

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



Motor type : 1AV3104C

SIMOTICS GP - 100 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)                     |       |      |          |      |      |         |      |                 |                                                  |      |                    |      |      |                                |                                |                                |         |
| 220                                                  | Δ     | 50   | 1.50     | -/-  | 6.50 | 970     | 14.8 | 82.5            | 83.1                                             | 81.5 | 0.73               | 0.65 | 0.52 | 5.2                            | 1.9                            | 2.8                            | IE3     |
| 380                                                  | Y     | 50   | 1.50     | -/-  | 3.80 | 970     | 14.8 | 82.5            | 83.1                                             | 81.5 | 0.73               | 0.65 | 0.52 | 5.2                            | 1.9                            | 2.8                            | IE3     |
|                                                      |       |      |          |      |      |         |      |                 |                                                  |      |                    |      |      |                                |                                |                                |         |
|                                                      |       |      |          |      |      |         |      |                 |                                                  |      |                    |      |      |                                |                                |                                |         |
| IM B3 / IM 1001                                      |       |      | FS 100 L |      |      | IP55    |      | IEC/EN 60034    | IEC, DIN, ISO, VDE, EN                           |      |                    |      |      |                                |                                |                                | Grade 3 |
| Environmental conditions : -20 °C - +40 °C / 1,000 m |       |      |          |      |      |         |      |                 | Locked rotor time (hot / cold) : 26.6 s   34.7 s |      |                    |      |      |                                |                                |                                |         |

## Mechanical data

|                                                                                     |                                |                                |                                 |                                         |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 59 / 71 dB(A) <sup>2) 3)</sup> | 62 / 74 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                       |
| Moment of inertia                                                                   | 0.0110 kg m <sup>2</sup>       |                                | Thermal class                   | F                                       |
| Bearing DE   NDE                                                                    | 6206 2Z C3                     | 6206 2Z 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                  | aluminum                                |
| Lubricants                                                                          | Unirex N3                      |                                | Net weight of the motor (IM B3) | 25 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               | IC411 - self ventilated, surface cooled |
| External earthing terminal                                                          | No                             |                                |                                 |                                         |

## Terminal box

|                          |           |                                |                   |
|--------------------------|-----------|--------------------------------|-------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 4 mm <sup>2</sup> |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 11 mm - 21 mm     |
| Type of terminal box     | TB1 F00   | Cable entry                    | 2xM32x1,5         |
| Contact screw thread     | M4        | Cable gland                    | 2 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               |                 |               |                                                                                                              | document status                |
|                   | datasheet                   |                 |               |                                                                                                              | released                       |
|                   | title                       |                 |               |                                                                                                              | document number                |
|                   | 1LE1003-1AC42-1AA4-Z<br>D34 |                 |               |                                                                                                              |                                |
| © Siemens AG 2022 |                             | rev.            | creation date | language                                                                                                     | Page                           |
|                   |                             | 01              | 2022-08-24    | en                                                                                                           | 1/2                            |



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



Motor type : 1AV3104C

SIMOTICS GP - 100 L - IM B3 - 6p

### Special design

D34 China Energy Efficiency Label

### Notes:

responsible dep.

DI MC LVM

technical reference

created by

DT Configurator

approved by

Technical data are subject to change! There may be discrepancies between calculated and rating plate values.

[Link documents](#)

**SIEMENS**

document type

datasheet

title

1LE1003-1AC42-1AA4-Z

D34

document status

released

document number

rev.

01

creation date

2022-08-24

language

en

Page

2/2