

# Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS



Motor type : 1AV3130B

SIMOTICS GP - 132 S - IM B3 - 4p

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

Remarks

## Electrical data

## Safe Area

| U<br>[V]        | $\Delta$ / Y | f<br>[Hz] | P<br>[kW] | P<br>[hp] | I<br>[A] | n<br>[1/min] | M<br>[Nm] | $\eta$ <sup>3)</sup> |      |                                  | $\cos\phi$ <sup>3)</sup> |      |      | $I_A/I_N$<br>$I_f/I_N$ | $M_A/M_N$<br>$T_f/T_N$ | $M_K/M_N$<br>$T_B/T_N$ | IE-CL |
|-----------------|--------------|-----------|-----------|-----------|----------|--------------|-----------|----------------------|------|----------------------------------|--------------------------|------|------|------------------------|------------------------|------------------------|-------|
| 400             | $\Delta$     | 50        | 5.50      | -/-       | 10.80    | 1470         | 35.5      | 89.6                 | 90.0 | 89.4                             | 0.82                     | 0.77 | 0.67 | 8.5                    | 2.9                    | 3.7                    | IE3   |
| 460             | $\Delta$     | 60        | 6.30      | -/-       | 10.40    | 1770         | 34.0      | 91.7                 | 92.0 | 91.3                             | 0.83                     | 0.79 | 0.69 | 8.7                    | 2.7                    | 3.7                    | IE3   |
| 460             | $\Delta$     | 60        | 5.50      | 7.50      | 9.30     | 1775         | 29.5      | 91.7                 | 91.6 | 90.5                             | 0.81                     | 0.76 | 0.65 | 10.0                   | 3.1                    | 4.2                    | MG1   |
| IM B3 / IM 1001 |              | FS 132 S  |           | 64 kg     |          | IP55         | CC032A    | IEC/EN 60034         |      | IEC, EN, UL, CSA, NEMA MG1-12-12 |                          |      |      | kVA Code: M            |                        |                        |       |

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

Locked rotor time (hot / cold) : 22 s | 28.1 s

## Mechanical data

|                                                                                     |                                 |                                 |                            |                                         |
|-------------------------------------------------------------------------------------|---------------------------------|---------------------------------|----------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 64.0 / 76.0 dB(A) <sup>2)</sup> | 68.0 / 80.0 dB(A) <sup>2)</sup> | External earthing terminal | No                                      |
| Moment of inertia                                                                   | 0.0340 kg m <sup>2</sup>        |                                 | Vibration severity grade   | A                                       |
| Bearing DE   NDE                                                                    | 6208 2Z C3                      | 6208 2Z C3                      | Insulation                 | 155(F) to 130(B)                        |
| bearing lifetime                                                                    |                                 |                                 | Duty type                  | S1                                      |
| L <sub>10mh</sub> F <sub>Rad min</sub> 50 60Hz <sup>1)</sup> for coupling operation | 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      | 6.0 mm <sup>2</sup> |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 11.0 mm - 21.0 mm   |
| Type of terminal box     | TB1 H00   | Cable entry                    | 2xM32x1,5-1xM16x1,5 |
| Contact screw thread     | M4        | Cable gland                    | 3 plugs             |

## Notes:

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

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

<sup>3)</sup> Value is valid only for DOL operation with motor design IC411

|                                                                                    |                               |                               |             |                             |                                                                                                              |                |             |  |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|-----------------------------|--------------------------------------------------------------------------------------------------------------|----------------|-------------|--|
| 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       |             |  |
|                                                                                    | title<br>1LE1023-1CB03-4AA4-Z |                               |             | document number             |                                                                                                              |                |             |  |
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### Special design

|     |                              |     |                                   |
|-----|------------------------------|-----|-----------------------------------|
| F01 | Mounting a brake             | R12 | Terminal box rotated through 180° |
| F10 | Brake supply voltage 24 V DC |     |                                   |

### Additional information:

|               |           |                    |          |
|---------------|-----------|--------------------|----------|
| <b>Brake:</b> |           |                    |          |
| Description:  | BFK458-16 | Current:           | 2.3 A    |
| Voltage:      | DC 24 V   | Moment of inertia: | .0015 Nm |

### Notes:

|                                                                                    |                               |                               |             |                             |                                                                                                              |                |             |  |
|------------------------------------------------------------------------------------|-------------------------------|-------------------------------|-------------|-----------------------------|--------------------------------------------------------------------------------------------------------------|----------------|-------------|--|
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