

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



Motor type : 1AV3082B

SIMOTICS GP - 80 M - IM B3 - 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]	η <sup>3)</sup>			cosφ <sup>3)</sup>			I <sub>A</sub> /I <sub>N</sub> I <sub>I</sub> /I <sub>N</sub>	M <sub>A</sub> /M <sub>N</sub> T <sub>I</sub> /T <sub>N</sub>	M <sub>K</sub> /M <sub>N</sub> T <sub>B</sub> /T <sub>N</sub>	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
<b>DOL duty (S1) - 155(F) to 130(B)</b>																	
230	Δ	50	0.55	-/-	2.20	1440	3.6	80.8	81.5	79.8	0.78	0.71	0.58	5.9	2.1	3.1	IE3
400	Y	50	0.55	-/-	1.26	1440	3.6	80.8	81.5	79.8	0.78	0.71	0.58	5.9	2.1	3.1	IE3
460	Y	60	0.63	-/-	1.25	1740	3.5	81.1	81.3	79.6	0.78	0.71	0.60	6.4	2.4	3.3	IE3
460	Y	60	0.55	0.75	1.15	1750	3.0	81.1	80.9	78.6	0.74	0.67	0.55	6.9	2.7	3.8	MG1
IM B3 / IM 1001		FS 80 M		IP55		IEC/EN 60034		IEC, EN, UL, CSA, NEMA MG1-12			kVA Code: M						
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 24.2 s   29 s								

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	53 / 64 dB(A) <sup>2)</sup>	55 / 66 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	6004 2Z C3	6004 2Z C3	Duty type	S1
<b>bearing lifetime</b>			Direction of rotation	bidirectional
L <sub>10mh</sub> , F <sub>Rad</sub> min 50 60Hz Lubricants	40000 h	32000 h	Frame material	aluminum
Regreasing device	Unirex N3		Net weight of the motor (IM B3)	11 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 E10	Cable entry	1xM25x1,5
Contact screw thread	M4	Cable gland	1 plug

## Notes:

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>K</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>B</sub>/M<sub>N</sub> = 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>
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