

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



Motor type : 1AV2112B

SIMOTICS GP - 112 M - IM V1 - 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	3.68	-/-	7.80	1460	24.1	86.8	87.1	85.8	0.79	0.71	0.57	7.7	2.7	3.5	IE2
690	Y	50	3.68	-/-	4.50	1460	24.1	86.8	87.1	85.8	0.79	0.71	0.57	7.7	2.7	3.5	IE2
460	Δ	60	4.18	-/-	7.50	1760	22.7	87.7	87.7	86.2	0.80	0.73	0.59	8.2	2.6	3.5	IE2
460	Δ	60	3.70	-/-	6.90	1770	20.0	87.5	87.2	85.1	0.77	0.69	0.56	8.7	3.0	4.0	IE2
IM V1 / IM 3011		FS 112 M		29 kg		IP65		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -20 °C - +50 °C / 1,000 m

Locked rotor time (hot / cold) : 8.85 s | 14.5 s

These values are calculated. The final rating plate data will be calculated when the order is placed

The efficiency values and efficiency class according to EuP directive are valid for standard power ratings under standard conditions.

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	58.0 / 70.0 dB(A) ²⁾	62.0 / 74.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0140 kg m ²		Vibration severity grade	A
Bearing DE NDE	6206 2Z C3	6206 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)	Special paint finish C3
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Condensate drainage holes	Yes (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	4.0 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	11.0 mm - 21.0 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.	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

H20	IP 65 degree of protection	N31	Increased air humidity/temperature with 60 to 100 g water per m3 air
N06	Temperature class 155 (F), utilised to 130 (B), cooling medium temperature 50°C, power reduced		

Notes:

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