



**SIMOTICS GP - 90 L - IM B3 - 6p**

|                  |                 |           |
|------------------|-----------------|-----------|
| 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> |       |
| DOL duty (S1) - 155(F) to 130(B)                    |       |      |         |      |      |         |      |                 |      |                                                |                    |                        |      |                                |                                |                                |       |
| 230                                                 | Δ     | 50   | 1.10    | -/-  | 5.10 | 935     | 11.2 | 78.1            | 79.3 | 77.7                                           | 0.70               | 0.61                   | 0.49 | 4.4                            | 2.2                            | 2.6                            | IE2   |
| 400                                                 | Y     | 50   | 1.10    | -/-  | 2.90 | 935     | 11.2 | 78.1            | 79.3 | 77.7                                           | 0.70               | 0.61                   | 0.49 | 4.4                            | 2.2                            | 2.6                            | IE2   |
| 460                                                 | Y     | 60   | 1.27    | -/-  | 3.05 | 1135    | 10.7 | 75.0            | 76.0 | 74.6                                           | 0.70               | 0.62                   | 0.50 | 4.4                            | 2.1                            | 2.6                            | IE1   |
| 460                                                 | Y     | 60   | 1.10    | -/-  | 2.80 | 1145    | 9.2  | 75.0            | 75.0 | 72.6                                           | 0.66               | 0.57                   | 0.45 | 4.8                            | 2.4                            | 3.1                            | IE1   |
| 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) : 20.1 s   30 s |                    |                        |      |                                |                                |                                |       |

## Mechanical data

|                                                                                        |                                |                                |                                 |                                         |
|----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 43 / 55 dB(A) <sup>2) 3)</sup> | 46 / 58 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                       |
| Moment of inertia                                                                      | 0.0040 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<br>50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | aluminum                                |
| Regreasing device                                                                      | Without                        |                                | Net weight of the motor (IM B3) | 16 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                | (A) without (Standard)                  |
| 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    |
| Contact screw thread     | M4        | Cable gland                    | 1 plug       |

**Notes:**

|                                                    |                                           |                                                                  |
|----------------------------------------------------|-------------------------------------------|------------------------------------------------------------------|
| $I_R/I_N$ = 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 |
| $M_R/M_N$ = locked rotor torque / torque nominal   | 2) at rated power / at full load          |                                                                  |
| $M_b/M_N$ = break down torque / nominal torque     |                                           |                                                                  |

|                                                                                    |                               |                   |             |                                                                                                              |                             |                                                                                                                         |             |
|------------------------------------------------------------------------------------|-------------------------------|-------------------|-------------|--------------------------------------------------------------------------------------------------------------|-----------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------|
| responsible dep.<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>1LE1001-0EC42-2AA4-Z |                   |             | document number                                                                                              |                             |                                                                                                                         |             |
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### Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1AV2094C

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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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