

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



Motor type : 1AV4112B SIMOTICS GP - 112 M - IM B3 - 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]	$\eta^{3)}$			$\cos\phi^{3)}$			I_A/I_N I_f/I_N	M_A/M_N T_f/T_N	M_K/M_N T_B/T_N	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	4.00	-/-	7.80	1465	26.0	91.1	91.6	91.0	0.81	0.75	0.63	8.3	3.1	4.3	IE4
690	Y	50	4.00	-/-	4.55	1465	26.0	91.1	91.6	91.0	0.81	0.75	0.63	8.3	3.1	4.3	IE4
460	Δ	60	4.55	-/-	7.60	1765	24.5	91.0	91.3	90.6	0.82	0.76	0.65	8.5	3.0	4.3	IE4
460	Δ	60	3.70	-/-	6.50	1770	20.0	91.0	90.8	89.5	0.78	0.71	0.58	10.0	3.7	5.4	IE4
IM B3 / IM 1001		FS 112 M			IP55	UKCA	IEC/EN 60034	IEC, DIN, ISO, VDE, EN									

Environmental conditions : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) : 20.5 s | 26.1 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 77 dB(A) ^{2) 3)}	68 / 80 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0200 kg m ²		Thermal class	F
Bearing DE NDE	6206 2Z C3	6206 2Z C3	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L_{10mh} , F_{Rad} min 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	46 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	(B) 3 PTC thermistors - for tripping (2 terminals)
External earthing terminal	Without		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	4 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	11 mm - 21 mm
Type of terminal box	TB1 F00	Cable entry	2xM32x1,5-1xM16x1,5
Contact screw thread	M4	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. IN LVM	technical reference	created by SPC	approved by	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	Link documents
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