

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



Motor type : 1AV4164B

SIMOTICS GP - 160 L - IM B3 - 4p

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

Remarks

Electrical data

Safe Area

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4	I _I /I _N	T _I /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	15.00	-/-	29.00	1480	97.0	93.9	94.0	93.3	0.80	0.74	0.62	7.8	3.7	4.3	IE4
690	Y	50	15.00	-/-	16.70	1480	97.0	93.9	94.0	93.3	0.80	0.74	0.62	7.8	3.7	4.3	IE4
460	Δ	60	17.30	-/-	28.50	1780	93.0	94.5	94.6	94.0	0.81	0.76	0.64	7.9	3.4	4.2	IE4
460	Δ	60	15.00	-/-	25.50	1780	80.0	94.1	94.0	93.0	0.79	0.72	0.60	8.8	3.9	4.8	IE4
IM B3 / IM 1001		FS 160 L				IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 32.2 s 42.5 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	63 / 76 dB(A) ^{2) 3)}	66 / 79 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0990 kg m ²		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
Lubricants	Unirex N3		Net weight of the motor (IM B3)	109 kg
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	No		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	No			

Terminal box

Terminal box position	top	Max. cross-sectional area	16 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	19 mm - 28 mm
Type of terminal box	TB1 J00	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	Cable gland	3 plugs

Notes:

I_A/I_N = locked rotor current / current nominal	1) L10mh according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M_A/M_N = locked rotor torque / torque nominal	2) at rated power / at full load	
M_K/M_N = break down torque / nominal torque		

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			
	document type				document status
	datasheet				released
	title				document number
	1LE1004-1DB43-4AB4				
© Siemens AG 2022		rev.	creation date	language	Page
		929	2022-10-10	en	1/1

