

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



Motor type : 1AV3083B

SIMOTICS GP - 80 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)                    |       |         |      |      |      |         |      |                 |                                                  |                        |                    |      |      |                                |                                |                                |       |
| 230                                                 | Δ     | 50      | 0.75 | -/-  | 3.05 | 1450    | 5.0  | 82.5            | 82.3                                             | 80.1                   | 0.75               | 0.67 | 0.55 | 7.1                            | 2.7                            | 3.9                            | IE3   |
| 400                                                 | Y     | 50      | 0.75 | -/-  | 1.75 | 1450    | 5.0  | 82.5            | 82.3                                             | 80.1                   | 0.75               | 0.67 | 0.55 | 7.1                            | 2.7                            | 3.9                            | IE3   |
| 460                                                 | Y     | 60      | 0.86 | -/-  | 1.72 | 1750    | 4.7  | 83.5            | 83.1                                             | 80.7                   | 0.75               | 0.67 | 0.55 | 7.7                            | 2.7                            | 4.1                            | IE3   |
| 460                                                 | Y     | 60      | 0.75 | -/-  | 1.59 | 1760    | 4.0  | 83.5            | 82.6                                             | 79.7                   | 0.71               | 0.63 | 0.50 | 8.3                            | 3.1                            | 4.7                            | IE3   |
| IM B3 / IM 1001                                     |       | FS 80 M |      |      |      | IP55    | UKCA | IEC/EN 60034    |                                                  | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |         |      |      |      |         |      |                 | Locked rotor time (hot / cold) : 19.8 s   23.6 s |                        |                    |      |      |                                |                                |                                |       |

| Mechanical data                                                                     |                                |                                |                                 |                                                   |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 53 / 64 dB(A) <sup>2) 3)</sup> | 53 / 64 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                                 |
| Moment of inertia                                                                   | 0.0029 kg m²                   |                                | Thermal class                   | F                                                 |
| Bearing DE   NDE                                                                    | 6004 2Z C3                     | 6004 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                                          |
| Regreasing device                                                                   | Without                        |                                | Net weight of the motor (IM B3) | 14 kg                                             |
| Grease nipple                                                                       | -/-                            |                                | Coating (paint finish)          | Standard paint finish C2                          |
| Type of bearing                                                                     | Preloaded bearing DE           |                                | Color, paint shade              | RAL7030                                           |
| Condensate drainage holes                                                           | Without                        |                                | Motor protection                | (B) 1 PTC thermistor - for tripping (2 terminals) |
| External earthing terminal                                                          | Without                        |                                | Method of cooling               | IC411 - self ventilated, surface cooled           |

|                          |  |  |           |  |  |                                |  |  |                     |  |  |  |  |  |  |  |  |
|--------------------------|--|--|-----------|--|--|--------------------------------|--|--|---------------------|--|--|--|--|--|--|--|--|
| Terminal box             |  |  |           |  |  |                                |  |  |                     |  |  |  |  |  |  |  |  |
| Terminal box position    |  |  | top       |  |  | Max. cross-sectional area      |  |  | 1.5 mm <sup>2</sup> |  |  |  |  |  |  |  |  |
| Material of terminal box |  |  | Aluminium |  |  | Cable diameter from ... to ... |  |  | 9 mm - 17 mm        |  |  |  |  |  |  |  |  |
| Type of terminal box     |  |  | TB1 E00   |  |  | Cable entry                    |  |  | 1xM25x1,5-1xM16x1,5 |  |  |  |  |  |  |  |  |
| Contact screw thread     |  |  | M4        |  |  | Cable gland                    |  |  | 2 plugs             |  |  |  |  |  |  |  |  |

|                                                    |                                                |                                                                  |
|----------------------------------------------------|------------------------------------------------|------------------------------------------------------------------|
| <b>Notes:</b>                                      |                                                |                                                                  |
| $I_A/I_N$ = locked rotor current / current nominal | 1) $L_{10mh}$ according to DIN ISO 281 10/2010 | 3) Value is valid only for DOL operation with motor design IC411 |
| $M_A/M_N$ = locked rotor torque / torque nominal   | 2) at rated power / at full load               |                                                                  |
| $M_B/M_N$ = 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>                                                        |  |
| IN LVM            |                      | SPC        |             |                                                                                                              |               |          |  |  |
| SIEMENS           | document type        |            |             | document status                                                                                              |               |          |                                                                                       |  |
|                   | datasheet            |            |             | released                                                                                                     |               |          |                                                                                       |  |
|                   | title                |            |             | document number                                                                                              |               |          |                                                                                       |  |
|                   | 1LE1003-0DB32-2AB4-Z |            |             |                                                                                                              |               |          |                                                                                       |  |
| © INNOMOTICS 2024 | D22                  |            |             | rev.                                                                                                         | creation date | language | Page                                                                                  |  |
|                   |                      |            |             | 953                                                                                                          | 2024-03-06    | en       | 1/2                                                                                   |  |

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## Special design

|     |                                                                                     |
|-----|-------------------------------------------------------------------------------------|
| D22 | Motor without CE character for export outside the EEA (see EU regulation 2019/1781) |
|-----|-------------------------------------------------------------------------------------|

Notes:

|                            |                               |                   |             |                                                                                                              |                             |                                                                                       |             |
|----------------------------|-------------------------------|-------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|-------------|
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| SIEMENS                    | document type<br>datasheet    |                   |             | document status<br>released                                                                                  |                             |  |             |
|                            | title<br>1LE1003-0DB32-2AB4-Z |                   |             | document number                                                                                              |                             |                                                                                       |             |
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