



**SIMOTICS GP - 80 M - IM B3 - 4p**

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

## 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> |       |
| <b>DOL duty (S1) - 155(F) to 130(B)</b>             |       |      |         |      |      |         |      |                 |  |                        |                    |      |      |                                |                                |                                |       |
| 230   | Δ     | 50   | 0.55    | -/-  | 2.20 | 1440    | 3.6  | 80.8            | 81.5   | 79.8                   | 0.78               | 0.71 | 0.58 | 5.9                            | 2.1                            | 3.1                            | IE3   |
| 400   | Y     | 50   | 0.55    | -/-  | 1.26 | 1440    | 3.6  | 80.8            | 81.5   | 79.8                   | 0.78               | 0.71 | 0.58 | 5.9                            | 2.1                            | 3.1                            | IE3   |
| 460   | Y     | 60   | 0.63    | -/-  | 1.25 | 1740    | 3.5  | 81.1            | 81.3   | 79.6                   | 0.78               | 0.71 | 0.60 | 6.4                            | 2.4                            | 3.3                            | IE3   |
| 460   | Y     | 60   | 0.55    | -/-  | 1.15 | 1750    | 3.0  | 81.1            | 80.9   | 78.6                   | 0.74               | 0.67 | 0.55 | 6.9                            | 2.7                            | 3.8                            | IE3   |
| IM B3 / IM 1001                                     |       |      | FS 80 M |      |      | IP55    | UKCA | IEC/EN 60034    |  | IEC, DIN, ISO, VDE, EN |                    |      |      |                                |                                |                                |       |
| Environmental conditions : -20 °C - +40 °C / 1000 m |       |      |         |      |      |         |      |                 | Locked rotor time (hot / cold) : 23.5 s   28.3 s |                        |                    |      |      |                                |                                |                                |       |

|   |                                |                                |                                 |   |
|---|--------------------------------|--------------------------------|---------------------------------|---|
| Sound level (SPL / SWL) at 50Hz 60Hz  | 53 / 64 dB(A) <sup>2) 3)</sup> | 55 / 66 dB(A) <sup>2) 3)</sup> | Vibration severity grade        | A   |
| Moment of inertia   | 0.0021 kg m²                   |                                | Thermal class                   | F   |
| Bearing DE   NDE  | 6004 2Z C3                     | 6004 2Z C3                     | Duty type                       | S1  |
| <b>bearing lifetime</b>   |                                |                                | 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                  | aluminum  |
| Regreasing device   | Without                        |                                | Net weight of the motor (IM B3) | 11 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) 1 PTC thermistor - for tripping (2 terminals) |
| External earthing terminal  | Without                        |                                | Method of cooling               | IC411 - self ventilated, surface cooled           |

|                          |           |                                |                     |
|--------------------------|-----------|--------------------------------|---------------------|
| 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 E00   | Cable entry                    | 1xM25x1,5-1xM16x1,5 |
| Contact screw thread     | M4        | Cable gland                    | 2 plugs             |

|  |   |  |
|--|---|--|
| $I_r/I_N$ = locked rotor current / current nominal | 1) $L_{10min}$ according to DIN ISO 281 10/2010 | 3) Value is valid only for DOL operation with motor design IC411 |
| $M_r/M_N$ = locked rotor torque / torque nominal   | 2) at rated power / at full load                |  |
| $M_b/M_N$ = break down torque / nominal torque     |   |  |

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|  | Document type<br>Technical data sheet  |                   |                                      | Document status<br>Released  |                             |  |             |
|   | Document title<br>1LE1003-0DB22-2AB4-Z |                   |                                      | Document number<br>TDS-240419-182356   |                             |   |             |
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Data sheet for three-phase Squirrel-Cage-Motors SIMOTICS





Motor type : 1AV3082B

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Special design

G11 Rotary pulse encoder Sendix 5020 (HTL)

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