

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



Motor type : 1AV2164D

SIMOTICS GP - 160 L - IM B5 - 8p

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	$\eta^{3)}$			$\cos\varphi^{3)}$			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	
400	Δ	50	7.50	-/-	18.10	725	99.0	85.3	86.4	86.0	0.70	0.65	0.54	3.8	1.6	1.9	IE2
690	Y	50	7.50	-/-	10.50	725	99.0	85.3	86.4	86.0	0.70	0.65	0.54	3.8	1.6	1.9	IE2
460	Δ	60	8.60	-/-	17.40	870	94.0	88.5	89.6	89.2	0.70	0.66	0.56	3.9	1.6	1.8	IE2
460	Δ	60	7.50	-/-	15.60	880	81.0	88.5	88.9	87.7	0.68	0.63	0.52	4.4	1.8	2.0	IE2
IM B5 / IM 3001		FS 160 L		94 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

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

Locked rotor time (hot / cold) : 56 s | 86.1 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	63.0 / 75.0 dB(A) ²⁾	71.0 / 83.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0980 kg m ²		Vibration severity grade	A
Bearing DE NDE	6309 2Z C3	6209 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L_{10mh} $F_{rad min}$ for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
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	-/-		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	16.0 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	19.0 mm - 28.0 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
 M_K/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 dep.	technical reference	created by	approved by		Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
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Special design

L22	Bearing design for increased cantilever forces
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