

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



Motor type : 1CV3226A

SIMOTICS SD - 225 M - IM B3 - 2p

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

Remarks

|                 |                  |
|-----------------|------------------|
| Electrical data | Safe Area<br>-/- |
|-----------------|------------------|

| 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> |       |  |
| DOL duty (S1) - 155(F) to 130(B)                    |       |      |          |      |       |         |       |                 |                                                  |              |                    |                        |      |                                |                                |                                |       |  |
| 400                                                 | Δ     | 50   | 55.00    | -/-  | 96.00 | 2965    | 177.0 | 94.3            | 94.6                                             | 94.4         | 0.88               | 0.86                   | 0.78 | 8.0                            | 2.8                            | 3.7                            | IE3   |  |
| 690                                                 | Y     | 50   | 55.00    | -/-  | 55.00 | 2965    | 177.0 | 94.3            | 94.6                                             | 94.4         | 0.88               | 0.86                   | 0.78 | 8.0                            | 2.8                            | 3.7                            | IE3   |  |
| 460                                                 | Δ     | 60   | 62.00    | -/-  | 93.00 | 3565    | 166.0 | 93.6            | 93.7                                             | 93.3         | 0.89               | 0.87                   | 0.80 | 8.0                            | 2.8                            | 3.6                            | IE3   |  |
| 460                                                 | Δ     | 60   | 55.00    | -/-  | 84.00 | 3570    | 147.0 | 93.6            | 93.6                                             | 92.8         | 0.88               | 0.85                   | 0.77 | 8.9                            | 3.2                            | 4.0                            | IE3   |  |
| IM B3 / IM 1001                                     |       |      | FS 225 M |      |       |         | IP55  | UKCA            |                                                  | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |                                |                                |                                |       |  |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |      |       |         |       |                 | Locked rotor time (hot / cold) : 17.3 s   30.3 s |              |                    |                        |      |                                |                                |                                |       |  |

## Mechanical data

|                                                                                     |                                |                                |                                 |                                         |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 73 / 87 dB(A) <sup>2) 3)</sup> | 76 / 90 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                       |
| Moment of inertia                                                                   | 0.3100 kg m <sup>2</sup>       |                                | Thermal class                   | F                                       |
| Bearing DE   NDE                                                                    | 6213 Z C3                      | 6213 Z C3                      | Duty type                       | S1                                      |
| bearing lifetime                                                                    |                                |                                | Direction of rotation           | bidirectional                           |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | cast iron                               |
| Regreasing device                                                                   | Without                        |                                | Net weight of the motor (IM B3) | 370 kg                                  |
| Grease nipple                                                                       | -/-                            |                                | Coating (paint finish)          | Standard paint finish C2                |
| Type of bearing                                                                     | Locating bearing NDE           |                                | Color, paint shade              | RAL7030                                 |
| Condensate drainage holes                                                           | With (standard)                |                                | Motor protection                | (A) without (Standard)                  |
| External earthing terminal                                                          | With (standard)                |                                | Method of cooling               | IC411 - self ventilated, surface cooled |

## Terminal box

|                          |           |                                |                    |
|--------------------------|-----------|--------------------------------|--------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 35 mm <sup>2</sup> |
| Material of terminal box | cast iron | Cable diameter from ... to ... | 27 mm - 35 mm      |
| Type of terminal box     | TB1 L01   | Cable entry                    | 2xM50x1,5          |
| Contact screw thread     | M8        | Cable gland                    | 2 plugs            |

## Notes:

|                                                                         |                                           |                                                                  |
|-------------------------------------------------------------------------|-------------------------------------------|------------------------------------------------------------------|
| I <sub>A</sub> /I <sub>N</sub> = locked rotor current / current nominal | 1) L10mh according to DIN ISO 281 10/2010 | 3) Value is valid only for DOL operation with motor design IC411 |
| M <sub>K</sub> /M <sub>N</sub> = locked rotor torque / torque nominal   | 2) at rated power / at full load          |                                                                  |
| M <sub>B</sub> /M <sub>N</sub> = break down torque / nominal torque     |                                           |                                                                  |

|                                |                                 |                       |             |                                                                                                              |                                 |                                                                                       |                 |
|--------------------------------|---------------------------------|-----------------------|-------------|--------------------------------------------------------------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------------------|-----------------|
| responsible dep.<br><br>IN LVM | technical reference             | created by<br><br>SPC | approved by | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |                                 | <a href="#">Link documents</a>                                                        |                 |
| SIEMENS                        | document type<br><br>datasheet  |                       |             | document status<br><br>released                                                                              |                                 |  |                 |
|                                | title<br><br>1LE1503-2BA63-4AA4 |                       |             | document number                                                                                              |                                 |                                                                                       |                 |
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