

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



Motor type : 1CV3315C

SIMOTICS SD - 315 L - IM B3 - 6p

|                  |                 |           |
|------------------|-----------------|-----------|
| 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   | 132.00   | -/-  | 245.00 | 992     | 1270.0 | 95.4            | 95.7                                             | 95.4         | 0.82               | 0.77                   | 0.66 | 8.0                            | 3.3                            | 3.3                            | IE3   |
| 690                                                  | Y     | 50   | 132.00   | -/-  | 141.00 | 992     | 1270.0 | 95.4            | 95.7                                             | 95.4         | 0.82               | 0.77                   | 0.66 | 8.0                            | 3.3                            | 3.3                            | IE3   |
|                                                      |       |      |          |      |        |         |        |                 |                                                  |              |                    |                        |      |                                |                                |                                |       |
|                                                      |       |      |          |      |        |         |        |                 |                                                  |              |                    |                        |      |                                |                                |                                |       |
| IM B3 / IM 1001                                      |       |      | FS 315 L |      |        |         | IP55   | UKCA            |                                                  | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1,000 m |       |      |          |      |        |         |        |                 | Locked rotor time (hot / cold) : 22.5 s   36.1 s |              |                    |                        |      |                                |                                |                                |       |

Mechanical data

|                                                                         |                                |                                |                                 |                                                                             |
|-------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                    | 67 / 82 dB(A) <sup>2) 3)</sup> | 66 / 81 dB(A) <sup>2) 3)</sup> | External earthing terminal      | With (standard)                                                             |
| Moment of inertia                                                       | 4.4800 kg m <sup>2</sup>       |                                | Vibration severity grade        | A                                                                           |
| Bearing DE   NDE                                                        | 6319 C3                        | 6319 C3                        | Thermal class                   | F                                                                           |
| bearing lifetime                                                        |                                |                                | Duty type                       | S1                                                                          |
| L <sub>10mh</sub> F <sub>Rad</sub> <sup>1)</sup> for coupling operation | 40000 h                        | 32000 h                        | Direction of rotation           | bidirectional                                                               |
| 50 60Hz                                                                 |                                |                                | Frame material                  | cast iron                                                                   |
| Relubrication interval/quantity DE   NDE                                | 40 g   40 g                    | 6000 h                         | Net weight of the motor (IM B3) | 1130 kg                                                                     |
| Lubricants                                                              | Unirex N3                      |                                | Coating (paint finish)          | Standard paint finish C2                                                    |
| Regreasing device                                                       | With (standard)                |                                | Color, paint shade              | RAL7030                                                                     |
| Grease nipple                                                           | M10x1 DIN 3404 A               |                                | Motor protection                | (P) 1 resistance thermometer PT100 in stator winding - 2 wire (2 terminals) |
| Type of bearing                                                         | Locating bearing NDE           |                                | Method of cooling               | IC411 - self ventilated, surface cooled                                     |
| Condensate drainage holes                                               | With (standard)                |                                |                                 |                                                                             |

Terminal box

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | left      | Max. cross-sectional area      | 240 mm <sup>2</sup> |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 38 mm - 45 mm       |
| Type of terminal box     | TB1 Q01   | Cable entry                    | 2xM63x1,5-2xM20x1,5 |
| Contact screw thread     | M12       | 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>A</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      |             |                                                                                                              |                 |                                |          |
|                   | document type       | datasheet            |             |                                                                                                              | document status | released                       |          |
|                   | title               | 1LE1503-3AC53-4AP6-Z |             |                                                                                                              | document number |                                |          |
| © Siemens AG 2023 |                     |                      |             |                                                                                                              | rev.            | creation date                  | language |
|                   |                     |                      |             |                                                                                                              | 943             | 2023-03-13                     | en       |
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|                   |                     |                      |             |                                                                                                              |                 |                                | 1/2      |



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|     |                                                  |
|-----|--------------------------------------------------|
| B02 | Acceptance test certificate 3.1 acc. to EN 10204 |
|-----|--------------------------------------------------|

Notes:

|                                                                                    |                      |                 |             |                                                                                                              |               |                                                                                       |      |
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| DI MC LVM                                                                          |                      | DT Configurator |             |                                                                                                              |               |  |      |
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|                                                                                    | 1LE1503-3AC53-4AP6-Z |                 |             |                                                                                                              |               |                                                                                       |      |
|                                                                                    | B02                  |                 |             | rev.                                                                                                         | creation date | language                                                                              | Page |
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