

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



Motor type : 1AV3105D

SIMOTICS XP - 100 L - IM B14 - 8p

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

Remarks

II 3D Ex tc IIIB T 120°C Dc

-/-

## Electrical data

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	1.10	-/-	5.30	710	14.8	77.7	76.4	75.1	0.67	0.56	0.45	4.1	1.8	2.3	IE3
400	Y	50	1.10	-/-	3.05	710	14.8	77.7	76.4	75.1	0.67	0.56	0.45	4.1	1.8	2.3	IE3
460	Y	60	1.27	-/-	2.95	860	14.1	78.5	78.5	76.1	0.67	0.58	0.46	4.4	1.9	2.6	IE3
460	Y	60	1.10	-/-	2.70	865	12.1	78.5	78.0	75.7	0.62	0.53	0.42	4.8	2.3	3.0	IE3
IM B14 / IM 3601		FS 100 L		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN									

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

Locked rotor time (hot / cold) : 33.6 s | 44.8 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	61.9 / 69.9 dB(A) <small>2) 3)</small>	65.4 / 73.4 dB(A) <small>2) 3)</small>	Vibration severity grade	A
Moment of inertia	0.0130 kg m <sup>2</sup>		Thermal class	F
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 min</sub> 50 60Hz <sup>1)</sup> for coupling operation	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	26 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Condensate drainage holes	Without		Motor protection	(A) without (Standard)
External earthing terminal	With (standard)		Method of cooling	IC411 - self ventilated, surface cooled

## 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		

## 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>K</sub>/M<sub>N</sub> = break down torque / nominal torque  
 1) L<sub>10mh</sub> 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. IN LVM	technical reference	created by SPC	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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