

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



Motor type : 1AV3184B

SIMOTICS GP - 180 L - IM B5 - 4p

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

Remarks **Safe Area**

**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>																	
400	Δ	50	22.00	-/-	41.00	1470	143.0	93.0	93.6	93.6	0.83	0.78	0.68	6.8	2.3	3.3	IE3
690	Y	50	22.00	-/-	24.00	1470	143.0	93.0	93.6	93.6	0.83	0.78	0.68	6.8	2.3	3.3	IE3
460	Δ	60	25.30	-/-	41.00	1770	136.0	93.6	94.1	94.0	0.83	0.78	0.69	6.9	2.2	3.2	IE3
460	Δ	60	22.00	-/-	36.50	1775	118.0	93.6	93.8	93.3	0.81	0.75	0.65	7.7	2.8	3.7	IE3
IM B5 / IM 3001		FS 180 L		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 25.9 s   40.6 s							

**Mechanical data**

Sound level (SPL / SWL) at 50Hz 60Hz	68 / 75 dB(A) <sup>2) 3)</sup>	70 / 77 dB(A) <sup>2) 3)</sup>	Vibration severity grade	A
Moment of inertia	0.1400 kg m <sup>2</sup>		Thermal class	F
Bearing DE   NDE	6210 2Z C3	6210 2Z C3	Duty type	S1
<b>bearing lifetime</b>			Direction of rotation	bidirectional
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	142 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

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

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