

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



Motor type : 1CV1220B

SIMOTICS SD - 225 S - 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 | | | | |
| 400 | Δ | 50 | 37.00 | -/- | 69.00 | 1475 | 240.0 | 91.2 | 91.6 | 91.1 | 0.85 | 0.81 | 0.71 | 7.0 | 2.3 | 3.2 | IE1 |
| 690 | Y | 50 | 37.00 | -/- | 40.00 | 1475 | 240.0 | 91.2 | 91.6 | 91.1 | 0.85 | 0.81 | 0.71 | 7.0 | 2.3 | 3.2 | IE1 |
| 460 | Δ | 60 | 42.50 | -/- | 67.00 | 1775 | 230.0 | 93.0 | 93.3 | 92.5 | 0.86 | 0.83 | 0.74 | 7.0 | 2.3 | 3.2 | IE1 |
| IM B5 / IM 3001 | | FS 225 S | | IP55 | | IEC/EN 60034 | | IEC, DIN, ISO, VDE, EN | | | | | | | | | |
| Environmental conditions : -20° C - +40° C / 1000 m | | | | | | | | | | Locked rotor time (hot / cold) : 13.1 s 22.7 s | | | | | | | |

Mechanical data

| | | | | |
|---|-----------------------------|-----------------------------|---------------------------------|---|
| Sound level (SPL / SWL) at 50Hz 60Hz | 68 / 82 dB(A) ²⁾ | 72 / 86 dB(A) ²⁾ | Vibration severity grade | A |
| Moment of inertia | 0.3700 kg m ² | | Insulation | 155(F) to 130(B) |
| Bearing DE NDE | 6213 Z C3 | 6213 Z C3 | Duty type | S1 |
| bearing lifetime | | | Direction of rotation | bidirectional |
| L_{10mh} $F_{Rad min}$ for coupling operation 50 60Hz ¹⁾ | 40000 h | 32000 h | Frame material | cast iron |
| Lubricants | Unirex N3 | | Net weight of the motor (IM B3) | 260 kg |
| 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 |
| External earthing terminal | Yes (standard) | | | |

Terminal box

| | | | |
|---------------------------|--------------------|--------------------------------|---------------|
| Terminal box position | top | Cable diameter from ... to ... | 27 mm - 35 mm |
| Material of terminal box | cast iron | Cable entry | 2xM50x1,5 |
| Type of terminal box | TB1 L01 | Cable gland | 2 plugs |
| Contact screw thread | M8 | | |
| Max. cross-sectional area | 35 mm ² | | |

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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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