

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



Motor type : 1AV3205B

SIMOTICS GP - 200 L - IM B3 - 4p

|                  |                 |           |
|------------------|-----------------|-----------|
| 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     | η <sup>3)</sup> |                                                  |                        | cosφ <sup>3)</sup> |      |      | I <sub>A</sub> /I <sub>N</sub> | M <sub>A</sub> /M <sub>N</sub> | M <sub>K</sub> /M <sub>N</sub> | IE-CL |
|-----------------------------------------------------|-------|------|----------|------|-------|---------|-------|-----------------|--------------------------------------------------|------------------------|--------------------|------|------|--------------------------------|--------------------------------|--------------------------------|-------|
| [V]                                                 |       | [Hz] | [kW]     | [hp] | [A]   | [1/min] | [Nm]  | 4/4             | 3/4                                              | 2/4                    | 4/4                | 3/4  | 2/4  | I <sub>I</sub> /I <sub>N</sub> | T <sub>I</sub> /T <sub>N</sub> | T <sub>B</sub> /T <sub>N</sub> |       |
| DOL duty (S1) - 155(F) to 130(B)                    |       |      |          |      |       |         |       |                 |                                                  |                        |                    |      |      |                                |                                |                                |       |
| 400                                                 | Δ     | 50   | 30.00    | -/-  | 55.00 | 1470    | 195.0 | 93.6            | 94.0                                             | 93.7                   | 0.84               | 0.80 | 0.71 | 7.3                            | 2.6                            | 3.1                            | IE3   |
| 690                                                 | Y     | 50   | 30.00    | -/-  | 32.00 | 1470    | 195.0 | 93.6            | 94.0                                             | 93.7                   | 0.84               | 0.80 | 0.71 | 7.3                            | 2.6                            | 3.1                            | IE3   |
| 460                                                 | Δ     | 60   | 34.50    | -/-  | 55.00 | 1770    | 186.0 | 93.0            | 93.3                                             | 92.9                   | 0.85               | 0.81 | 0.73 | 7.3                            | 2.4                            | 3.0                            | IE2   |
| 460                                                 | Δ     | 60   | 30.00    | -/-  | 48.00 | 1778    | 161.0 | 94.1            | 94.2                                             | 93.6                   | 0.83               | 0.79 | 0.70 | 8.8                            | 2.6                            | 3.5                            | IE3   |
| IM B3 / IM 1001                                     |       |      | FS 200 L |      |       | IP55    |       | IEC/EN 60034    |                                                  | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |      |       |         |       |                 | Locked rotor time (hot / cold) : 28.6 s   43.8 s |                        |                    |      |      |                                |                                |                                |       |

## Mechanical data

|                                                   |                             |                             |                                 |                                                    |
|---------------------------------------------------|-----------------------------|-----------------------------|---------------------------------|----------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz              | 65 / 72 dB(A) <sup>2)</sup> | 67 / 74 dB(A) <sup>2)</sup> | Vibration severity grade        | A                                                  |
| Moment of inertia                                 | 0.2400 kg m <sup>2</sup>    |                             | Thermal class                   | F                                                  |
| Bearing DE   NDE                                  | 6212 Z C3                   | 6212 Z C3                   | Duty type                       | S1                                                 |
| bearing lifetime                                  |                             |                             | Direction of rotation           | bidirectional                                      |
| L <sub>10mh</sub> F <sub>Rad</sub> min<br>50 60Hz | 40000 h                     | 32000 h                     | Frame material                  | aluminum                                           |
| Lubricants                                        | Unirex N3                   |                             | Net weight of the motor (IM B3) | 189 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                | (B) 3 PTC thermistors - for tripping (2 terminals) |
| Condensate drainage holes                         | No                          |                             | Method of cooling               | IC411 - self ventilated, surface cooled            |
| External earthing terminal                        | No                          |                             |                                 |                                                    |

## Terminal box

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 25 mm <sup>2</sup>  |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 27 mm - 35 mm       |
| Type of terminal box     | TB1 L00   | Cable entry                    | 2xM50x1,5-2xM20x1,5 |
| Contact screw thread     | M6        | Cable gland                    | 4 plugs             |

## Notes:

|                                                                         |                                           |                                                                  |
|-------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------|
| I <sub>A</sub> /I <sub>N</sub> = locked rotor current / current nominal | 1) L10mh according to DIN ISO 281 10/2010 | 3) Value is valid only for DOL operation with motor design IC411 |
| M <sub>K</sub> /M <sub>N</sub> = locked rotor torque / torque nominal   | 2) at rated power / at full load          |                                                                  |
| M <sub>K</sub> /M <sub>N</sub> = break down torque / nominal torque     |                                           |                                                                  |

|                   |                     |                 |               |                                                                                                              |                                |
|-------------------|---------------------|-----------------|---------------|--------------------------------------------------------------------------------------------------------------|--------------------------------|
| responsible dep.  | technical reference | created by      | approved by   | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. | <a href="#">Link documents</a> |
| DI MC LVM         |                     | DT Configurator |               |                                                                                                              |                                |
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