

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



Motor type : 1AV3094A

SIMOTICS GP - 90 L - 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]	$\eta^{3)}$			$\cos\phi^{3)}$			$I_A/I_N$ $I_f/I_N$	$M_A/M_N$ $T_f/T_N$	$M_K/M_N$ $T_B/T_N$	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
230	$\Delta$	50	2.20	-/-	7.30	2910	7.2	85.9	86.8	86.1	0.88	0.83	0.73	8.3	2.6	4.0	IE3
400	Y	50	2.20	-/-	4.20	2910	7.2	85.9	86.8	86.1	0.88	0.83	0.73	8.3	2.6	4.0	IE3
460	Y	60	2.54	-/-	4.20	3510	6.9	86.5	87.0	85.9	0.88	0.84	0.75	8.3	2.6	4.2	IE3
460	Y	60	2.20	3.00	3.65	3530	6.0	86.5	86.4	84.5	0.87	0.82	0.71	9.6	3.0	4.9	MG1

IM B3 / IM 1001	FS 90 L	19 kg	IP55	CC032A	IEC/EN 60034	IEC, EN, UL, CSA, NEMA MG1-12-12	kVA Code: N
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Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 5.92 s | 8.52 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65.0 / 77.0 dB(A) <sup>2)</sup>	69.0 / 81.0 dB(A) <sup>2)</sup>	External earthing terminal	No
Moment of inertia	0.0031 kg m <sup>2</sup>		Vibration severity grade	A
Bearing DE   NDE	6205 2Z C3	6004 2Z C3	Insulation	155(F) to 130(B)
<b>bearing lifetime</b>			Duty type	S1
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
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	-/-		Method of cooling	IC411 - self ventilated, surface cooled

## Terminal box

Terminal box position	top	Max. cross-sectional area	1.5 mm <sup>2</sup>
Material of terminal box	Aluminium	Cable diameter from ... to ...	9.0 mm - 17.0 mm
Type of terminal box	TB1 E10	Cable entry	1xM25x1,5
Contact screw thread	M4	Cable gland	1 plug


### 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	<i>Technical data are subject to change! There may be discrepancies between calculated and rating plate values.</i>
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