

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



Motor type : 1CV3205B

SIMOTICS SD - 200 L - IM B5 - 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> |       |
| 380             | Δ     | 50       | 30.00 | -/-    | 58.00 | 1470    | 195.0 | 93.6            | 94.0 | 93.7                   | 0.84               | 0.80 | 0.71 | 7.3                            | 2.6                            | 3.1                            | IE3   |
| 660             | Y     | 50       | 30.00 | -/-    | 33.50 | 1470    | 195.0 | 93.6            | 94.0 | 93.7                   | 0.84               | 0.80 | 0.71 | 7.3                            | 2.6                            | 3.1                            | IE3   |
| 440             | Δ     | 60       | 34.50 | -/-    | 57.00 | 1770    | 186.0 | 93.0            | 93.3 | 92.9                   | 0.85               | 0.81 | 0.73 | 7.3                            | 2.4                            | 3.0                            | IE2   |
| 440             | Δ     | 60       | 30.00 | -/-    | 50.00 | 1778    | 161.0 | 94.1            | 94.2 | 93.6                   | 0.83               | 0.79 | 0.70 | 8.8                            | 2.6                            | 3.5                            | IE3   |
| IM B5 / IM 3001 |       | FS 200 L |       | 240 kg |       | IP55    |       | IEC/EN 60034    |      | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |

Environmental conditions : -40 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 28.6 s | 43.8 s

## Mechanical data

|                                                                                     |                                 |                                 |                            |                                                               |
|-------------------------------------------------------------------------------------|---------------------------------|---------------------------------|----------------------------|---------------------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 65.0 / 72.0 dB(A) <sup>2)</sup> | 67.0 / 74.0 dB(A) <sup>2)</sup> | External earthing terminal | Yes (standard)                                                |
| Moment of inertia                                                                   | 0.2400 kg m <sup>2</sup>        |                                 | Vibration severity grade   | A                                                             |
| Bearing DE   NDE                                                                    | 6312 C3                         | 6312 C3                         | Insulation                 | 155(F) to 130(B)                                              |
| <b>bearing lifetime</b>                                                             |                                 |                                 | Duty type                  | S1                                                            |
| L <sub>10mh</sub> F <sub>Rad min</sub> 50 60Hz <sup>1)</sup> for coupling operation | 40000 h                         | 32000 h                         | Direction of rotation      | bidirectional                                                 |
| Relubrication interval/quantity DE   NDE                                            | 20 g   20 g                     | 8000 h                          | Frame material             | cast iron                                                     |
| Lubricants                                                                          | AERO SHELL GREASE 22            |                                 | Coating (paint finish)     | Special paint finish C3                                       |
| Regreasing device                                                                   | Yes (standard)                  |                                 | Color, paint shade         | RAL7030                                                       |
| Grease nipple                                                                       | M10x1 DIN 3404 A                |                                 | Motor protection           | (B) 3 PTC thermistors - for tripping (standard) (2 terminals) |
| Type of bearing                                                                     | Locating bearing NDE            |                                 | Method of cooling          | IC411 - self ventilated, surface cooled                       |
| Condensate drainage holes                                                           | Yes (standard)                  |                                 |                            |                                                               |

## Terminal box

|                          |           |                                |                      |
|--------------------------|-----------|--------------------------------|----------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 25.0 mm <sup>2</sup> |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 27.0 mm - 35.0 mm    |
| Type of terminal box     | TB1 L01   | 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  
M<sub>K</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>K</sub>/M<sub>N</sub> = 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.                                                                   | technical reference  | created by      | approved by |                 | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |          |      |  |
| DI MC LVM                                                                          |                      | DT Configurator |             |                 |                                                                                                              |          |      |  |
|  | document type        |                 |             | document status |                                                                                                              | customer |      |  |
|                                                                                    | datasheet            |                 |             | released        |                                                                                                              |          |      |  |
| © Siemens AG 2021                                                                  | title                |                 |             | document number |                                                                                                              |          |      |  |
|                                                                                    | 1LE1603-2AB53-3FB4-Z |                 |             |                 |                                                                                                              |          |      |  |
|                                                                                    | D03                  |                 |             | rev.            | creation date                                                                                                | language | Page |  |
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### Special design

D03 Minimum ambient temperature -40°C

### Notes:

|                                                                                    |  |                               |                               |             |                                                                                                              |                                   |                |             |
|------------------------------------------------------------------------------------|--|-------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------------|----------------|-------------|
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