

Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1CV1184B

SIMOTICS SD - 180 L - IM B5 - 4p

| | | |
|------------------|-----------------|-----------|
| Client order no. | Item-No. | Offer no. |
| Order no. | Consignment no. | Project |

Remarks

Electrical data

Safe Area

| U [V] | Δ / Y | f [Hz] | P [kW] | P [hp] | I [A] | n [1/min] | M [Nm] | η ³⁾ | | | $\cos\phi$ ³⁾ | | | I_A/I_N I_i/I_N | M_A/M_N T_i/T_N | M_k/M_N T_B/T_N | IE-CL |
|----------|--------------|-----------|-----------|-----------|----------|--------------|-----------|----------------------|------|------|--------------------------|------|------|------------------------|------------------------|------------------------|-------|
| | | | | | | | | 4/4 | 3/4 | 2/4 | 4/4 | 3/4 | 2/4 | | | | |
| 230 | Δ | 50 | 22.00 | -/- | 74.00 | 1465 | 143.0 | 89.9 | 90.8 | 90.7 | 0.83 | 0.78 | 0.67 | 8.0 | 2.7 | 3.6 | IE1 |
| 400 | Y | 50 | 22.00 | -/- | 42.50 | 1465 | 143.0 | 89.9 | 90.8 | 90.7 | 0.83 | 0.78 | 0.67 | 8.0 | 2.7 | 3.6 | IE1 |
| 460 | Y | 60 | 25.30 | -/- | 41.50 | 1765 | 137.0 | 91.0 | 91.7 | 91.5 | 0.84 | 0.79 | 0.69 | 8.2 | 2.7 | 3.6 | IE1 |

| | | | | | |
|-----------------|----------|--------|------|--------------|------------------------|
| IM B5 / IM 3001 | FS 180 L | 170 kg | IP55 | IEC/EN 60034 | IEC, DIN, ISO, VDE, EN |
|-----------------|----------|--------|------|--------------|------------------------|

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 7.76 s | 14 s

Mechanical data

| | | | | |
|---|---------------------------------|---------------------------------|----------------------------|---|
| Sound level (SPL / SWL) at 50Hz 60Hz | 63.0 / 76.0 dB(A) ²⁾ | 66.0 / 79.0 dB(A) ²⁾ | External earthing terminal | Yes (standard) |
| Moment of inertia | 0.1300 kg m ² | | Vibration severity grade | A |
| Bearing DE NDE | 6210 Z C3 | 6210 Z C3 | Insulation | 155(F) to 130(B) |
| bearing lifetime | | | Duty type | S1 |
| L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾ | 40000 h | 32000 h | Direction of rotation | bidirectional |
| Lubricants | Unirex N3 | | Frame material | cast iron |
| Regreasing device | No | | Coating (paint finish) | Standard paint finish C2 |
| Grease nipple | -/- | | Color, paint shade | RAL7030 |
| Type of bearing | Locating bearing NDE | | Motor protection | (A) without (Standard) |
| Condensate drainage holes | Yes (standard) | | Method of cooling | IC411 - self ventilated, surface cooled |


Terminal box

| | | | |
|--------------------------|-----------|--------------------------------|----------------------|
| Terminal box position | top | Max. cross-sectional area | 16.0 mm ² |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 19.0 mm - 28.0 mm |
| Type of terminal box | TB1 J01 | Cable entry | 2xM40x1,5 |
| Contact screw thread | M5 | Cable gland | 2 plugs |

Notes:

I_A/I_N = locked rotor current / current nominal
 M_k/M_N = locked rotor torque / torque nominal
 M_k/M_N = break down torque / nominal torque
 1) L10mh according to DIN ISO 281 10/2010
 2) at rated power / at full load
 3) Value is valid only for DOL operation with motor design IC411

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|-------------------------------|---------------------|-------------------------------|-------------|---|
| responsible dep. DI MC LVM | technical reference | created by DT Configurator | approved by | <i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i> |
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