.9 | 2.8 | 2.1 | 55 | 62 | 1LE1002-0BB3 | 4 | 0.00037 |
| 0.25 | 0.29 | 71 M | 1365 | 1.8 | 61.5 | 61.4 | 56.1 | 0.73 | 0.80 | 1.8 | 3.0 | 2.0 | 54 | 65 | 1LE1002-0CB2 | 5 | 0.00052 |
| 0.37 | 0.43 | 71 M | 1350 | 2.7 | 66.0 | 67.7 | 65.0 | 0.75 | 1.08 | 2.0 | 3.2 | 2.0 | 54 | 65 | 1LE1002-0CB3 | 6 | 0.00077 |
| 0.55 | 0.63 | 80 M | 1385 | 3.8 | 70.0 | 70.7 | 67.7 | 0.79 | 1.44 | 2.1 | 3.7 | 2.2 | 59 | 66 | 1LE1002-0DB2 | 9 | 0.0014 |
| 0.75 | 0.86 | 80 M | 1385 | 5.2 | 72.1 | 72.0 | 67.0 | 0.76 | 1.85 | 2.1 | 3.6 | 2.3 | 59 | 66 | 1LE1002-0DB3 | 11 | 0.0017 |
| 1.1 | 1.27 | 90 S | 1405 | 7.5 | 75.0 | 75.9 | 73.6 | 0.81 | 2.5 | 2.1 | 4.5 | 2.3 | 61 | 68 | 1LE1002-0EB0 | 12 | 0.0024 |
| 1.5 | 1.75 | 90 L | 1410 | 10 | 77.2 | 77.8 | 75.1 | 0.80 | 3.35 | 2.4 | 4.7 | 2.6 | 61 | 68 | 1LE1002-0EB4 | 15 | 0.0033 |
| 2.2 | 2.55 | 100 L | 1425 | 15 | 79.7 | 80.5 | 78.5 | 0.81 | 4.9 | 2.2 | 5.1 | 2.3 | 60 | 72 | 1LE1002-1AB4 | 18 | 0.0059 |
| 3 | 3.45 | 100 L | 1425 | 20 | 81.5 | 83.0 | 82.3 | 0.85 | 6.3 | 2.4 | 5.4 | 2.6 | 60 | 72 | 1LE1002-1AB5 | 22 | 0.0078 |
| 4 | 4.55 | 112 M | 1435 | 27 | 83.1 | 84.3 | 83.7 | 0.83 | 8.4 | 2.5 | 6.1 | 2.9 | 58 | 70 | 1LE1002-1BB2 | 27 | 0.010 |
| 5.5 | 6.3 | 132 S | 1450 | 36 | 84.7 | 85.7 | 84.9 | 0.82 | 11.2 | 2.3 | 5.7 | 2.7 | 64 | 76 | 1LE1002-1CB0 | 38 | 0.019 |
| 7.5 | 8.6 | 132 M | 1450 | 49 | 86.0 | 86.9 | 86.3 | 0.82 | 15.2 | 2.6 | 6.6 | 3.1 | 64 | 76 | 1LE1002-1CB2 | 44 | 0.024 |
| 11 | 12.6 | 160 M | 1460 | 72 | 87.6 | 87.9 | 86.7 | 0.81 | 22.5 | 2.7 | 6.9 | 3.3 | 65 | 77 | 1LE1002-1DB2 | 62 | 0.044 |
| 15 | 17.3 | 160 L | 1460 | 98 | 88.7 | 89.1 | 88.0 | 0.82 | 30.0 | 3.0 | 7.5 | 3.6 | 65 | 77 | 1LE1002-1DB4 | 73 | 0.056 |
| 18.5 | 21.3 | 180 M | 1468 | 120 | 89.3 | 90.2 | 90.2 | 0.85 | 35 | 2.2 | 7.3 | 3.1 | 63 | 76 | 1LE1002-1EB2 | 131 | 0.13 |
| 22 | 25.3 | 180 L | 1465 | 143 | 89.9 | 90.8 | 90.7 | 0.83 | 42.5 | 2.7 | 8 | 3.6 | 63 | 76 | 1LE1002-1EB4 | 132 | 0.13 |
| 30 | 34.5 | 200 L | 1472 | 195 | 90.7 | 91.5 | 91.4 | 0.83 | 58 | 2.3 | 6.9 | 3.1 | 64 | 78 | 1LE1002-2AB5 | 169 | 0.2 |
| Voltagess | | | | | | | | | | | | | | Version | | Order code | |
| 50 Hz 230 VΔ/400 VY | | | | 60 Hz ¹⁾ 460 VY | | | | Standard | | | | 2 | 2 | - | | | |
| 50 Hz 400 VΔ/690 VY | | | | 60 Hz ¹⁾ 460 VΔ | | | | Standard | | | | 3 | 4 | - | | | |
| 50 Hz 500 VY | | | | | | | | Without additional charge | | | | 2 | 7 | - | | | |
| 50 Hz 500 VΔ | | | | | | | | Without additional charge | | | | 4 | 0 | - | | | |
| For other voltages ¹⁾ and more information, see from page 2/89 | | | | | | | | | | | | | | 9 | 0 | ... | |
| Types of construction | | | | | | | | | | | | | | Version | | Order code | |
| Without flange | | IM B3 ²⁾ | | Standard | | | | | | | | A | - | | | | |
| With flange | | IM B5 ²⁾ | | With additional charge | | | | | | | | F | - | | | | |
| With flange | | IM B14 ²⁾ | | With additional charge | | | | | | | | K | - | | | | |
| For other types of construction and more information, see from page 2/95 | | | | | | | | | | | | | | | | ... | |
| Motor protection | | | | | | | | | | | | | | Version | | Order code | |
| Without | | | | Standard | | | | | | | | A | - | | | | |
| PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200) | | | | With additional charge | | | | | | | | B | - | | | | |
| For other motor protection and more information, see from page 2/107 | | | | | | | | | | | | | | | | ... | |
| Terminal box position | | | | | | | | | | | | | | Version | | Order code | |
| Terminal box at top | | | | Standard | | | | | | | | 4 | | | | | |
| For other terminal box positions and more information, see from page 2/110 | | | | | | | | | | | | | | | | | |
| Special versions | | | | | | | | | | | | | | | | Order code(s) | |
| Forced-air cooled motors w/o ext. fan/fan cover (IC 418) | | | | | | | | | | | | | | 1LE1002-.... | | -Z F90 +...+...+... | |
| For options, see from page 2/113 | | | | | | | | | | | | | | 1LE1002-.... | | -Z ...+...+...+... | |

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (H03) or stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (H03), the type must be specified.



SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency

Self-ventilated or forced-air cooled motors · Aluminum series 1LE1002

Selection and ordering data

توجه: مشخصات در سری قدیمی و سری جدید مشابه یکدیگرند (GP 1LA7 & 1LE1)

| Operating values at rated power | | | | | | | | | | | | | | Aluminum series | | m _{IM B3} J | | | |
|--|---------------------------------------|---------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------------------|-------------------------------|--|--|---|-----------------------------|----------------------------|-------------|----|------------------|
| P _{rated} , 50 Hz/ P50 | P _{rated} , 60 Hz/ P60 | Frame size | n _{rated} , 50 Hz | T _{rated} , 50 Hz | η _{rated} , 50 Hz | η _{rated} , 50 Hz | η _{rated} , 50 Hz | η _{rated} , 50 Hz | η _{rated} , 50 Hz | cosφ _{rated} , 50 Hz | I _{rated} , 50 Hz | T _{LR} / I _{rated} , 50 Hz | I _{LR} / I _{rated} , 50 Hz | T _B / I _{rated} , 50 Hz | L _{pfA} , 50 Hz | L _{WA} , 50 Hz | Article No. | kg | J |
| kW | kW | FS | rpm | Nm | % | % | % | % | % | A | A | A | A | A | A | A | | | kgm ² |
| • Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B) | | | | | | | | | | | | | | | | | | | |
| 2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz ¹⁾ | | | | | | | | | | | | | | | | | | | |
| 0.18 | 0.21 | 63 M | 2805 | 0.61 | 52.8 | 50.1 | 44.2 | 0.79 | 1.08 | 1.7 | 3.4 | 2.2 | 55 | 62 | 1LE1002-0BA2 | 4 | 0.00018 | | |
| 0.25 | 0.29 | 63 M | 2835 | 0.84 | 58.2 | 55.5 | 48.6 | 0.75 | 1.44 | 1.9 | 3.6 | 2.6 | 56 | 63 | 1LE1002-0BA3 | 4 | 0.00022 | | |
| 0.37 | 0.43 | 71 M | 2755 | 1.3 | 63.9 | 64.5 | 61.1 | 0.79 | 1.06 | 2.2 | 3.4 | 2.2 | 62 | 73 | 1LE1002-0CA2 | 5 | 0.00029 | | |
| 0.55 | 0.63 | 71 M | 2750 | 1.9 | 69.0 | 69.9 | 66.5 | 0.79 | 1.46 | 2.2 | 3.7 | 2.2 | 62 | 73 | 1LE1002-0CA3 | 6 | 0.00041 | | |
| 0.75 | 0.86 | 80 M | 2835 | 2.5 | 72.1 | 72.6 | 69.9 | 0.86 | 1.75 | 2.1 | 5.2 | 2.3 | 64 | 71 | 1LE1002-0DA2 | 9 | 0.00079 | | |
| 1.1 | 1.27 | 80 M | 2840 | 3.7 | 75.0 | 75.7 | 73.4 | 0.86 | 2.45 | 2.5 | 5.7 | 2.5 | 64 | 71 | 1LE1002-0DA3 | 12 | 0.0010 | | |
| 1.5 | 1.75 | 90 S | 2835 | 5.1 | 77.2 | 78.2 | 76.8 | 0.85 | 3.3 | 2.6 | 5.5 | 2.9 | 71 | 78 | 1LE1002-0EA0 | 13 | 0.0014 | | |
| 2.2 | 2.55 | 90 L | 2855 | 7.4 | 79.7 | 80.9 | 81.3 | 0.85 | 4.7 | 2.8 | 6.5 | 3.2 | 71 | 78 | 1LE1002-0EA4 | 14 | 0.0018 | | |
| 3 | 3.45 | 100 L | 2835 | 10 | 81.5 | 83.2 | 82.8 | 0.87 | 6.1 | 3.2 | 6.4 | 3.5 | 67 | 79 | 1LE1002-1AA4 | 20 | 0.0034 | | |
| 4 | 4.55 | 112 M | 2935 | 13 | 83.1 | 83.0 | 80.8 | 0.85 | 8.2 | 3.3 | 8.3 | 4.2 | 69 | 81 | 1LE1002-1BA2 | 25 | 0.0067 | | |
| 5.5 | 6.3 | 132 S | 2910 | 18 | 84.7 | 85.9 | 85.7 | 0.88 | 10.7 | 1.8 | 5.7 | 2.6 | 68 | 80 | 1LE1002-1CA0 | 35 | 0.013 | | |
| 7.5 | 8.6 | 132 S | 2925 | 24 | 86.0 | 86.7 | 86.1 | 0.88 | 14.3 | 2.2 | 6.8 | 3.1 | 68 | 80 | 1LE1002-1CA1 | 40 | 0.016 | | |
| 11 | 12.6 | 160 M | 2925 | 36 | 87.6 | 88.0 | 87.1 | 0.86 | 21.0 | 2.0 | 5.7 | 2.7 | 70 | 82 | 1LE1002-1DA2 | 60 | 0.030 | | |
| 15 | 17.3 | 160 M | 2935 | 49 | 88.7 | 88.9 | 87.7 | 0.85 | 28.5 | 2.4 | 6.8 | 3.2 | 70 | 82 | 1LE1002-1DA3 | 68 | 0.036 | | |
| 18.5 | 21.3 | 160 L | 2935 | 60 | 89.3 | 89.7 | 89.3 | 0.87 | 34.5 | 2.7 | 7.6 | 3.4 | 70 | 82 | 1LE1002-1DA4 | 78 | 0.044 | | |
| 22 | 24.5 | 180 M | 2945 | 71 | 89.9 | 90.6 | 90.4 | 0.87 | 40.5 | 2.5 | 7.7 | 3.5 | 72 | 85 | 1LE1002-1EA2 | 112 | 0.069 | | |
| 30 | 33.5 | 200 L | 2960 | 97 | 90.7 | 90.9 | 90.2 | 0.79 | 60 | 2.5 | 7.3 | 3.6 | 72 | 85 | 1LE1002-2AA4 | 149 | 0.124 | | |
| 37 | 41.5 | 200 L | 2955 | 120 | 91.2 | 91.6 | 91.2 | 0.88 | 67 | 2.7 | 8.2 | 3.5 | 72 | 85 | 1LE1002-2AA5 | 169 | 0.15 | | |
| Voltagess | | | | | | | | | | | | | | Version | | Order code | | | |
| 50 Hz 230 VΔ/400 VY | | | 60 Hz ¹⁾ 460 VY | | | Standard | | 2 2 | | - | | | | | | | | | |
| 50 Hz 400 VΔ/690 VY | | | 60 Hz ¹⁾ 460 VΔ | | | Standard | | 3 4 | | - | | | | | | | | | |
| 50 Hz 500 VY | | | | | | Without additional charge | | 2 7 | | - | | | | | | | | | |
| 50 Hz 500 VΔ | | | | | | Without additional charge | | 4 0 | | - | | | | | | | | | |
| For other voltages ¹⁾ and more information, see from page 2/89 | | | | | | | | | | | | | | 9 0 | | ... | | | |
| Types of construction | | | | | | | | | | | | | | Version | | Order code | | | |
| Without flange | | | IM B3 ²⁾ | | | Standard | | A | | - | | | | | | | | | |
| With flange | | | IM B5 ²⁾ | | | With additional charge | | F | | - | | | | | | | | | |
| With flange | | | IM B14 ²⁾ | | | With additional charge | | K | | - | | | | | | | | | |
| For other types of construction and more information, see from page 2/95 | | | | | | | | | | | | | | B | | ... | | | |
| Motor protection | | | | | | | | | | | | | | Version | | Order code | | | |
| Without | | | | | | Standard | | A | | - | | | | | | | | | |
| PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200) | | | | | | With additional charge | | B | | - | | | | | | | | | |
| For other motor protection and more information, see from page 2/107 | | | | | | | | | | | | | | 4 | | ... | | | |
| Terminal box position | | | | | | | | | | | | | | Version | | Order code | | | |
| Terminal box at top | | | | | | Standard | | 4 | | | | | | | | | | | |
| For other terminal box positions and more information, see from page 2/110 | | | | | | | | | | | | | | | | | | | |
| Special versions | | | | | | | | | | | | | | Order code(s) | | | | | |
| Forced-air cooled motors w/o ext. fan/fan cover (IC 418) | | | | | | | | | | | | | | 1LE1002-....-Z F90 +...+...+... | | | | | |
| For options, see from page 2/113 | | | | | | | | | | | | | | 1LE1002-....-Z...+...+...+... | | | | | |

2

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (H03) or stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (H03), the type must be specified.

SIMOTICS GP/SD 1LE1 standard motors

Motors with IE1 Standard Efficiency



Self-ventilated or forced-air cooled motors · Aluminum series 1LE1002

Selection and ordering data (continued)

توجه: مشخصات در سری قدیمی و سری جدید مشابه یکدیگرند (GP 1LA7 & 1LE1)

| P _{rated} 50 Hz/ P50 | P _{rated} 60 Hz/ P60 | Frame size | Operating values at rated power | | | | | | | | | | Aluminum series | | m _{IM B3} | J | | |
|--|-------------------------------------|---------------|---------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--------------------------------|-----------------------------|---|--|---|---------------------------|----------------------|-----|--------------------------|-------------|
| | | | n _{rated} 50 Hz | T _{rated} 50 Hz | η _{rated} 50 Hz | η _{rated} 50 Hz | η _{rated} 50 Hz | η _{rated} 50 Hz | cosφ _{rated} 50 Hz | I _{rated} 50 Hz | T _{LR} / I _{LR} 50 Hz | I _{LR} / I _{rated} 50 Hz | T _B / I _{rated} 50 Hz | L _{pfA} 50 Hz | | | L _{WA} 50 Hz | Article No. |
| kW | kW | FS | rpm | Nm | % | % | % | A | A | A | A | A | A | dB(A) | dB(A) | | | |
| • Cooling: Self-ventilated (IC 411) or with order code F90 forced-air cooled without external fan and fan cover (IC 418) • Efficiency according to IEC 60034-30-1: IE1 Standard Efficiency, service factor (SF) 1.1 • Insulation: Thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B) | | | | | | | | | | | | | | | | | | |
| 6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz ¹⁾ | | | | | | | | | | | | | | | | | | |
| 0.09 | 0.11 | 63 M | 895 | 1.3 | 42.7 | 38.5 | 30.4 | 0.63 | 0.84 | 1.8 | 2.0 | 1.9 | 56 | 62 | 1LE1002-0BC2 | 4 | 0.00037 | |
| 0.18 | 0.21 | 71 M | 800 | 2.2 | 45.5 | 44.4 | 38.3 | 0.67 | 0.84 | 1.9 | 2.0 | 2.0 | 51 | 62 | 1LE1002-0CC2 | 5 | 0.00055 | |
| 0.25 | 0.29 | 71 M | 860 | 2.8 | 52.1 | 52.8 | 48.4 | 0.71 | 0.98 | 2.0 | 2.2 | 2.0 | 51 | 62 | 1LE1002-0CC3 | 6 | 0.00080 | |
| 0.37 | 0.43 | 80 M | 915 | 3.9 | 57.9 | 56.9 | 51.1 | 0.70 | 1.23 | 1.6 | 2.7 | 1.8 | 56 | 64 | 1LE1002-0DC2 | 9 | 0.0014 | |
| 0.55 | 0.63 | 80 M | 900 | 5.8 | 65.8 | 66.6 | 62.6 | 0.72 | 1.68 | 1.7 | 2.7 | 1.9 | 56 | 64 | 1LE1002-0DC3 | 12 | 0.0017 | |
| 0.75 | 0.86 | 90 S | 940 | 7.6 | 70.0 | 70.0 | 66.0 | 0.67 | 2.30 | 2.0 | 3.8 | 2.2 | 59 | 70 | 1LE1002-0EC0 | 13 | 0.0033 | |
| 1.1 | 1.27 | 90 L | 925 | 11 | 72.9 | 73.8 | 71.2 | 0.69 | 3.15 | 2.2 | 3.8 | 2.4 | 59 | 70 | 1LE1002-0EC4 | 15 | 0.004 | |
| 1.5 | 1.75 | 100 L | 940 | 15 | 75.2 | 76.0 | 72.4 | 0.74 | 3.9 | 2.0 | 4.0 | 2.2 | 59 | 71 | 1LE1002-1AC4 | 19 | 0.0065 | |
| 2.2 | 2.55 | 112 M | 940 | 22 | 77.7 | 78.5 | 76.3 | 0.72 | 5.7 | 2.6 | 4.6 | 2.7 | 57 | 69 | 1LE1002-1BC2 | 25 | 0.0092 | |
| 3 | 3.45 | 132 S | 955 | 30 | 79.7 | 80.2 | 77.7 | 0.74 | 7.3 | 2.0 | 4.6 | 2.6 | 63 | 75 | 1LE1002-1CC0 | 34 | 0.017 | |
| 4 | 4.55 | 132 M | 955 | 40 | 81.4 | 82.6 | 81.9 | 0.76 | 9.3 | 2.3 | 5.2 | 2.6 | 63 | 75 | 1LE1002-1CC2 | 39 | 0.021 | |
| 5.5 | 6.3 | 132 M | 955 | 55 | 83.1 | 84.0 | 83.0 | 0.75 | 12.7 | 2.7 | 5.7 | 3.0 | 63 | 75 | 1LE1002-1CC3 | 48 | 0.027 | |
| 7.5 | 8.6 | 160 M | 970 | 74 | 84.7 | 85.4 | 85.0 | 0.73 | 17.5 | 2.1 | 5.5 | 2.9 | 67 | 79 | 1LE1002-1DC2 | 72 | 0.056 | |
| 11 | 12.6 | 160 L | 965 | 109 | 86.4 | 86.4 | 85.4 | 0.77 | 24 | 1.9 | 5.9 | 2.7 | 67 | 79 | 1LE1002-1DC4 | 92 | 0.078 | |
| 15 | 18 | 180 L | 975 | 147 | 87.7 | 88.5 | 87.9 | 0.77 | 32 | 2.3 | 6.1 | 3 | 56 | 69 | 1LE1002-1EC4 | 119 | 0.17 | |
| 18.5 | 22 | 200 L | 980 | 214 | 89.2 | 90 | 89.6 | 0.79 | 45 | 2.8 | 6.8 | 2.9 | 59 | 72 | 1LE1002-2AC4 | 149 | 0.25 | |
| 22 | 26.5 | 200 L | 980 | 214 | 89.2 | 90 | 89.6 | 0.79 | 45 | 2.8 | 6.8 | 2.9 | 59 | 72 | 1LE1002-2AC5 | 166 | 0.3 | |
| 8-pole: 750 rpm at 50 Hz, 900 rpm at 60 Hz ¹⁾ | | | | | | | | | | | | | | | | | | |
| 0.09 | 0.11 | 71 M | 635 | 1.4 | 39 | 35.7 | 28.6 | 0.63 | 0.53 | 1.8 | 1.8 | 2 | 49 | 56 | 1LE1002-0CD2 | 6 | 0.00080 | |
| 0.12 | 0.14 | 71 M | 625 | 1.8 | 31 | 30.5 | 27.1 | 0.68 | 0.82 | 1.7 | 2 | 1.7 | 49 | 56 | 1LE1002-0CD3 | 6 | 0.00080 | |
| 0.75 | 0.86 | 100 L | 705 | 10 | 61.2 | 58.1 | 50.5 | 0.62 | 2.85 | 1.9 | 3 | 2.2 | 60 | 72 | 1LE1002-1AD4 | 17 | 0.0056 | |
| 1.1 | 1.27 | 100 L | 690 | 15 | 66.5 | 66.0 | 61.8 | 0.61 | 3.90 | 2.0 | 3.2 | 2.3 | 60 | 72 | 1LE1002-1AD5 | 22 | 0.0078 | |
| 1.5 | 1.75 | 112 M | 700 | 20 | 70.2 | 71.1 | 68.7 | 0.66 | 4.65 | 1.9 | 3.5 | 2.1 | 63 | 75 | 1LE1002-1BD2 | 29 | 0.0094 | |
| 2.2 | 2.55 | 132 S | 715 | 29 | 74.2 | 74.1 | 71.4 | 0.66 | 6.5 | 1.7 | 3.9 | 2.4 | 63 | 75 | 1LE1002-1CD0 | 37 | 0.019 | |
| 3 | 3.45 | 132 M | 715 | 40 | 77.0 | 77.4 | 75.2 | 0.68 | 8.3 | 1.8 | 3.9 | 2.2 | 63 | 75 | 1LE1002-1CD2 | 44 | 0.024 | |
| 4 | 4.55 | 160 M | 720 | 53 | 79.2 | 79.3 | 76.3 | 0.67 | 10.9 | 1.6 | 4.1 | 2.3 | 63 | 75 | 1LE1002-1DD2 | 60 | 0.044 | |
| 5.5 | 6.3 | 160 M | 720 | 73 | 81.4 | 81.9 | 80.3 | 0.68 | 14.3 | 1.6 | 4 | 2.2 | 63 | 75 | 1LE1002-1DD3 | 72 | 0.056 | |
| 7.5 | 8.6 | 160 L | 715 | 100 | 83.1 | 83.7 | 82.4 | 0.69 | 18.9 | 1.7 | 3.8 | 2.2 | 63 | 75 | 1LE1002-1DD4 | 91 | 0.077 | |
| 11 | 13.2 | 180 L | 720 | 146 | 85 | 86.2 | 86 | 0.7 | 26.5 | 1.9 | 5 | 2.5 | 65 | 78 | 1LE1002-1ED4 | 122 | 0.2 | |
| 15 | 18 | 200 L | 718 | 199 | 86.2 | 87.9 | 88.4 | 0.75 | 33.5 | 2.5 | 5.5 | 2.9 | 55 | 69 | 1LE1002-2AD5 | 170 | 0.3 | |
| Voltages | | | Version | | | | | | | | | | | | Order code | | | |
| 50 Hz 230 VΔ/400 VY | | | 60 Hz ¹⁾ 460 VY | | | | | | | | | | Standard | | 2 2 | | | |
| 50 Hz 400 VΔ/690 VY | | | 60 Hz ¹⁾ 460 VΔ | | | | | | | | | | Standard | | 3 4 | | | |
| 50 Hz 500 VY | | | | | | | | | | | | | Without additional charge | | 2 7 | | | |
| 50 Hz 500 VΔ | | | | | | | | | | | | | Without additional charge | | 4 0 | | | |
| For other voltages ¹⁾ and more information, see from page 2/89 | | | | | | | | | | | | | | | 9 0 | | | |
| Types of construction | | | Version | | | | | | | | | | | | Order code | | | |
| Without flange | | | IM B3 ²⁾ | | | | | | | | | | Standard | | A | | | |
| With flange | | | IM B5 ²⁾ | | | | | | | | | | With additional charge | | F | | | |
| With flange | | | IM B14 ²⁾ | | | | | | | | | | With additional charge | | K | | | |
| For other types of construction and more information, see from page 2/95 | | | | | | | | | | | | | | | ... | | | |
| Motor protection | | | Version | | | | | | | | | | | | Order code | | | |
| Without | | | Standard | | | | | | | | | | | | A | | | |
| PTC thermistor with 1 or 3 temperature sensors (frame sizes 63 to 90 or 100 to 200) | | | With additional charge | | | | | | | | | | | | B | | | |
| For other motor protection and more information, see from page 2/107 | | | | | | | | | | | | | | | ... | | | |
| Terminal box position | | | Version | | | | | | | | | | | | Order code(s) | | | |
| Terminal box at top | | | Standard | | | | | | | | | | | | 4 | | | |
| For other terminal box positions and more information, see from page 2/110 | | | | | | | | | | | | | | | ... | | | |
| Special versions | | | | | | | | | | | | | | | Order code(s) | | | |
| Forced-air cooled motors w/o ext. fan/fan cover (IC 418) | | | | | | | | | | | | | 1LE1002-... -Z | | F90+...+...+... | | | |
| For options, see from page 2/113 | | | | | | | | | | | | | 1LE1002-... -Z | | ...+...+...+... | | | |

2

¹⁾ Operating values at rated power for 60 Hz are stored in the Drive Technology Configurator (DT Configurator; see Appendix, "Tools and engineering").

²⁾ Types derived from IM B3 (IM B6/7/8, IM V6, and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible, provided that no requirements exist for condensation drainage holes (H03) or stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. For orders with condensation drainage holes (H03), the type must be specified.

ابعاد و اندازه الکتروموتورهای زمینس پوسته آلومینیوم از فریم 63 ام تا 200 ال

Dimensions

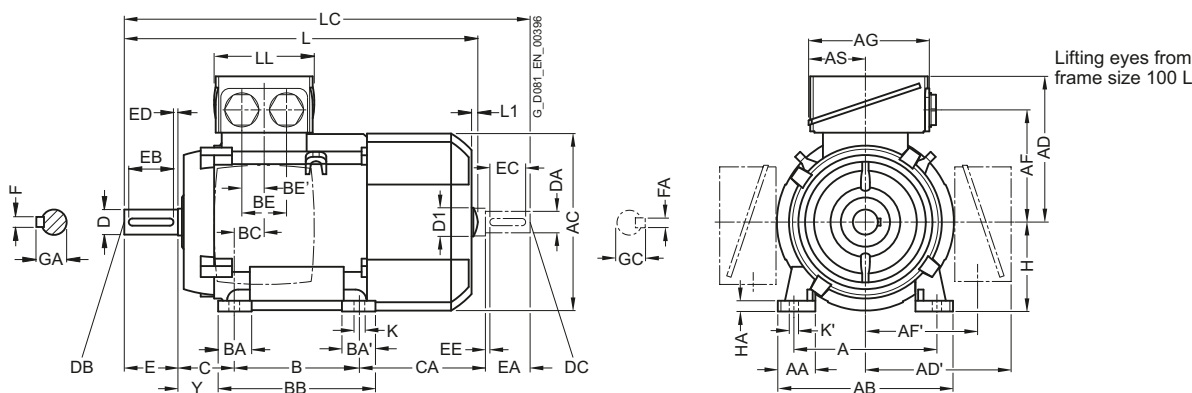
SIMOTICS GP 1LE1 standard motors

Aluminum series, self-ventilated – IE1, IE2, NEMA Energy Efficient and pole-changing · Frame sizes 63 M to 200 L

Dimensional drawings

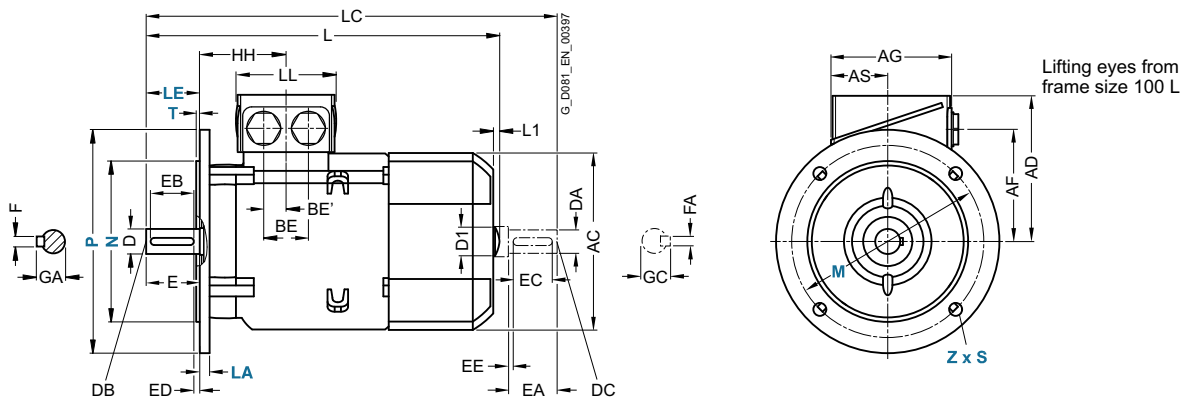
توجه: ابعاد و اندازه در سری قدیمی و سری جدید مشابه یکدیگرند و فقط تفاوت در، شکل ظاهری کاسه عقب(بادگیر فن) و جعبه برق (درپ نخسته کلمپ) می باشد (GP 1LA7 & 1LE1)

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see page 1/46 (Z = the number of retaining holes)



| For motor | Motor type | No. of poles | Dimension designation acc. to IEC | | | | | | | | | | | | | | | | | | | | | |
|------------|---|-----------------|-----------------------------------|------|------------|-----|--------------|-------|-------|-------|-----|-------|-----|------|------------------|-------------------|------|----|------------------|-----|-------------------|------------|----|------|
| Frame size | | | A | AA | AB | AC | AD | AD' | AF | AF' | AG | AS | B | BA | BA' | BB | BC | BE | BE' | C | CA | H | HA | Y |
| 63 M | 1LE100-0B.2 1LE1002-0B.3 1LE1001-0B.3 1LE1002-0B.6 | 2, 4, 6 2, 4 | 100 | 27 | 120 | 124 | 101 | - | 78 | - | 75 | 37.5 | 80 | 27 | - | 96 | 30 | 32 | 18 | 40 | 66 | 63 | 7 | 26.5 |
| 71 M | 1LE1001, 1LE1002 | 2, 4, 6, 8 | 112 | 30.5 | 132 | 145 | 111 | - | 88 | - | 75 | 37.5 | 90 | 27 | - | 106 | 18 | 32 | 18 | 45 | 83 | 71 | 7 | 31.5 |
| 80 M | 1LE1001 | 2, 4, 6 | 125 | 30.5 | 150 | 159 | 121.5 | 121.5 | 96.5 | 96.5 | 93 | 43 | 100 | 32 | 32 | 118 | 23 | - | 18 ¹⁾ | 50 | 113 | 80 | 8 | 41 |
| 90 S | 1LE1041 | 2, 4, 6 | 140 | 30.5 | 165 | 178 | 126 | 126 | 101.5 | 101.5 | 93 | 43 | 100 | 33 | 54 | 143 | 22.5 | - | 18 ¹⁾ | 56 | 174 | 90 | 10 | 47 |
| 90 L | | 2, 4, 6 | 140 | 30.5 | 165 | 178 | 126 | 126 | 101.5 | 101.5 | 93 | 43 | 125 | 33 | 54 | 143 | 22.5 | - | 18 ¹⁾ | 56 | 174 | 90 | 10 | 47 |
| 100 L | All | 2, 4, 6, 8 | 160 | 42 | 196 | 198 | 166 | 166 | 125.5 | 125.5 | 135 | 63.5 | 140 | 37.5 | 37.5 | 176 | 33.5 | 50 | 25 | 63 | 141 | 100 | 12 | 45 |
| 112 M | All | 2, 4, 6, 8 | 190 | 46 | 226 | 222 | 177 | 177 | 136.5 | 136.5 | 135 | 63.5 | 140 | 37.5 | 37.5 | 176 | 26 | 50 | 25 | 70 | 130 | 112 | 12 | 52 |
| 132 S | All | 2, 4, 6, 8 | 216 | 53 | 256 | 262 | 202 | 202 | 159.5 | 159.5 | 155 | 70.5 | 140 | 38 | 76 ³⁾ | 218 ⁴⁾ | 26.5 | 48 | 24 | 89 | 167 | 132 | 15 | 69 |
| 132 M | All | 2, 4, 6, 8 | 216 | 53 | 256 | 262 | 202 | 202 | 159.5 | 159.5 | 155 | 70.5 | 178 | 38 | 76 | 218 | 26.5 | 48 | 24 | 89 | 179 | 132 | 15 | 69 |
| 160 M | All | 2, 4, 6, 8 | 254 | 60 | 300 | 314 | 236.5 | 236.5 | 190 | 190 | 175 | 77.5 | 210 | 44 | 89 ⁵⁾ | 300 ⁶⁾ | 47 | 57 | 28.5 | 108 | 192 | 160 | 18 | 85 |
| 160 L | All | 2, 4, 6, 8 | 254 | 60 | 300 | 314 | 236.5 | 236.5 | 190 | 190 | 175 | 77.5 | 254 | 44 | 89 | 300 | 47 | 57 | 28.5 | 108 | 148 ²⁾ | 160 | 18 | 85 |
| 180 M | All | 2, 4, 6, 8 | 279 | 65 | 339 | 356 | 259 | 259 | 212.5 | 212.5 | 175 | 77.5 | 241 | 80 | 100 | 328 | 30 | 57 | 28.5 | 121 | 232 | 180 | 20 | 95 |
| 180 L | All | 2, 4, 6, 8 | 279 | 65 | 339 | 356 | 259 | 259 | 212.5 | 212.5 | 175 | 77.5 | 279 | 80 | 100 | 328 | 30 | 57 | 28.5 | 121 | 194 | 180 | 20 | 95 |
| 200 L | All | 2, 4, 6, 8 | 318 | 70 | 378 | 396 | 296 | 296 | 238 | 238 | 225 | 102.5 | 305 | 90 | 100 | 355 | 45 | 75 | 37.5 | 133 | 202 | 200 | 25 | 108 |

1) Only one termination hole available.

2) Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension CA* is 208 mm.

3) With screwed-on feet, dimension BA' is 38 mm.

4) With screwed-on feet, dimension BB is 180 mm.

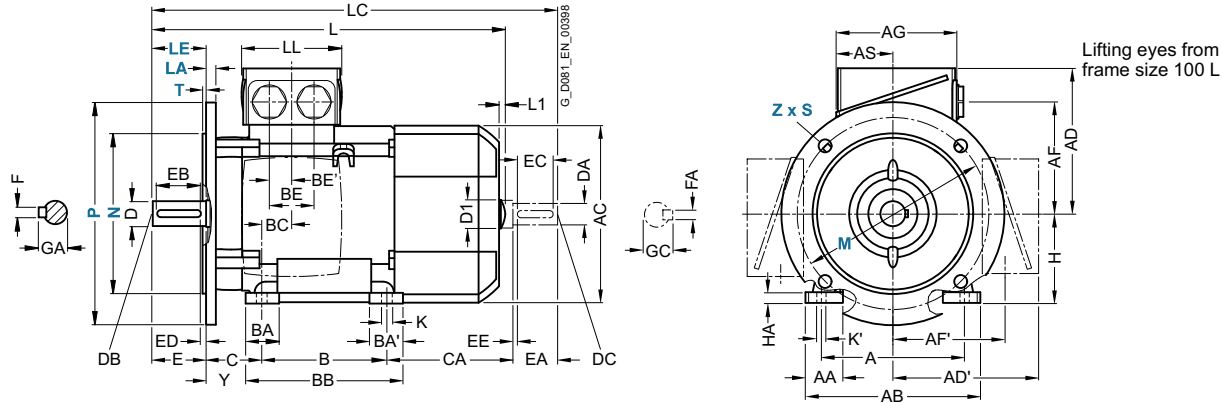
5) With screwed-on feet, dimension BA' is 44 mm.

6) With screwed-on feet, dimension BB is 256 mm.

توجه: ابعاد و اندازه در سری قدیمی و سری جدید مشابه یکدیگرند و فقط تفاوت در، شکل ظاهری کاسه عقب (بادگیر فن) و جعبه برق (درپ تخته کلمپ) می باشد (GP 1LA7 & 1LE1)

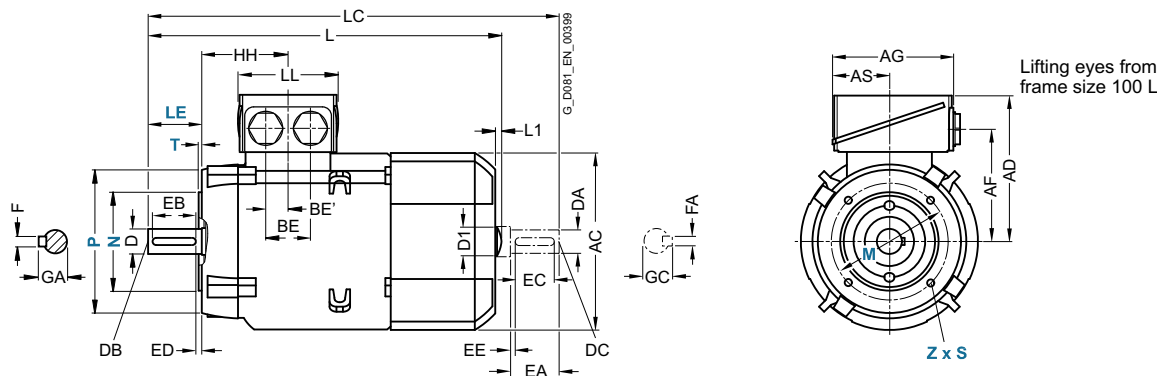
Dimensional drawings (continued) (Type of construction IM B35)

For flange dimensions, see page 1/46 (Z = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see page 1/46 (Z = the number of retaining holes)



| For motor | | | Dimension designation acc. to IEC | | | | DE shaft extension | | | | | NDE shaft extension | | | | | | | | | | | | |
|------------|----------------------------------|---------------|-----------------------------------|------|------|---------------------|--------------------|----|-------------------|-----|----|---------------------|-----|-----|-----|----|------|----|-----|-----|-----|-----|----|------|
| Frame size | Motor type | No. of poles | HH | K | K' | L ¹⁾ | L1 | D1 | LC | LL | D | DB | E | EB | ED | F | GA | DA | DC | EA | EC | EE | FA | GC |
| 63 M | 1LE100-0B.2 1LE101 1LE1021 | 2, 4, 6 | 69.5 | 7 | 10 | 202.5 ⁴⁾ | - | - | 232 ⁴⁾ | 75 | 11 | M4 | 23 | 16 | 3.5 | 4 | 12.5 | 11 | M4 | 23 | 16 | 3.5 | 4 | 12.5 |
| | 1LE1001-0B.3 1LE1002-0B.6 | 2, 4 | | | | 228.5 | | | 258 | | | | | | | | | | | | | | | |
| 71 M | 1LE1001, 1LE1002 | 2, 4, 6, 8 | 63.5 | 7 | 10 | 240 | - | - | 278 | 75 | 14 | M5 | 30 | 22 | 4 | 5 | 16 | 14 | M5 | 30 | 22 | 4 | 5 | 16 |
| 80 M | 1LE1001 | 2, 4, 6 | 73 | 9.5 | 13.5 | 292 | - | - | 342.5 | 79 | 19 | M6 | 40 | 32 | 4 | 6 | 21.5 | 19 | M6 | 40 | 32 | 4 | 6 | 21.5 |
| 90 S | 1LE1041 | 2, 4, 6 | 78.5 | 10 | 14 | 347 | - | - | 405 | 79 | 24 | M8 | 50 | 40 | 5 | 8 | 27 | 19 | M6 | 40 | 32 | 4 | 6 | 21.5 |
| 90 L | | 2, 4, 6 | 78.5 | 10 | 14 | 347 | - | - | 405 | 79 | 24 | M8 | 50 | 40 | 5 | 8 | 27 | 19 | M6 | 40 | 32 | 4 | 6 | 21.5 |
| 100 L | All | 2, 4, 6, 8 | 96.5 | 12 | 16 | 395.5 | 7 | 32 | 454 | 112 | 28 | M10 | 60 | 50 | 5 | 8 | 31 | 24 | M8 | 50 | 40 | 5 | 8 | 27 |
| 112 M | All | 2, 4, 6, 8 | 96 | 12 | 16 | 389 414 | 7 | 32 | 450 475 | 112 | 28 | M10 | 60 | 50 | 5 | 8 | 31 | 24 | M8 | 50 | 40 | 5 | 8 | 27 |
| 132 S | All | 2, 4, 6, 8 | 115.5 | 12 | 16 | 465 | 8.5 | 39 | 535.5 | 130 | 38 | M12 | 80 | 70 | 5 | 10 | 41 | 28 | M10 | 60 | 50 | 5 | 8 | 31 |
| 132 M | All | 2, 4, 6, 8 | 115.5 | 12 | 16 | 465 | 8.5 | 39 | 535.5 | 130 | 38 | M12 | 80 | 70 | 5 | 10 | 41 | 28 | M10 | 60 | 50 | 5 | 8 | 31 |
| 160 M | All | 2, 4, 6, 8 | 155 | 15 | 19 | 604 | 10 | 45 | 730 | 145 | 42 | M16 | 110 | 90 | 10 | 12 | 45 | 42 | M16 | 110 | 90 | 10 | 12 | 45 |
| 160 L | All | 2, 4, 6, 8 | 155 | 15 | 19 | 604 ²⁾ | 10 | 45 | 730 ³⁾ | 145 | 42 | M16 | 110 | 90 | 10 | 12 | 45 | 42 | M16 | 110 | 90 | 10 | 12 | 45 |
| 180 M | All | 2, 4, 6, 8 | 151 | 14.5 | 19 | 698 | - | - | 814 | 145 | 48 | M16 | 110 | 100 | 5 | 14 | 52 | 48 | M16 | 110 | 100 | 5 | 14 | 52 |
| 180 L | All | 2, 4, 6, 8 | 151 | 14.5 | 19 | 698 | - | - | 814 | 145 | 48 | M16 | 110 | 100 | 5 | 14 | 52 | 48 | M16 | 110 | 100 | 5 | 14 | 52 |
| 200 L | All | 2, 4, 6, 8 | 178 | 18.5 | 25 | 746 | - | - | 860 | 185 | 55 | M20 | 110 | 100 | 5 | 16 | 59 | 55 | M20 | 110 | 100 | 5 | 16 | 59 |

1) The length is specified as far as the tip of the fan cover.
 2) Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension L is 664 mm.
 3) Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension LC is 790 mm.
 4) For 1LE1002-0B.3 with the type of construction code letters (14th position of the article number) F, G, H (IM B5, IM V1 without protective cover, IM V3) is dimension L 228.5 mm. Dimension LC is 258 mm.