

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



Motor type : 1AV3136B

SIMOTICS GP - 132 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 155(F)                   |       |      |          |      |       |         |      |                 |                                                  |                        |                    |      |      |                                |                                |                                |       |
| 400                                                | Δ     | 50   | 11.00    | -/-  | 22.00 | 1470    | 71.0 | 91.4            | 91.8                                             | 91.1                   | 0.79               | 0.73 | 0.61 | 8.3                            | 2.8                            | 3.8                            | IE3   |
| 690                                                | Y     | 50   | 11.00    | -/-  | 12.70 | 1470    | 71.0 | 91.4            | 91.8                                             | 91.1                   | 0.79               | 0.73 | 0.61 | 8.3                            | 2.8                            | 3.8                            | IE3   |
| 460                                                | Δ     | 60   | 12.60    | -/-  | 21.00 | 1770    | 68.0 | 92.4            | 92.6                                             | 92.0                   | 0.81               | 0.76 | 0.65 | 8.8                            | 2.7                            | 3.8                            | IE3   |
| 460                                                | Δ     | 60   | 11.00    | -/-  | 19.20 | 1775    | 59.0 | 92.4            | 92.0                                             | 91.0                   | 0.78               | 0.72 | 0.60 | 9.8                            | 3.1                            | 4.4                            | IE3   |
| IM B3 / IM 1001                                    |       |      | FS 132 M |      |       | IP55    | UKCA | IEC/EN 60034    |                                                  | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -30 °C - + °C / 1,000 m |       |      |          |      |       |         |      |                 | Locked rotor time (hot / cold) : 14.4 s   20.6 s |                        |                    |      |      |                                |                                |                                |       |

## Mechanical data

|                                               |                                |                                |                                 |                                             |
|-----------------------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz          | 64 / 78 dB(A) <sup>2) 3)</sup> | 69 / 82 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                           |
| Moment of inertia                             | 0.0410 kg m <sup>2</sup>       |                                | Thermal class                   | F                                           |
| Bearing DE   NDE                              | 6208 2Z C3                     | 6208 2Z C3                     | Duty type                       | S1                                          |
| bearing lifetime                              |                                |                                | Direction of rotation           | bidirectional                               |
| $L_{10mh} F_{Rad min}$ for coupling operation | 40000 h                        | 32000 h                        | Frame material                  | aluminum                                    |
| Lubricants                                    | Unirex N3                      |                                | Net weight of the motor (IM B3) | 81 kg                                       |
| Regreasing device                             | No                             |                                | Coating (paint finish)          | Standard paint finish C2                    |
| Grease nipple                                 | -/-                            |                                | Color, paint shade              | RAL7030                                     |
| Type of bearing                               | Preloaded bearing DE           |                                | Motor protection                | (A) without (Standard)                      |
| Condensate drainage holes                     | No                             |                                | Method of cooling               | IC418 - without fan and without housing fan |
| External earthing terminal                    | No                             |                                |                                 |                                             |

## Terminal box

|                          |           |                                |                   |
|--------------------------|-----------|--------------------------------|-------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 6 mm <sup>2</sup> |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 11 mm - 21 mm     |
| Type of terminal box     | TB1 H00   | Cable entry                    | 2xM32x1,5         |
| Contact screw thread     | M4        | Cable gland                    | 2 plugs           |

## Notes:

|                                                    |                                           |                                                                  |
|----------------------------------------------------|-------------------------------------------|------------------------------------------------------------------|
| $I_A/I_N$ = 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 |
| $M_K/M_N$ = locked rotor torque / torque nominal   | 2) at rated power / at full load          |                                                                  |
| $M_K/M_N$ = 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                |                 |             |                                                                                                              | document number                |
|                   | 1LE1003-1CB63-4AA4-Z |                 |             |                                                                                                              |                                |
| © Siemens AG 2022 | D04+F90+N03          |                 |             |                                                                                                              | rev.                           |
|                   |                      |                 |             |                                                                                                              | 929                            |
|                   |                      | creation date   |             | language                                                                                                     | Page                           |
|                   |                      | 2022-11-22      |             | en                                                                                                           | 1/2                            |



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### Special design

|     |                                                     |     |                                                                                           |
|-----|-----------------------------------------------------|-----|-------------------------------------------------------------------------------------------|
| D04 | Minimum ambient temperature -30°C                   | N03 | Temperature class 155 (F), utilised to 155 (F), with increased cooling medium temperature |
| F90 | Without external fan and without external fan cover |     |                                                                                           |

### Notes:

|                               |                               |                               |             |                                                                                                              |                             |                                                                                       |             |
|-------------------------------|-------------------------------|-------------------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|-------------|
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| SIEMENS                       | document type<br>datasheet    |                               |             | document status<br>released                                                                                  |                             |  |             |
|                               | title<br>1LE1003-1CB63-4AA4-Z |                               |             | document number                                                                                              |                             |                                                                                       |             |
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