

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



Motor type : 1AV112A

SIMOTICS GP - 112 M - IM B3 - 2p

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

Remarks

## Electrical data

## Safe Area

U [V]	$\Delta / Y$	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	$\eta$ <sup>3)</sup>			$\cos\phi$ <sup>3)</sup>			$I_A/I_N$ $I_i/I_N$	$M_A/M_N$ $T_i/T_N$	$M_K/M_N$ $T_B/T_N$	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
230	$\Delta$	50	4.00	-/-	14.20	2935	13.0	83.1	82.9	80.5	0.85	0.77	0.65	8.3	3.3	4.2	IE1
400	Y	50	4.00	-/-	8.20	2935	13.0	83.1	82.9	80.5	0.85	0.77	0.65	8.3	3.3	4.2	IE1
460	Y	60	4.55	-/-	7.80	3535	12.3	84.5	84.2	82.1	0.87	0.82	0.71	9.0	3.3	4.6	IE1

IM B3 / IM 1001	FS 112 M	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN
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Environmental conditions : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) : 4.18 s | 8.13 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 81 dB(A) <sup>2)</sup>	73 / 85 dB(A) <sup>2)</sup>	Vibration severity grade	A
Moment of inertia	0.0067 kg m <sup>2</sup>		Insulation	155(F) to 130(B)
Bearing DE   NDE	6206 2Z C3	6206 2Z C3	Duty type	S1
<b>bearing lifetime</b>			Direction of rotation	bidirectional
L <sub>10mh</sub> , F <sub>Rad</sub> min 50 60Hz <sup>1)</sup> for coupling operation	40000 h	32000 h	Frame material	aluminum
Lubricants	Unirex N3		Net weight of the motor (IM B3)	25 kg
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(A) without (Standard)
Condensate drainage holes	No		Method of cooling	IC411 - self ventilated, surface cooled
External earthing terminal	No			

## Terminal box

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

کنترل سازان  
تامین تجهیزات برق صنعتی و الکتروموتور  
شماره های تماس : ۰۲۱-۳۳۱۱۰۷۶۸

**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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<b>SIEMENS</b>	document type datasheet	document status released	customer	
	title 1LE1002-1BA22-2AA4	document number		
© Siemens AG 2021	rev. 01	creation date 2021-10-05 00:55	language en	Page 1/1