

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



Motor type : 1AV2072C

SIMOTICS GP - 71 M - IM B3 - 6p

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

|         |           |
|---------|-----------|
| Remarks | 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> |       |
| DOL duty (S1) - 155(F) to 130(B)                    |       |         |      |      |      |         |      |                 |                                                   |                        |                    |      |      |                                |                                |                                |       |
| 230                                                 | Δ     | 50      | 0.18 | -/-  | 1.17 | 875     | 2.0  | 56.6            | 56.9                                              | 52.7                   | 0.68               | 0.57 | 0.44 | 2.5                            | 2.2                            | 2.3                            | IE2   |
| 400                                                 | Y     | 50      | 0.18 | -/-  | 0.68 | 875     | 2.0  | 56.6            | 56.9                                              | 52.7                   | 0.68               | 0.57 | 0.44 | 2.5                            | 2.2                            | 2.3                            | IE2   |
| 460                                                 | Y     | 60      | 0.21 | -/-  | 0.72 | 1075    | 1.9  | 55.0            | 54.9                                              | 51.2                   | 0.67               | 0.57 | 0.44 | 2.5                            | 2.4                            | 2.4                            | IE2   |
| 460                                                 | Y     | 60      | 0.18 | -/-  | 0.67 | 1105    | 1.6  | 55.0            | 53.6                                              | 48.8                   | 0.61               | 0.51 | 0.40 | 2.7                            | 2.9                            | 2.9                            | IE2   |
| IM B3 / IM 1001                                     |       | FS 71 M |      |      |      | IP55    | UKCA | IEC/EN 60034    |                                                   | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |         |      |      |      |         |      |                 | Locked rotor time (hot / cold) : 91.5 s   112.1 s |                        |                    |      |      |                                |                                |                                |       |

| Mechanical data                                                                        |                                |                                |                                 |                                         |
|----------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                   | 46 / 57 dB(A) <sup>2) 3)</sup> | 49 / 60 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                       |
| Moment of inertia                                                                      | 0.0008 kg m²                   |                                | Thermal class                   | F                                       |
| Bearing DE   NDE                                                                       | 6202 2Z C3                     | 6202 2Z C3                     | Duty type                       | S1                                      |
| bearing lifetime                                                                       |                                |                                | Direction of rotation           | bidirectional                           |
| L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation<br>50 60Hz <sup>1)</sup> | 40000 h                        | 32000 h                        | Frame material                  | aluminum                                |
| Regreasing device                                                                      | Without                        |                                | Net weight of the motor (IM B3) | 6 kg                                    |
| Grease nipple                                                                          | -/-                            |                                | Coating (paint finish)          | Standard paint finish C2                |
| Type of bearing                                                                        | Preloaded bearing DE           |                                | Color, paint shade              | RAL7030                                 |
| Condensate drainage holes                                                              | Without                        |                                | Motor protection                | (A) without (Standard)                  |
| External earthing terminal                                                             | Without                        |                                | Method of cooling               | IC411 - self ventilated, surface cooled |

| Terminal box             |           |                                |              |
|--------------------------|-----------|--------------------------------|--------------|
| Terminal box position    | top       | Max. cross-sectional area      | 1.5 mm²      |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 9 mm - 17 mm |
| Type of terminal box     | TB1 B00   | Cable entry                    | 1xM25x1,5    |
| Contact screw thread     | M4        | Cable gland                    | 1 plug       |
|                          |           |                                |              |

|                                                                                                                                                                                                                         |  |  |  |  |  |                                                                                           |  |  |  |  |  |                                                                  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|-------------------------------------------------------------------------------------------|--|--|--|--|--|------------------------------------------------------------------|--|--|--|--|--|
| I <sub>A</sub> /I <sub>N</sub> = locked rotor current / current nominal<br>M <sub>A</sub> /M <sub>N</sub> = locked rotor torque / torque nominal<br>M <sub>K</sub> /M <sub>N</sub> = break down torque / nominal torque |  |  |  |  |  | 1) L <sub>10mh</sub> according to DIN ISO 281 10/2010<br>2) at rated power / at full load |  |  |  |  |  | 3) Value is valid only for DOL operation with motor design IC411 |  |  |  |  |  |
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| Responsible department<br>IN LVM                                                    | Technical reference                   | Created by<br>SPC | Approved by<br>Created automatically | Technical data are subject to change! There may be discrepancies between calculated and rating plate values. |                             | <a href="#">Link documents</a>                                                        |             |
|  | Document type<br>Technical data sheet |                   |                                      | Document status<br>Released                                                                                  |                             |  |             |
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