

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



Motor type : 1AV3130B

SIMOTICS GP - 132 S - IM B14 - 4p

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

Remarks

## Electrical data

## 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> |       |
| 230 | Δ     | 50   | 5.50 | -/-  | 18.80 | 1470    | 35.5 | 89.6            | 90.0 | 89.4 | 0.82               | 0.77 | 0.67 | 8.5                            | 2.9                            | 3.7                            | IE3   |
| 400 | Y     | 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 | Y     | 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 | Y     | 60   | 5.50 | -/-  | 9.30  | 1775    | 29.5 | 91.7            | 91.6 | 90.5 | 0.81               | 0.76 | 0.65 | 10.0                           | 3.1                            | 4.2                            | IE3   |

|                  |          |       |      |              |                        |
|------------------|----------|-------|------|--------------|------------------------|
| IM B14 / IM 3601 | FS 132 S | 64 kg | IP55 | IEC/EN 60034 | IEC, DIN, ISO, VDE, EN |
|------------------|----------|-------|------|--------------|------------------------|

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 / 76 dB(A) <sup>2)</sup> | 68 / 80 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> | 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                                      | No                          |                             | Method of cooling          | IC411 - self ventilated, surface cooled |

## Terminal box

|                          |           |                                |                   |
|--------------------------|-----------|--------------------------------|-------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 6 mm <sup>2</sup> |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 11 mm - 21 mm     |
| Type of terminal box     | TB1 H00   | Cable entry                    | 2xM32x1,5         |
| Contact screw thread     | M4        | Cable gland                    | 2 plugs           |

## Notes:

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>K</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>K</sub>/M<sub>N</sub> = 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 |             |                                                                                                              |

|                                                                                    |                    |                  |          |      |
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