



**SIMOTICS GP - 90 L - IM B5 - 4p**

|                  |                 |           |
|------------------|-----------------|-----------|
| Client order no. | Item-No.        | Offer no. |
| Order no.        | Consignment no. | Project   |

|         |
|---------|
| Remarks |
|---------|

## 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> |       |
| <b>DOL duty (S1) - 155(F) to 130(B)</b> |       |      |         |      |      |         |      |                 |      |                        |                    |      |      |                                |                                |                                |       |
| 230                                     | Δ     | 50   | 1.50    | -/-  | 5.50 | 1445    | 9.9  | 85.3            | 85.7 | 84.4                   | 0.80               | 0.73 | 0.60 | 7.3                            | 2.9                            | 3.5                            | IE3   |
| 400                                     | Y     | 50   | 1.50    | -/-  | 3.15 | 1445    | 9.9  | 85.3            | 85.7 | 84.4                   | 0.80               | 0.73 | 0.60 | 7.3                            | 2.9                            | 3.5                            | IE3   |
| 460                                     | Y     | 60   | 1.75    | -/-  | 3.15 | 1740    | 9.6  | 86.5            | 86.7 | 85.4                   | 0.80               | 0.74 | 0.62 | 7.7                            | 2.9                            | 3.7                            | IE3   |
| 460                                     | Y     | 60   | 1.50    | -/-  | 2.85 | 1755    | 8.2  | 86.5            | 86.6 | 84.7                   | 0.77               | 0.69 | 0.57 | 8.6                            | 3.4                            | 4.3                            | IE3   |
| IM B5 / IM 3001                         |       |      | FS 90 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) : 17.3 s | 21.5 s

## Mechanical data

|                                                                                        |                                |                                |                                 |                                                   |
|----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 56 / 68 dB(A) <sup>2) 3)</sup> | 58 / 70 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                                 |
| Moment of inertia                                                                      | 0.0049 kg m²                   |                                | Thermal class                   | F                                                 |
| Bearing DE   NDE                                                                       | 6205 2Z C3                     | 6004 2Z C3                     | Duty type                       | S1                                                |
| <b>bearing lifetime</b>                                                                |                                |                                | Direction of rotation           | bidirectional                                     |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation<br>50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | aluminum                                          |
| Regreasing device                                                                      | Without                        |                                | Net weight of the motor (IM B3) | 19 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               | IC416 - separately ventilated, surface cooled     |

## Terminal box

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 1.5 mm²             |
| 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             |

Notes:

$I_A/I_N$  = locked rotor current / current nominal  
 $M_A/M_N$  = locked rotor torque / torque nominal  
 $M_K/M_N$  = break down torque / nominal torque

1) L10mh according to DIN ISO 281 10/2010  
2) at rated power / at full load

3) Value is valid only for DOL operation with motor design IC411

|                                                                                    |                               |                   |             |                                                                                                              |                             |                                                                                                                         |             |
|------------------------------------------------------------------------------------|-------------------------------|-------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------|
| responsible dep.<br>IN LVM                                                         | technical reference           | created by<br>SPC | approved by | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |                             | <a href="#">Link documents</a><br> |             |
|  | document type<br>datasheet    |                   |             | document status<br>released                                                                                  |                             |                                    |             |
|                                                                                    | title<br>1LE1003-0EB42-2FB4-Z |                   |             | document number                                                                                              |                             |                                                                                                                         |             |
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### Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1AV3094B

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## Special design

|     |                                   |     |                                        |
|-----|-----------------------------------|-----|----------------------------------------|
| F70 | Mounting of separately driven fan | G11 | Rotary pulse encoder Sendix 5020 (HTL) |
|-----|-----------------------------------|-----|----------------------------------------|

**Notes:**

|                            |                               |                   |             |                                                                                                              |                             |                                                                                       |             |
|----------------------------|-------------------------------|-------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------------------------------------|-------------|
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| SIEMENS                    | document type<br>datasheet    |                   |             | document status<br>released                                                                                  |                             |  |             |
|                            | title<br>1LE1003-0EB42-2FB4-Z |                   |             | document number                                                                                              |                             |                                                                                       |             |
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