

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



Motor type : 1CV4104A

SIMOTICS SD - 100 L - IM B3 - 2p

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

Remarks

Safe Area

-/-

Electrical data

| U [V] | Δ / Y | f [Hz] | P [kW] | P [hp] | I [A] | n [1/min] | M [Nm] | $\eta^{3)}$ | | | $\cos\phi^{3)}$ | | | 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 | | | | |
| DOL duty (S1) - 155(F) to 130(B) | | | | | | | | | | | | | | | | | |
| 400 | Δ | 50 | 3.00 | -/- | 5.70 | 2920 | 9.8 | 89.1 | 89.8 | 89.4 | 0.86 | 0.81 | 0.71 | 9.0 | 3.7 | 4.9 | IE4 |
| 690 | Y | 50 | 3.00 | -/- | 3.30 | 2920 | 9.8 | 89.1 | 89.8 | 89.4 | 0.86 | 0.81 | 0.71 | 9.0 | 3.7 | 4.9 | IE4 |
| 460 | Δ | 60 | 3.45 | -/- | 5.60 | 3515 | 9.4 | 89.5 | 89.9 | 89.3 | 0.87 | 0.83 | 0.74 | 9.5 | 4.0 | 5.2 | IE4 |
| 460 | Δ | 60 | 3.00 | -/- | 4.95 | 3530 | 8.1 | 89.5 | 89.5 | 88.3 | 0.85 | 0.80 | 0.69 | 10.8 | 4.7 | 6.0 | IE4 |
| IM B3 / IM 1001 | | FS 100 L | | IP55 | | UKCA | | IEC/EN 60034 | | IEC, DIN, ISO, VDE, EN | | | | | | | |

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

Locked rotor time (hot / cold) : 12.7 s | 16.4 s

Mechanical data

| | | | | |
|----------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz | 62 / 74 dB(A) ^{2) 3)} | 67 / 79 dB(A) ^{2) 3)} | Vibration severity grade | A |
| Moment of inertia | 0.0054 kg m ² | | Thermal class | F |
| Bearing DE NDE | 6206 2Z C3 | 6206 2Z C3 | Duty type | S1 |
| bearing lifetime | | | Direction of rotation | bidirectional |
| L_{10mh} , F_{Rad} min 50 60Hz ¹⁾ for coupling operation | 40000 h | 32000 h | Frame material | cast iron |
| Regreasing device | Without | | Net weight of the motor (IM B3) | 38 kg |
| Grease nipple | -/- | | Coating (paint finish) | Standard paint finish C2 |
| Type of bearing | Preloaded bearing DE | | Color, paint shade | RAL7030 |
| Condensate drainage holes | With (standard) | | Motor protection | (A) without (Standard) |
| External earthing terminal | Without | | Method of cooling | IC411 - self ventilated, surface cooled |

Terminal box

| | | | |
|--------------------------|-----------|--------------------------------|-------------------|
| Terminal box position | top | Max. cross-sectional area | 4 mm ² |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 11 mm - 21 mm |
| Type of terminal box | TB1 F01 | Cable entry | 2xM32x1,5 |
| Contact screw thread | M4 | Cable gland | 2 plugs |

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

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