



**SIMOTICS GP - 112 M - IM B3 - 4p**

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

Remarks

## Safe Area

| U               | $\Delta / Y$ | f    | P        | P    | I     | n       | M    | $\eta^{3)}$ |      |              | $\cos\varphi^{3)}$ |                        |      | $I_A/I_N$ | $M_A/M_N$ | $M_K/M_N$ | IE-CL |
|-----------------|--------------|------|----------|------|-------|---------|------|-------------|------|--------------|--------------------|------------------------|------|-----------|-----------|-----------|-------|
| [V]             |              | [Hz] | [kW]     | [hp] | [A]   | [1/min] | [Nm] | 4/4         | 3/4  | 2/4          | 4/4                | 3/4                    | 2/4  | $I_I/I_N$ | $T_I/T_N$ | $T_B/T_N$ |       |
| 230             | $\Delta$     | 50   | 4.00     | -/-  | 14.60 | 1435    | 26.5 | 83.1        | 84.3 | 84.0         | 0.83               | 0.77                   | 0.65 | 6.1       | 2.5       | 2.9       | IE1   |
| 400             | Y            | 50   | 4.00     | -/-  | 8.40  | 1435    | 26.5 | 83.1        | 84.3 | 84.0         | 0.83               | 0.77                   | 0.65 | 6.1       | 2.5       | 2.9       | IE1   |
| 460             | Y            | 60   | 4.55     | -/-  | 8.10  | 1735    | 25.0 | 85.0        | 86.1 | 85.1         | 0.83               | 0.78                   | 0.66 | 6.8       | 2.5       | 3.2       | IE1   |
|                 |              |      |          |      |       |         |      |             |      |              |                    |                        |      |           |           |           |       |
| IM B3 / IM 1001 |              |      | FS 112 M |      | 27 kg |         | IP55 |             |      | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |           |           |           |       |

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 7.34 s | 14.6 s

## Mechanical data

|                                                                                     |                                 |                                 |                            |                                         |
|-------------------------------------------------------------------------------------|---------------------------------|---------------------------------|----------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 58.0 / 70.0 dB(A) <sup>2)</sup> | 62.0 / 74.0 dB(A) <sup>2)</sup> | External earthing terminal | No                                      |
| Moment of inertia                                                                   | 0.0100 kg m <sup>2</sup>        |                                 | Vibration severity grade   | A                                       |
| Bearing DE   NDE                                                                    | 6206 2Z C3                      | 6206 2Z C3                      | Insulation                 | 155(F) to 130(B)                        |
| bearing lifetime                                                                    |                                 |                                 | Duty type                  | S1                                      |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup> | 40000 h                         | 32000 h                         | Direction of rotation      | bidirectional                           |
| Lubricants                                                                          | Unirex N3                       |                                 | Frame material             | aluminum                                |
| 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                                                           | -/-                             |                                 | Method of cooling          | IC411 - self ventilated, surface cooled |

## Terminal box

|                          |           |                                |                   |
|--------------------------|-----------|--------------------------------|-------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 4.0 mm²           |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 11.0 mm - 21.0 mm |
| Type of terminal box     | TB1 F00   | Cable entry                    | 2xM32x1,5         |
| 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.                                                                   | technical reference  | created by      | approved by     | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |          |          |  |
| DI MC LVM                                                                          |                      | DT Configurator |                 |                                                                                                              |          |          |  |
|  | document type        |                 |                 | document status                                                                                              |          | customer |  |
|                                                                                    | datasheet            |                 |                 | released                                                                                                     |          |          |  |
|                                                                                    | title                |                 | document number |                                                                                                              |          |          |  |
|                                                                                    | 1LE1002-1BB22-2AA4-Z |                 |                 |                                                                                                              |          |          |  |
|                                                                                    | D22+D47              |                 | rev.            | creation date                                                                                                | language | Page     |  |
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## Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1AV1112B

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### Special design

D22 motor without CE character for export outside the EEA (see EU regulation 640/2009) D47 TR CU product safety certificate EAC for the Eurasian Customs Union

### Notes:

|                                                                                    |                               |                               |                                   |  |                                                                                                              |             |  |  |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-----------------------------------|--|--------------------------------------------------------------------------------------------------------------|-------------|--|--|
| responsible dep.<br>DI MC LVM                                                      | technical reference           | created by<br>DT Configurator | approved by                       |  | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |             |  |  |
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|                                                                                    | title<br>1LE1002-1BB22-2AA4-Z |                               |                                   |  |                                                                                                              |             |  |  |
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