



**SIMOTICS GP - 90 L - IM B3 - 2p**

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

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

## Safe Area

## Electrical data

-/-

| 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   | 2.20    | -/-  | 7.80 | 2890    | 7.3  | 83.2            | 83.7                                           | 82.0                   | 0.85               | 0.77 | 0.64 | 7.1                            | 2.5                            | 3.7                            | IE2   |
| 400                                                 | Y     | 50   | 2.20    | -/-  | 4.50 | 2890    | 7.3  | 83.2            | 83.7                                           | 82.0                   | 0.85               | 0.77 | 0.64 | 7.1                            | 2.5                            | 3.7                            | IE2   |
| 460                                                 | Y     | 60   | 2.55    | -/-  | 4.35 | 3485    | 7.0  | 85.5            | 86.0                                           | 84.4                   | 0.86               | 0.80 | 0.68 | 7.6                            | 2.6                            | 3.9                            | IE2   |
| 460                                                 | Y     | 60   | 2.20    | -/-  | 3.90 | 3510    | 6.0  | 85.5            | 85.2                                           | 82.6                   | 0.83               | 0.76 | 0.62 | 8.7                            | 3.0                            | 4.6                            | IE2   |
| IM B3 / IM 1001                                     |       |      | FS 90 L |      |      | IP55    | UKCA | IEC/EN 60034    |                                                | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |         |      |      |         |      |                 | Locked rotor time (hot / cold) : 4.1 s   7.7 s |                        |                    |      |      |                                |                                |                                |       |

## Mechanical data

|                                                                                     |                                |                                |                                 |                                                   |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 65 / 77 dB(A) <sup>2) 3)</sup> | 69 / 81 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                                 |
| Moment of inertia                                                                   | 0.0021 kg m <sup>2</sup>       |                                | 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 50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | aluminum                                          |
| Regreasing device                                                                   | Without                        |                                | Net weight of the motor (IM B3) | 15 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 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             |

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

1)  $L_{10mh}$  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

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|  | Document type<br>Technical data sheet |                   |                                      | Document status<br>Released                                                                                  |                             |                                    |             |
|                                                                                    | Title<br>1LE1001-0EA42-2AB4-Z         |                   |                                      | Document number<br>TDS-240321-180112                                                                         |                             |                                                                                                                         |             |
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Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1AV2094A

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Special design

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

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