

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



Motor type : 1AV3112A

SIMOTICS GP - 112 M - IM B3 - 2p

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]	η ³⁾			cosφ ³⁾			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
								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	-/-	7.40	2945	13.0	88.1	88.8	87.9	0.89	0.84	0.76	9.1	2.6	3.6	IE3
690	Y	50	4.00	-/-	4.25	2945	13.0	88.1	88.8	87.9	0.89	0.84	0.76	9.1	2.6	3.6	IE3
460	Δ	60	4.55	-/-	7.30	3545	12.3	88.5	88.5	87.2	0.89	0.85	0.78	9.7	2.7	3.8	IE3
460	Δ	60	4.00	-/-	6.40	3550	10.8	88.5	88.4	86.7	0.88	0.83	0.75	10.9	3.1	4.3	IE3
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) : 7 s 10.2 s							

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	73 / 81 dB(A) ^{2) 3)}	80 / 88 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0079 kg m ²		Thermal class	F
Bearing DE NDE	6306 2Z C3	6206 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)	32 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

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) 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

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Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>	Link documents
	Document type Technical data sheet	Document status Released			
	Document title 1LE1003-1BA23-4AB4-Z	Document number TDS-240626-120040			
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Special design

L22 Bearing design for increased cantilever forces

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