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

**Motor type : 1AV3083B** **SIMOTICS GP - 80 M - IM B14 - 4p**

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

Remarks

**Safe Area**

**-/-**

## Electrical data

| U [V] | Δ / Y | f [Hz] | P [kW] | P [hp] | I [A] | n [1/min] | M [Nm] | η 3) 4/4 | η 3) 3/4 | η 3) 2/4 | cosφ 3) 4/4 | cosφ 3) 3/4 | cosφ 3) 2/4 | $I_A/I_N$ $I_l/I_N$ | $M_A/M_N$ $T_l/T_N$ | $M_K/M_N$ $T_B/T_N$ | IE-CL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DOL duty (S1)** - 155(F) to 130(B) | | | | | | | | | | | | | | | | | |
| 230 | Δ | 50 | 0.75 | -/- | 3.05 | 1450 | 5.0 | 82.5 | 82.3 | 80.1 | 0.75 | 0.67 | 0.55 | 7.1 | 2.7 | 3.9 | IE3 |
| 400 | Y | 50 | 0.75 | -/- | 1.75 | 1450 | 5.0 | 82.5 | 82.3 | 80.1 | 0.75 | 0.67 | 0.55 | 7.1 | 2.7 | 3.9 | IE3 |
| 460 | Y | 60 | 0.86 | -/- | 1.72 | 1750 | 4.7 | 83.5 | 83.1 | 80.7 | 0.75 | 0.67 | 0.55 | 7.7 | 2.7 | 4.1 | IE3 |
| 460 | Y | 60 | 0.75 | -/- | 1.59 | 1760 | 4.0 | 83.5 | 82.6 | 79.7 | 0.71 | 0.63 | 0.50 | 8.3 | 3.1 | 4.7 | IE3 |
| IM B14 / IM 3601 | | | 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) : 19.8 s | 23.6 s

## Mechanical data

| | | | | |
|---|---|---|---|---|
| Sound level (SPL / SWL) at 50Hz\|60Hz | 53 / 64 dB(A) 2) 3) | 53 / 64 dB(A) 2) 3) | Vibration severity grade | A |
| Moment of inertia | 0.0029 kg m² | | Thermal class | F |
| Bearing DE \| NDE | 6004 2Z C3 | 6004 2Z C3 | Duty type | S1 |
| **bearing lifetime** | | | Direction of rotation | bidirectional |
| $L_{10mh}$ $F_{Rad\ min}$ for coupling operation 50\|60Hz 1) | 40000 h | 32000 h | Frame material | aluminum |
| Regreasing device | Without | | Net weight of the motor (IM B3) | 14 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 E00 | Cable entry | 1xM25x1,5 |
| Contact screw thread | M4 | Cable gland | 1 plug |

$I_A/I_N$ = locked rotor current / current nominal
$M_A/M_N$ = locked rotor torque / torque nominal
$M_K/M_N$ = break down torque / nominal torque

1) $L_{10mh}$ 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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|---|---|---|---|---|---|
| IN LVM | | SPC | Created automatically | | |

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