

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



Motor type : 1CV3073B

SIMOTICS SD - 71 M - 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 | M_A/M_N | M_K/M_N | IE-CL |
|-----------------|--------------|-----------|-----------|-----------|----------|--------------|-----------|----------------------|------|----------------------------------|--------------------------|------|-------------|-----------|-----------|-----------|-------|
| | | | | | | | | 4/4 | 3/4 | 2/4 | 4/4 | 3/4 | 2/4 | I_i/I_N | T_i/T_N | T_B/T_N | |
| 230 | Δ | 50 | 0.37 | -/- | 1.72 | 1410 | 2.5 | 77.3 | 76.8 | 73.2 | 0.70 | 0.61 | 0.48 | 4.8 | 3.1 | 3.1 | IE3 |
| 400 | Y | 50 | 0.37 | -/- | 0.99 | 1410 | 2.5 | 77.3 | 76.8 | 73.2 | 0.70 | 0.61 | 0.48 | 4.8 | 3.1 | 3.1 | IE3 |
| 460 | Y | 60 | 0.43 | -/- | 0.99 | 1710 | 2.4 | 78.2 | 77.5 | 74.1 | 0.70 | 0.61 | 0.49 | 5.1 | 3.0 | 3.1 | IE3 |
| 460 | Y | 60 | 0.37 | 0.50 | 0.90 | 1720 | 2.0 | 78.2 | 76.9 | 72.5 | 0.66 | 0.57 | 0.45 | 5.7 | 3.6 | 3.8 | MG1 |
| IM B5 / IM 3001 | | FS 71 M | | 16 kg | | IP55 | | IEC/EN 60034 | | IEC, EN, UL, CSA, NEMA MG1-12-12 | | | kVA Code: L | | | | |

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

Locked rotor time (hot / cold) : 47.6 s | 55.8 s

Mechanical data

| | | | | |
|---|---------------------------------|---------------------------------|----------------------------|---|
| Sound level (SPL / SWL) at 50Hz 60Hz | 44.0 / 55.0 dB(A) ²⁾ | 47.0 / 58.0 dB(A) ²⁾ | External earthing terminal | No |
| Moment of inertia | 0.0014 kg m ² | | Vibration severity grade | A |
| Bearing DE NDE | 6202 2Z C3 | 6202 2Z 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 | Preloaded bearing DE | | Motor protection | (A) without (Standard) |
| Condensate drainage holes | -/- | | Method of cooling | IC411 - self ventilated, surface cooled |

Terminal box

| | | | |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position | top | Max. cross-sectional area | 1.5 mm ² |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 9.0 mm - 17.0 mm |
| Type of terminal box | TB1 D11 | Cable entry | 1xM25x1,5 |
| Contact screw thread | M4 | Cable gland | 1 plug |

Notes:

I_A/I_N = locked rotor current / current nominal
 M_A/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

| | | | | | | | |
|-------------------------------|-----------------------------|-------------------------------|-----------------------------------|---|--|-----------------|--|
| 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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