

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



Motor type : 1AV3166B

SIMOTICS GP - 160 L - IM B3 - 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]	$\eta^{3)}$			$\cos\phi^{3)}$			$I_A/I_N$ $I_f/I_N$	$M_A/M_N$ $T_f/T_N$	$M_K/M_N$ $T_B/T_N$	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4				
<b>DOL duty (S1) - 180(H) to 180(H)</b>																	
230	$\Delta$	50	18.50	-/-	66.00	1480	119.0	92.6	92.7	91.8	0.76	0.69	0.57	8.1	2.7	3.8	IE3
400	Y	50	18.50	-/-	38.00	1480	119.0	92.6	92.7	91.8	0.76	0.69	0.57	8.1	2.7	3.8	IE3
460	Y	60	21.30	-/-	37.00	1775	115.0	92.4	92.5	91.8	0.78	0.72	0.61	8.1	2.7	3.6	IE2
460	Y	60	18.50	-/-	33.00	1780	99.0	93.6	93.5	92.4	0.75	0.68	0.56	9.0	3.0	4.2	IE3
IM B3 / IM 1001		FS 160 L			IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN								
Environmental conditions : -20 °C - + °C / 1,000 m									Locked rotor time (hot / cold) : 17 s   24 s								

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65 / 77 dB(A) <sup>2) 3)</sup>	70 / 82 dB(A) <sup>2) 3)</sup>	Vibration severity grade	A
Moment of inertia	0.0990 kg m <sup>2</sup>		Thermal class	H
Bearing DE   NDE	6209 Z C3	6209 Z C3	Duty type	S1
<b>bearing lifetime</b>			Direction of rotation	bidirectional
$L_{10mh}$ , $F_{Rad min}$ 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)	110 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Locating bearing NDE		Color, paint shade	RAL7030
Condensate drainage holes	Without		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
External earthing terminal	Without		Method of cooling	IC411 - self ventilated, surface cooled

## Terminal box

Terminal box position	top	Max. cross-sectional area	16 mm <sup>2</sup>
Material of terminal box	Aluminium	Cable diameter from ... to ...	19 mm - 28 mm
Type of terminal box	TB1 J00	Cable entry	2xM40x1,5-1xM16x1,5
Contact screw thread	M5	Cable gland	3 plugs

**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. 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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**Special design**

N11 Temperature class 180(H), and coolant temperature max. 60°C

**Notes:**

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