

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



Motor type : 1CV1205B

SIMOTICS SD - 200 L - IM B3 - 4p

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

Remarks

## Electrical data

## Safe Area

| U                                | $\Delta / Y$ | f        | P     | P    | I     | n       | M     | $\eta^{3)}$ |              |      | $\cos\phi^{3)}$        |      |      | $I_A/I_N$ | $M_A/M_N$ | $M_K/M_N$ | 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) - 155(F) to 130(B) |              |          |       |      |       |         |       |             |              |      |                        |      |      |           |           |           |       |
| 400                              | $\Delta$     | 50       | 26.10 | -/-  | 51.00 | 1475    | 169.0 | 91.1        | 91.5         | 91.3 | 0.80                   | 0.74 | 0.63 | 7.9       | 2.6       | 3.6       | IE1   |
| 690                              | Y            | 50       | 26.10 | -/-  | 30.00 | 1475    | 169.0 | 91.1        | 91.5         | 91.3 | 0.80                   | 0.74 | 0.63 | 7.9       | 2.6       | 3.6       | IE1   |
| 460                              | $\Delta$     | 60       | 30.01 | -/-  | 49.50 | 1775    | 161.5 | 92.8        | 93.1         | 92.9 | 0.82                   | 0.76 | 0.65 | 8.4       | 2.6       | 3.5       | IE1   |
|                                  |              |          |       |      |       |         |       |             |              |      |                        |      |      |           |           |           |       |
| IM B3 / IM 1001                  |              | FS 200 L |       |      |       | IP55    |       |             | IEC/EN 60034 |      | IEC, DIN, ISO, VDE, EN |      |      |           |           |           |       |

Environmental conditions : -20 °C - +55 °C / 1,000 m

Locked rotor time (hot / cold) : 10.7 s | 19.8 s

These values are calculated. The final rating plate data will be calculated when the order is placed

The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.

## Mechanical data

|                                                                      |                                |                                |                                 |                                                    |
|----------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                 | 64 / 78 dB(A) <sup>2) 3)</sup> | 68 / 81 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                                  |
| Moment of inertia                                                    | 0.2000 kg m <sup>2</sup>       |                                | Thermal class                   | F                                                  |
| Bearing DE   NDE                                                     | 6212 2Z C3                     | 6212 2Z C3                     | Duty type                       | S1                                                 |
| bearing lifetime                                                     |                                |                                | Direction of rotation           | bidirectional                                      |
| $L_{10mh} F_{Rad, min}$ for coupling operation 50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | cast iron                                          |
| Lubricants                                                           | Unirex N3                      |                                | Net weight of the motor (IM B3) | 220 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                                            | Yes (standard)                 |                                | Method of cooling               | IC411 - self ventilated, surface cooled            |
| External earthing terminal                                           | Yes (standard)                 |                                |                                 |                                                    |

## Terminal box

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 25 mm <sup>2</sup>  |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 27 mm - 35 mm       |
| Type of terminal box     | TB1 L01   | Cable entry                    | 2xM50x1,5-2xM20x1,5 |
| Contact screw thread     | M6        | 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.  | 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                     |               |                                                                                                              |                 |                                |  |
|                   | document type       | datasheet                           |               |                                                                                                              | document status | released                       |  |
|                   | title               | 1LE1502-2AB53-4AB4-Z<br>D22+N07+Q02 |               |                                                                                                              | document number |                                |  |
| © Siemens AG 2022 |                     | rev.                                | creation date | language                                                                                                     | Page            |                                |  |
|                   |                     | 01                                  | 2022-08-30    | en                                                                                                           | 1/2             |                                |  |



**SIMOTICS SD - 200 L - IM B3 - 4p**

|     |                                                                                                |     |                                                   |
|-----|------------------------------------------------------------------------------------------------|-----|---------------------------------------------------|
| D22 | Motor without CE character for export outside the EEA (see EU regulation 2019/1781)            | Q02 | Anti-condensation heating for 230 V (2 terminals) |
| N07 | Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 55°C, power reduced |     |                                                   |

|               |  |
|---------------|--|
| Space heaters |  |
|---------------|--|

|                 |                    |
|-----------------|--------------------|
| Technical data: | 1-phase, 230 V 50W |
|-----------------|--------------------|

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

|                                                                                    |                               |                               |             |                                                                                                              |                             |                                |                                                                                       |             |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|--------------------------------|---------------------------------------------------------------------------------------|-------------|
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|  | document type<br>datasheet    |                               |             |                                                                                                              | document status<br>released |                                |  |             |
|                                                                                    | title<br>1LE1502-2AB53-4AB4-Z |                               |             |                                                                                                              | document number             |                                |                                                                                       |             |
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