



**SIMOTICS GP - 160 L - IM B3 - 6p**

|                  |                 |           |
|------------------|-----------------|-----------|
| 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  | $I_A/I_N$ | $T_A/T_N$ | $T_B/T_N$ |       |
| 230             | $\Delta$     | 50   | 11.00    | -/-  | 38.00  | 980     | 107.0 | 90.3        | 90.7 | 89.8         | 0.80               | 0.75                   | 0.64 | 6.8       | 2.9       | 2.8       | IE3   |
| 400             | Y            | 50   | 11.00    | -/-  | 22.00  | 980     | 107.0 | 90.3        | 90.7 | 89.8         | 0.80               | 0.75                   | 0.64 | 6.8       | 2.9       | 2.8       | IE3   |
| 460             | Y            | 60   | 12.60    | -/-  | 22.00  | 1180    | 102.0 | 90.2        | 90.5 | 89.5         | 0.80               | 0.75                   | 0.65 | 7.1       | 3.0       | 2.8       | IE2   |
| 460             | Y            | 60   | 11.00    | -/-  | 19.60  | 1185    | 89.0  | 90.2        | 90.1 | 88.5         | 0.78               | 0.72                   | 0.61 | 8.0       | 3.4       | 3.2       | IE2   |
| IM B3 / IM 1001 |              |      | FS 160 L |      | 106 kg |         | IP55  |             |      | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |           |           |           |       |

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

Locked rotor time (hot / cold) : 18 s | 25.6 s

## Mechanical data

|                                                                                        |                                 |                                 |                            |                                               |
|----------------------------------------------------------------------------------------|---------------------------------|---------------------------------|----------------------------|-----------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 75.0 / 79.0 dB(A) <sup>2)</sup> | 75.0 / 79.0 dB(A) <sup>2)</sup> | External earthing terminal | No                                            |
| Moment of inertia                                                                      | 0.1640 kg m <sup>2</sup>        |                                 | Vibration severity grade   | A                                             |
| Bearing DE   NDE                                                                       | 6209 2Z C3                      | 6209 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<br>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                                                                        | Locating bearing NDE            |                                 | Motor protection           | (A) without (Standard)                        |
| Condensate drainage holes                                                              | -/-                             |                                 | Method of cooling          | IC416 - separately ventilated, surface cooled |

## Terminal box

|                          |           |                                |                   |
|--------------------------|-----------|--------------------------------|-------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 16.0 mm²          |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 19.0 mm - 28.0 mm |
| Type of terminal box     | TB1 J00   | Cable entry                    | 2xM40x1,5         |
| Contact screw thread     | M5        | 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                                                                                              |                  |          |      |
|                                                                                    | 1LE1003-1DC42-2AA4-Z |                 |             |                                                                                                              |                  |          |      |
|                                                                                    | F70                  |                 |             | rev.                                                                                                         | creation date    | language | Page |
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## Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1AV3164C

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### Special design

F70 Mounting of separately driven fan

### 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. |  |                |             |
|  |  | document type<br>datasheet    |                               |             | document status<br>released                                                                                  |  | customer       |             |
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