

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



Motor type : 1CV3310D

SIMOTICS SD - 315 S - IM B3 - 8p

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

Remarks

## Electrical data

## Safe Area

| U<br>[V] | $\Delta / Y$ | f<br>[Hz] | P<br>[kW] | P<br>[hp] | I<br>[A] | n<br>[1/min] | M<br>[Nm] | $\eta$ <sup>3)</sup> |      |      | $\cos\phi$ <sup>3)</sup> |      |      | $I_A/I_N$<br>$I_i/I_N$ | $M_A/M_N$<br>$T_i/T_N$ | $M_K/M_N$<br>$T_B/T_N$ | IE-CL |
|----------|--------------|-----------|-----------|-----------|----------|--------------|-----------|----------------------|------|------|--------------------------|------|------|------------------------|------------------------|------------------------|-------|
|          |              |           |           |           |          |              |           | 4/4                  | 3/4  | 2/4  | 4/4                      | 3/4  | 2/4  |                        |                        |                        |       |
| 400      | $\Delta$     | 50        | 55.00     | -/-       | 106.00   | 740          | 710.0     | 92.5                 | 92.9 | 92.6 | 0.81                     | 0.76 | 0.65 | 6.0                    | 2.3                    | 2.7                    | IE3   |
| 690      | Y            | 50        | 55.00     | -/-       | 61.00    | 740          | 710.0     | 92.5                 | 92.9 | 92.6 | 0.81                     | 0.76 | 0.65 | 6.0                    | 2.3                    | 2.7                    | IE3   |

|   |          |      |  |                        |
|---|----------|------|--|------------------------|
| IM B3 / IM 1001                                     | FS 315 S | IP55 | IEC/EN 60034                                   | IEC, DIN, ISO, VDE, EN |
| Environmental conditions : -20 °C - +40 °C / 1000 m |          |      | Locked rotor time (hot / cold) : 30 s   43.8 s |                        |

## Mechanical data

|  |                             |                             |                                 |   |
|--|-----------------------------|-----------------------------|---------------------------------|---|
| Sound level (SPL / SWL) at 50Hz 60Hz   | 66 / 81 dB(A) <sup>2)</sup> | 73 / 87 dB(A) <sup>2)</sup> | External earthing terminal      | Yes (standard)  |
| Moment of inertia  | 2.0000 kg m <sup>2</sup>    |                             | Vibration severity grade        | A   |
| Bearing DE   NDE   | 6319 C3                     | 6319 C3                     | Insulation                      | 155(F) to 130(B)  |
| <b>bearing lifetime</b>  |                             |                             | Duty type                       | S1  |
| L <sub>10mh</sub> , F <sub>Rad</sub> , min<br>50 60Hz <sup>1)</sup> for coupling operation | 40000 h                     | 32000 h                     | Direction of rotation           | bidirectional   |
| Relubrication interval/quantity DE  <br>NDE  | 40 g   40 g<br>6000 h       |                             | Frame material                  | cast iron   |
| Lubricants   | Unirex N3                   |                             | Net weight of the motor (IM B3) | 650 kg  |
| Regreasing device  | Yes (standard)              |                             | Coating (paint finish)          | Special paint finish C3                                       |
| Grease nipple  | M10x1 DIN 3404 A            |                             | Color, paint shade              | RAL7030   |
| Type of bearing  | Locating bearing NDE        |                             | Motor protection                | (B) 3 PTC thermistors - for tripping (standard) (2 terminals) |
| Condensate drainage holes  | Yes (standard)              |                             | Method of cooling               | IC411 - self ventilated, surface cooled                       |

## Terminal box

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 240 mm <sup>2</sup> |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 38 mm - 45 mm       |
| Type of terminal box     | TB1 Q01   | Cable entry                    | 2xM63x1,5-2xM20x1,5 |
| Contact screw thread     | M12       | Cable gland                    | 4 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

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