

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

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Motor type / Motor type : 1AV3112B

SIMOTICS GP - 112 M - IM B5 - 4p

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

Remarks / Remarks

Safe Area

Electrical data / 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) / DOL duty (S1) - 155(F) to 130(B)																	
400	Δ	50	4.00	-/-	7.90	1460	26.0	88.6	89.2	88.6	0.82	0.76	0.65	7.1	2.4	3.7	IE3
690	Y	50	4.00	-/-	4.60	1460	26.0	88.6	89.2	88.6	0.82	0.76	0.65	7.1	2.4	3.7	IE3
460	Δ	60	4.55	-/-	7.70	1760	24.5	89.5	90.0	89.3	0.83	0.78	0.67	7.3	2.5	3.8	IE3
460	Δ	60	4.00	-/-	6.90	1770	21.5	89.5	90.0	88.3	0.81	0.72	0.60	8.2	2.9	4.3	IE3
IM B5 / IM 3001		FS 112 M		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions / Environmental conditions : -20 °C - +40 °C / 1000 m Locked rotor time (hot / cold) / Locked rotor time (hot / cold) : 16.1 s | 21.8 s

Mechanical data / Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz Sound level (SPL / SWL) at 50Hz 60Hz	58 / 70 dB(A) ^{2) 3)}	62 / 74 dB(A) ^{2) 3)}	Vibration severity grade Vibration severity grade	A A
Moment of inertia Moment of inertia	0.0170 kg m ²		Thermal class Thermal class	F F
Bearing DE NDE Bearing DE NDE	6206 2Z C3	6206 2Z C3	Duty type Duty type	S1
bearing lifetime / bearing lifetime			Direction of rotation Direction of rotation	bidirectional bidirectional
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material Frame material	aluminum aluminum
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾			Net weight of the motor (IM B3) Net weight of the motor (IM B3)	34 kg
Regreasing device Regreasing device	Without Without		Coating (paint finish) Coating (paint finish)	Standard paint finish C2 Standard paint finish C2
Grease nipple Grease nipple	-/-		Color, paint shade Color, paint shade	RAL7030
Type of bearing Type of bearing	Preloaded bearing DE Preloaded bearing DE		Motor protection Motor protection	(F) 1 temperature sensor KTY84-130 (2 terminals) (F) 1 temperature sensor KTY84-130 (2 terminals)
Condensate drainage holes Condensate drainage holes	Without Without		Method of cooling Method of cooling	IC411 - self ventilated, surface cooled IC411 - self ventilated, surface cooled
External earthing terminal External earthing terminal	Without Without			

Terminal box / Terminal box

Terminal box position Terminal box position	top top	Max. cross-sectional area Max. cross-sectional area	4 mm ²
Material of terminal box Material of terminal box	Aluminium Aluminium	Cable diameter from ... to ... Cable diameter from ... to ...	11 mm - 21 mm
Type of terminal box Type of terminal box	TB1 F00	Cable entry Cable entry	2xM32x1,5-1xM16x1,5
Contact screw thread Contact screw thread	M4	Cable gland Cable gland	3 plugs 3 plugs

I_A/I_N = locked rotor current / current nominal 1) L_{10mh} 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

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Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	Link documents
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Special design / Special design

G11 Rotary pulse encoder Sendix 5020 (HTL)
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