

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



Motor type : 1AV2083B

SIMOTICS GP - 80 M - IM B14 - 4p

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	0.75	-/-	3.10	1440	5.0	79.6	79.9	77.5	0.76	0.67	0.54	5.6	2.2	3.1	IE2
400	Y	50	0.75	-/-	1.79	1440	5.0	79.6	79.9	77.5	0.76	0.67	0.54	5.6	2.2	3.1	IE2
460	Y	60	0.86	-/-	1.82	1740	4.7	78.0	78.5	76.7	0.76	0.69	0.56	6.2	2.2	3.3	IE2
460	Y	60	0.75	-/-	1.68	1750	4.1	78.0	77.4	74.6	0.72	0.63	0.51	6.8	2.5	3.8	IE2

IM B14 / IM 3601	FS 80 M	11 kg	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN
------------------	---------	-------	------	--------------	------------------------

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

Locked rotor time (hot / cold) : 14.8 s | 19.8 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	53.0 / 64.0 dB(A) <sup>2)</sup>	55.0 / 66.0 dB(A) <sup>2)</sup>	External earthing terminal	No
Moment of inertia	0.0021 kg m <sup>2</sup>		Vibration severity grade	A
Bearing DE   NDE	6004 2Z C3	6004 2Z C3	Insulation	155(F) to 130(B)
<b>bearing lifetime</b>			Duty type	S1
$L_{10mh}$ $F_{rad, min}$ 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 E00	Cable entry	1xM25x1,5
Contact screw thread	M4	Cable gland	1 plug

## Notes:

$I_A/I_N$ = locked rotor current / current nominal	1) L10mh according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
$M_L/M_N$ = locked rotor torque / torque nominal	2) at rated power / at full load	
$M_K/M_N$ = break down torque / nominal torque		

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>
-------------------------------	---------------------	-------------------------------	-------------	---

	document type datasheet	document status released	customer	
	title 1LE1001-0DB32-2KA4	document number	rev. 01	creation date 2021-04-20 21:35
© Siemens AG 2021				Page 1/1