

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

Data sheet for three-phase Squirrel-Cage-Motors



Motor type / Motor type : 1CD3083C

SIMOTICS XP - 80 M - IM B34 - 6p

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

Remarks / Remarks

## Electrical data / Electrical data

II 2G Ex db eb IIB T4 Gb

| U  | $\Delta / Y$ | f       | P    | P    | I    | n       | M    | $\eta^{3)}$  |      |      | $\cos\varphi^{3)}$ |      |      | $I_A/I_N$ | $M_A/M_N$ | $M_K/M_N$ | IE-CL |
|--|--------------|---------|------|------|------|---------|------|--------------|------|------|--------------------|------|------|-----------|-----------|-----------|-------|
| [V]  |              | [Hz]    | [kW] | [hp] | [A]  | [1/min] | [Nm] | 4/4          | 3/4  | 2/4  | 4/4                | 3/4  | 2/4  | $I_i/I_N$ | $T_i/T_N$ | $T_B/T_N$ |       |
| DOL duty (S1) / DOL duty (S1) - 155(F) to 130(B) |              |         |      |      |      |         |      |              |      |      |                    |      |      |           |           |           |       |
| 230  | $\Delta$     | 50      | 0.55 | -/-  | 2.65 | 935     | 5.6  | 77.2         | 77.0 | 73.9 | 0.67               | 0.57 | 0.44 | 4.5       | 2.5       | 2.8       | IE3   |
| 400  | Y            | 50      | 0.55 | -/-  | 1.53 | 935     | 5.6  | 77.2         | 77.0 | 73.9 | 0.67               | 0.57 | 0.44 | 4.5       | 2.5       | 2.8       | IE3   |
| 460  | Y            | 60      | 0.55 | -/-  | 1.34 | 1145    | 4.6  | 81.7         | 80.5 | 76.4 | 0.63               | 0.54 | 0.42 | 5.3       | 2.8       | 3.4       | IE3   |
| IM B34 / IM 2101                                 |              | FS 80 M |      |      |      | IP55    |      | IEC/EN 60034 |      |      |                    |      |      |           |           |           |       |

Environmental conditions / Environmental conditions : -20 °C - +40 °C / 1000 m Locked rotor time (hot / cold) / Locked rotor time (hot / cold) : 43.6 s | 55 s

## Mechanical data / Mechanical data

|  |  |                                |  |  |
|--|--|--------------------------------|--|--|
| Sound level (SPL / SWL) at 50Hz 60Hz<br>Sound level (SPL / SWL) at 50Hz 60Hz           | 61 / 69 dB(A) <sup>2) 3)</sup>             | 45 / 56 dB(A) <sup>2) 3)</sup> | Vibration severity grade<br>Vibration severity grade     | A<br>A   |
| Moment of inertia<br>Moment of inertia   | 0.0031 kg m <sup>2</sup>                   |                                | Thermal class<br>Thermal class                           | F<br>F   |
| Bearing DE   NDE<br>Bearing DE   NDE   | 6204 2Z C3                                 | 6204 2Z C3                     | Duty type<br>Duty type                                   | S1   |
| bearing lifetime / bearing lifetime  |  |                                | Direction of rotation<br>Direction of rotation           | bidirectional<br>bidirectional   |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation<br>50 60Hz <sup>1)</sup> | 40000 h                                    | 32000 h                        | Frame material<br>Frame material                         | cast iron<br>cast iron   |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz<br><sup>1)</sup> |  |                                | Net weight of the motor<br>Net weight of the motor       | 35 kg  |
| Regreasing device<br>Regreasing device   | Without<br>Without                         |                                | Motor weight incl. options<br>Motor weight incl. options | 35 kg  |
| Grease nipple<br>Grease nipple   | -/-  |                                | Coating (paint finish)<br>Coating (paint finish)         | Standard paint finish C2<br>Standard paint finish C2   |
| Type of bearing<br>Type of bearing   | Locating bearing DE<br>Locating bearing DE |                                | Color, paint shade<br>Color, paint shade                 | RAL7030  |
| Condensate drainage holes<br>Condensate drainage holes                                 | Without<br>Without                         |                                | Motor protection<br>Motor protection                     | (B) 3 PTC thermistors - for tripping (2 terminals)<br>(B) 3 PTC thermistors - for tripping (2 terminals) |
| External earthing terminal<br>External earthing terminal                               | With (standard)<br>With (standard)         |                                | Method of cooling<br>Method of cooling                   | IC411 - self ventilated, surface cooled<br>IC411 - self ventilated, surface cooled                       |

## Terminal box / Terminal box

|  |                        |  |                   |
|--|------------------------|--|-------------------|
| Terminal box position<br>Terminal box position       | top<br>top             | Max. cross-sectional area<br>Max. cross-sectional area           | 4 mm <sup>2</sup> |
| Material of terminal box<br>Material of terminal box | cast iron<br>cast iron | Cable diameter from ... to ...<br>Cable diameter from ... to ... | 9 mm - 17 mm      |
| Type of terminal box<br>Type of terminal box         | TB1 E21                | Cable entry<br>Cable entry                                       | -/-               |
| Contact screw thread<br>Contact screw thread         | M4                     |  |                   |

### 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. | <a href="#">Link documents</a> |
|                               | document type<br>datasheet  |                               |             |  | document status<br>released    |
|                               | title<br>1MB1563-ODC32-2NB4 |                               |             |  | document number                |
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