

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

Motor type: **7CV3083B** SIMOTICS SD - 80M - IM B3 - 4 p

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

Electrical data

Safe Area

| U | Δ/Y | f | P | P | I | n | M | M | $\eta^{3)}$ | | | $\cos\phi^{3)}$ | | | I_A/I_N | M_A/M_N | M_k/M_N | IE-CL |
|--|------------|---------|--------|------|-------|---------|---------|------|------------------------|--|------|-----------------|------|------|-----------|-----------|-----------|-------|
| [V]±10% | | [Hz]±5% | [kW] | [hp] | [A] | [1/min] | [kgf.m] | [Nm] | 4/4 | 3/4 | 2/4 | 4/4 | 3/4 | 2/4 | | | | |
| Motordaten / Motor Data | | | | | | | | | | | | | | | | | | |
| 415 | Y | 50 | 0.75 | -/- | 1.70 | 1445 | 0.5 | 5.0 | 83.2 | 83.2 | 82.0 | 0.75 | 0.66 | 0.53 | 6.5 | 3.5 | 3.2 | IE3 |
| IM B3 / IM 1001 | | | FS 80M | | 21 kg | | SF:1 | | IS 12615 / IEC 60034-1 | | | | | | | | | |
| Environmental conditions : -20 °C - +50 °C / 1,000 m | | | | | | | | | | Locked rotor time (hot / cold) : 16 s 21 s | | | | | | | | |



Mechanical data

| | | | |
|---|--|-----------------------------------|---|
| Sound pressure level 50Hz 60Hz | 60 dB(A) 63 dB(A) | External earthing terminal | Yes (standard) |
| Moment of inertia Rotor GD ² | 0.0024 kg m ² 0.0095 kgf.m ² | Vibration severity grade | A (Standard) |
| Bearing DE NDE | 6204 2ZC3 6204 2ZC3 | Insulation | 155(F) utilized to 130(B) |
| bearing lifetime | | Duty type | S1 |
| L _{10mh} F _{Rad max} according catalogue 50 60Hz ¹⁾ | 20.000 h 16.000 h | Direction of rotation | Bidirectional |
| L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾ | 50.000 h 40.000 h | Frame material | Cast iron |
| Type of bearing | Locating (fixed) bearing, NDE | Forced ventilation motor details | - / - |
| Relubrication interval/quantity DE NDE | - / - g - / - g - / - h | Net weight of the motor (IM B3) | 21 kg |
| Type of construction | IM B3 / IM 1001 | Rotor weight | 4 kg |
| Degree of protection | IP55 | Data of anti condensation heating | - / - V, - / - W |
| Lubricants | Esso Unirex N3 | Coating (paint finish) | Standard paint finish |
| Regreasing device | - / - | Color, paint shade | RAL7030 |
| Grease nipple | - / - | Motor protection | (A) without |
| Condensate drainage holes | No | Method of cooling | IC411 - Self ventilated, surface cooled |

Terminal box

| | | | |
|---------------------------|-------------------|--------------------------------|---------------------|
| Terminal box position | Top | Cable diameter from ... to ... | 9.0 mm - 17.0 mm |
| Material of terminal box | Aluminium | Cable entry | 1xM16x1.5+1xM25x1.5 |
| Type of terminal box | TB7 D04 | Cable gland | 2 Plugs |
| Contact screw thread | M4 | | |
| Max. cross-sectional area | 6 mm ² | | |

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
 3) Value is valid only for DOL operation with motor design IC411
 1) L10mh according to DIN ISO 281 10/2010

| | | | | | |
|-------------------------------|---|--|-----------------------------|---|---|
| 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> | Link documents |
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