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

**Motor type : 1AV3163A** **SIMOTICS GP - 160 M - IM B5 - 2p**

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

## Electrical data

**Safe Area**

| 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) | | | | | | | | | | | | | | | | | |
| 230 | Δ | 50 | 15.00 | -/- | 47.50 | 2955 | 48.5 | 91.9 | 91.9 | 90.8 | 0.86 | 0.81 | 0.71 | 10.2 | 3.5 | 4.4 | IE3 |
| 400 | Y | 50 | 15.00 | -/- | 27.50 | 2955 | 48.5 | 91.9 | 91.9 | 90.8 | 0.86 | 0.81 | 0.71 | 10.2 | 3.5 | 4.4 | IE3 |
| 460 | Y | 60 | 17.30 | -/- | 27.00 | 3550 | 46.5 | 91.7 | 91.4 | 90.2 | 0.88 | 0.84 | 0.75 | 10.1 | 3.3 | 4.5 | IE3 |
| 460 | Y | 60 | 15.00 | 20.00 | 24.00 | 3560 | 40.0 | 91.0 | 90.4 | 88.5 | 0.86 | 0.81 | 0.71 | 11.8 | 4.0 | 5.2 | MG1 |

| IM B5 / IM 3001 | | FS 160 M | CC032A | IP55 | UKCA | IEC/EN 60034 | IEC, EN, UL, CSA, NEMA MG1-12 | kVA Code: M | |
|---|---|---|---|---|---|---|---|---|---|

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 13.3 s | 18.9 s

## Mechanical data

| | | | | |
|---|---|---|---|---|
| Sound level (SPL / SWL) at 50Hz\|60Hz | 77 / 85 dB(A) 2) 3) | 81 / 89 dB(A) 2) 3) | Vibration severity grade | A |
| Moment of inertia | 0.0430 kg m² | | Thermal class | F |
| Bearing DE \| NDE | 6209 2Z C3 | 6209 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) | 78 kg |
| Grease nipple | -/- | | Coating (paint finish) | Standard paint finish C2 |
| Type of bearing | Locating bearing NDE | | 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 | 16 mm² |
| Material of terminal box | Aluminium | Cable diameter from ... to ... | 19 mm - 28 mm |
| Type of terminal box | TB1 J00 | Cable entry | 2xM40x1,5 |
| Contact screw thread | M5 | Cable gland | 2 plugs |

**Notes:**

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

1) L10mh 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 dep. | technical reference | created by | approved by | *Technical data are subject to change! There may be discrepancies between calculated and rating plate values.* | Link documents |
|---|---|---|---|---|---|
| DI MC LVM | | DT Configurator | | | |

SIEMENS

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