

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



Motor type : 1AV2164B

SIMOTICS GP - 160 L - IM B5 - 4p

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]	$\eta^{3)}$			$\cos\varphi^{3)}$			I_A/I_N	M_A/M_N	M_K/M_N	IE-CL
								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	15.00	-/-	28.00	1475	97.0	90.6	91.2	90.8	0.85	0.81	0.71	7.3	2.3	3.0	IE2
690	Y	50	15.00	-/-	16.30	1475	97.0	90.6	91.2	90.8	0.85	0.81	0.71	7.3	2.3	3.0	IE2
460	Δ	60	17.30	-/-	27.50	1775	93.0	92.4	92.9	92.4	0.86	0.83	0.74	7.7	2.3	2.9	IE2
460	Δ	60	15.00	-/-	24.50	1780	80.0	91.0	91.1	90.1	0.84	0.80	0.69	8.5	2.6	3.4	IE2
IM B5 / IM 3001		FS 160 L		83 kg		IP65		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

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

Locked rotor time (hot / cold) : 14.1 s | 23.3 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	75.0 / 79.0 dB(A) ²⁾	75.0 / 79.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0710 kg m ²		Vibration severity grade	A
Bearing DE NDE	6209 2Z C3	6209 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} 50 60Hz ¹⁾ for coupling operation	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	(C) 6 PTC thermistors - for alarm and tripping (4 terminals)
Condensate drainage holes	-/-		Method of cooling	IC416 - separately 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_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. DI MC LVM	technical reference	created by DT Configurator	approved by		Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
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Special design

F70	Mounting of separately driven fan	Q02	Anti-condensation heating for 230 V (2 terminals)
H20	IP 65 degree of protection		

Additional information:

Space heaters

Technical data: 1-phase, 230 V 50W

Notes:

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