

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



Motor type : 1CV3252B

SIMOTICS SD - 250 M - 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)                     |       |          |       |      |        |         |       |                 |                                                |                        |                    |      |      |                                |                                |                                |       |
| 380                                                  | Δ     | 50       | 55.00 | -/-  | 102.00 | 1482    | 355.0 | 94.6            | 95.1                                           | 95.0                   | 0.87               | 0.84 | 0.76 | 6.8                            | 2.5                            | 2.9                            | IE3   |
|                                                      |       |          |       |      |        |         |       |                 |                                                |                        |                    |      |      |                                |                                |                                |       |
| 440                                                  | Δ     | 60       | 63.00 | -/-  | 101.00 | 1782    | 340.0 | 94.1            | 94.5                                           | 94.4                   | 0.87               | 0.84 | 0.77 | 6.7                            | 2.4                            | 2.8                            | IE2   |
| 440                                                  | Δ     | 60       | 55.00 | -/-  | 88.00  | 1786    | 295.0 | 95.4            | 95.6                                           | 95.1                   | 0.86               | 0.83 | 0.74 | 7.6                            | 2.8                            | 3.2                            | IE3   |
| IM B3 / IM 1001                                      |       | FS 250 M |       |      |        | IP55    | UKCA  | IEC/EN 60034    |                                                | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                | KS C IEC60034-2-1              |       |
| Environmental conditions : -20 °C - +40 °C / 1,000 m |       |          |       |      |        |         |       |                 | Locked rotor time (hot / cold) : 34.9 s   55 s |                        |                    |      |      |                                |                                |                                |       |

Mechanical data

|                                                                                     |                                |                                |                                 |                                                    |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 66 / 79 dB(A) <sup>2) 3)</sup> | 68 / 82 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                                  |
| Moment of inertia                                                                   | 0.8500 kg m <sup>2</sup>       |                                | Thermal class                   | F                                                  |
| Bearing DE   NDE                                                                    | 6215 Z C3                      | 6215 Z C3                      | Duty type                       | S1                                                 |
| bearing lifetime                                                                    |                                |                                | Direction of rotation           | bidirectional                                      |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | cast iron                                          |
| Regreasing device                                                                   | Without                        |                                | Net weight of the motor (IM B3) | 420 kg                                             |
| Grease nipple                                                                       | -/-                            |                                | Coating (paint finish)          | Standard paint finish C2                           |
| Type of bearing                                                                     | Locating bearing DE            |                                | Color, paint shade              | RAL7030                                            |
| Bearing insulation DE / Bearing insulation NDE                                      | Yes (non-drive end)            |                                | Motor protection                | (B) 3 PTC thermistors - for tripping (2 terminals) |
| Condensate drainage holes                                                           | With (standard)                |                                | Method of cooling               | IC411 - self ventilated, surface cooled            |
| External earthing terminal                                                          | With (standard)                |                                |                                 |                                                    |

Terminal box

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 120 mm <sup>2</sup> |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 34 mm - 42 mm       |
| Type of terminal box     | TB1 N01   | Cable entry                    | 2xM63x1,5-2xM20x1,5 |
| Contact screw thread     | M10       | 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>B</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      |             |                                                                                                              |                 |  |          |      |
|  | document type       |                      |             |                                                                                                              | document status |                                                                                       |          |      |
|                                                                                    | datasheet           |                      |             |                                                                                                              | released        |                                                                                       |          |      |
|                                                                                    | title               | 1LE1543-2CB23-3AB4-Z |             |                                                                                                              | document number |                                                                                       |          |      |
|                                                                                    |                     |                      |             |                                                                                                              |                 |                                                                                       |          |      |
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|                                                                                    |                     |                      |             |                                                                                                              | 943             | 2023-03-20                                                                            | en       | 1/2  |



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## Special design

|     |                                   |     |                        |
|-----|-----------------------------------|-----|------------------------|
| D33 | KEA Korea Energy Efficiency Label | L51 | Bearing insulation NDE |
|-----|-----------------------------------|-----|------------------------|

Notes:

|                                                                                    |                      |                 |             |                                                                                                              |               |                                                                                       |      |
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|                                                                                    | 1LE1543-2CB23-3AB4-Z |                 |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | D33+L51              |                 |             | rev.                                                                                                         | creation date | language                                                                              | Page |
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