

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



Motor type : 1AV3131A

SIMOTICS GP - 132 S - IM B5 - 2p

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

Remarks

## Electrical data

## 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  | $I_i/I_N$   | $T_i/T_N$ | $T_B/T_N$ |       |
| 415             | $\Delta$     | 50       | 7.50 | -/-   | 12.60 | 2950    | 24.5   | 90.1         | 90.9 | 90.7                             | 0.92               | 0.89 | 0.84 | 8.3         | 2.1       | 4.0       | IE3   |
| 480             | $\Delta$     | 60       | 8.60 | -/-   | 12.50 | 3550    | 23.0   | 90.2         | 90.5 | 90.0                             | 0.92               | 0.91 | 0.85 | 8.4         | 2.1       | 4.1       | IE3   |
| 480             | $\Delta$     | 60       | 7.50 | 10.00 | 10.90 | 3555    | 20.0   | 90.2         | 90.5 | 90.0                             | 0.91               | 0.90 | 0.84 | 9.5         | 2.4       | 4.7       | MG1   |
| IM B5 / IM 3001 |              | FS 132 S |      | 57 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) : 12.6 s | 17.2 s

## Mechanical data

|                                                                                     |                                 |                                 |                            |                                                    |
|-------------------------------------------------------------------------------------|---------------------------------|---------------------------------|----------------------------|----------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 68.0 / 80.0 dB(A) <sup>2)</sup> | 72.0 / 84.0 dB(A) <sup>2)</sup> | External earthing terminal | No                                                 |
| Moment of inertia                                                                   | 0.0310 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           | (B) 3 PTC thermistors - for tripping (2 terminals) |
| 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

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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