

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



Motor type : 1AV3112C INNOMOTICS GP - 112 M - IM B3 - 6p

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

|                 |           |
|-----------------|-----------|
| Remarks         | Safe Area |
| Electrical data | -/-       |

| 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)                    |       |      |          |      |      |         |      |                 |                                                |              |                    |                        |      |                                |                                |                                |       |
| 500                                                 | Y     | 50   | 2.20     | -/-  | 4.00 | 970     | 21.5 | 84.3            | 85.0                                           | 83.9         | 0.75               | 0.68                   | 0.55 | 5.6                            | 2.2                            | 2.8                            | IE3   |
|                                                     |       |      |          |      |      |         |      |                 |                                                |              |                    |                        |      |                                |                                |                                |       |
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| IM B3 / IM 1001                                     |       |      | FS 112 M |      |      |         | IP55 | UKCA            |                                                | IEC/EN 60034 |                    | IEC, DIN, ISO, VDE, EN |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |          |      |      |         |      |                 | Locked rotor time (hot / cold) : 26.9 s   35 s |              |                    |                        |      |                                |                                |                                |       |

| Mechanical data                                                                     |                                |                                |                                 |                                                    |
|-------------------------------------------------------------------------------------|--------------------------------|--------------------------------|---------------------------------|----------------------------------------------------|
| Sound level (SPL / SWL) at 50Hz 60Hz                                                | 65 / 74 dB(A) <sup>2) 3)</sup> | 65 / 77 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A                                                  |
| Moment of inertia                                                                   | 0.0170 kg m²                   |                                | Thermal class                   | F                                                  |
| Bearing DE   NDE                                                                    | 6206 2Z C3                     | 6206 2Z C3                     | Duty type                       | S1                                                 |
| bearing lifetime                                                                    |                                |                                | Direction of rotation           | bidirectional                                      |
| L <sub>10mh</sub> F <sub>Rad min</sub> 50 60Hz <sup>1)</sup> for coupling operation | 40000 h                        | 32000 h                        | Frame material                  | aluminum                                           |
| Regreasing device                                                                   | Without                        |                                | Net weight of the motor (IM B3) | 34 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                | (B) 3 PTC thermistors - for tripping (2 terminals) |
| External earthing terminal                                                          | Without                        |                                | Method of cooling               | IC411 - self ventilated, surface cooled            |

| Terminal box             |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| Terminal box position    | top       | Max. cross-sectional area      | 4 mm²               |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 11 mm - 21 mm       |
| Type of terminal box     | TB1 F00   | Cable entry                    | 2xM32x1,5-1xM16x1,5 |
| Contact screw thread     | M4        | Cable gland                    | 3 plugs             |
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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>B</sub>/M<sub>N</sub> = break down torque / nominal torque  
1) L<sub>10mh</sub> 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

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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>                                                        |             |
| INNOMOTICS                       | Document type<br>Technical data sheet |                   |                                      | Document status<br>Released                                                                                  |                             |  |             |
|                                  | Document title<br>1LE1003-1BC22-7AB4  |                   |                                      | Document number<br>TDS-241009-103811                                                                         |                             |                                                                                       |             |
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