

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



Motor type : 1AV3164A

SIMOTICS GP - 160 L - IM B5 - 2p

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>	M <sub>A</sub> /M <sub>N</sub>	M <sub>K</sub> /M <sub>N</sub>	IE-CL
								4/4	3/4	2/4	4/4	3/4	2/4	I <sub>I</sub> /I <sub>N</sub>	T <sub>I</sub> /T <sub>N</sub>	T <sub>B</sub> /T <sub>N</sub>	
400	Δ	50	18.50	-/-	32.00	2955	60.0	92.4	92.8	92.4	0.90	0.87	0.80	9.0	2.8	4.2	IE3
690	Y	50	18.50	-/-	18.60	2955	60.0	92.4	92.8	92.4	0.90	0.87	0.80	9.0	2.8	4.2	IE3
460	Δ	60	21.30	-/-	32.00	3555	57.0	91.7	91.5	90.3	0.91	0.88	0.80	9.0	2.6	4.2	IE3
460	Δ	60	18.50	-/-	28.50	3560	49.5	91.7	91.5	90.3	0.89	0.86	0.78	10.2	3.0	4.8	IE3
IM B5 / IM 3001		FS 160 L		94 kg		IP55		IEC/EN 60034			IEC, DIN, ISO, VDE, EN						

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

Locked rotor time (hot / cold) : 13.3 s | 19.7 s

## Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	75.0 / 79.0 dB(A) <sup>2)</sup>	75.0 / 79.0 dB(A) <sup>2)</sup>	External earthing terminal	No
Moment of inertia	0.0680 kg m <sup>2</sup>		Vibration severity grade	A
Bearing DE   NDE	6209 2Z C3	6209 2Z C3	Insulation	155(F) to 130(B)
<b>bearing lifetime</b>			Duty type	S1
L <sub>10mh</sub> F <sub>Rad min</sub> 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	Locating bearing NDE		Motor protection	(A) without (Standard)
Condensate drainage holes	No		Method of cooling	IC416 - separately ventilated, surface cooled

## Terminal box

Terminal box position	top	Max. cross-sectional area	16.0 mm <sup>2</sup>
Material of terminal box	Aluminium	Cable diameter from ... to ...	19.0 mm - 28.0 mm
Type of terminal box	TB1 J00	Cable entry	2xM40x1,5
Contact screw thread	M5	Cable gland	2 plugs

### 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) 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>	
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**Special design**

F70 Mounting of separately driven fan

**Notes:**

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