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

**Motor type : 1AV2094B** **SIMOTICS GP - 90 L - 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 | $I_A/I_N$ $I_I/I_N$ | $M_A/M_N$ $T_I/T_N$ | $M_K/M_N$ $T_B/T_N$ | IE-CL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **DOL duty (S1)** - 155(F) to 130(B) | | | | | | | | | | | | | | | | | |
| 400 | Y | 50 | 1.50 | -/- | 3.30 | 1435 | 10.0 | 82.8 | 83.5 | 82.2 | 0.79 | 0.71 | 0.58 | 6.4 | 2.6 | 3.4 | IE2 |
| | | | | | | | | | | | | | | | | | |
| 460 | Y | 60 | 1.75 | -/- | 3.30 | 1730 | 9.7 | 84.0 | 85.0 | 84.0 | 0.79 | 0.73 | 0.61 | 6.7 | 2.5 | 3.4 | IE2 |
| 460 | Y | 60 | 1.50 | -/- | 3.00 | 1745 | 8.2 | 84.0 | 84.0 | 81.9 | 0.75 | 0.67 | 0.54 | 7.5 | 2.9 | 4.0 | IE2 |
| IM B14 / IM 3601 | | | FS 90 L | | | IP55 | UKCA | IEC/EN 60034 | | IEC, DIN, ISO, VDE, EN | | | | | | | |

Environmental conditions : -20 °C - +40 °C / 1000 m | Locked rotor time (hot / cold) : 12.5 s | 17.2 s

## Mechanical data

| | | | |
|---|---|---|---|
| Sound level (SPL / SWL) at 50Hz\|60Hz | 56 / 68 dB(A) 2) 3) | 58 / 70 dB(A) 2) 3) | Vibration severity grade | A |
| Moment of inertia | 0.0036 kg m² | | Thermal class | F |
| Bearing DE \| NDE | 6205 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) | 16 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



| Responsible department | Technical reference | Created by | Approved by | *Technical data are subject to change! There may be discrepancies between calculated and rating plate values.* | Link documents |
|---|---|---|---|---|---|
| IN LVM | | SPC | Created automatically | | |

SIEMENS

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