

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



Motor type : 1AV2094A

SIMOTICS GP - 90 L - IM B5 - 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>			$I_A/I_N$ $I_f/I_N$	$M_A/M_N$ $T_f/T_N$	$M_K/M_N$ $T_B/T_N$	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
<b>DOL duty (S1) - 155(F) to 130(B)</b>																	
400	Y	50	2.20	-/-	4.50	2890	7.3	83.2	83.7	82.0	0.85	0.77	0.64	7.1	2.5	3.7	IE2
460	Y	60	2.54	-/-	4.35	3485	7.0	85.5	86.0	84.4	0.86	0.80	0.68	7.6	2.6	3.9	IE2
460	Y	60	2.20	-/-	3.90	3510	6.0	85.5	85.2	82.6	0.83	0.76	0.62	8.7	3.0	4.6	IE2
IM B5 / IM 3001			FS 90 L			IP55		IEC/EN 60034			IEC, DIN, ISO, VDE, EN						

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 4.13 s | 7.73 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 77 dB(A) <sup>2)</sup>	69 / 81 dB(A) <sup>2)</sup>	Vibration severity grade	A
Moment of inertia	0.0021 kg m <sup>2</sup>		Thermal class	F
Bearing DE   NDE	6205 2Z C3	6004 2Z C3	Duty type	S1
<b>bearing lifetime</b>			Direction of rotation	bidirectional
$L_{10mh}$ , $F_{Rad}$ , $m_{min}$ 50 60Hz Lubricants	40000 h	32000 h	Frame material	aluminum
Regreasing device	Unirex N3		Net weight of the motor (IM B3)	15 kg
Grease nipple	No		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Condensate drainage holes	No		Motor protection	(A) without (Standard)
External earthing terminal	No		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 mm - 17 mm
Type of terminal box	TB1 E00	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>	<a href="#">Link documents</a>
	document type datasheet	document status released			document number
	title 1LE1001-0EA40-2FA4	rev. 01	creation date 2021-11-28		
© Siemens AG 2021					