

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



Motor type : 1CV3182B

SIMOTICS SD - 180 M - 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>	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>	
<b>DOL duty (S1) - 155(F) to 130(B)</b>																	
400	Δ	50	18.50	-/-	35.00	1470	120.0	92.6	93.1	92.9	0.82	0.77	0.68	7.2	2.5	3.3	IE3
690	Y	50	18.50	-/-	20.50	1470	120.0	92.6	93.1	92.9	0.82	0.77	0.68	7.2	2.5	3.3	IE3
460	Δ	60	21.30	-/-	35.00	1770	115.0	92.4	92.8	92.4	0.83	0.79	0.70	7.2	2.4	3.2	IE2
460	Δ	60	18.50	-/-	30.50	1775	100.0	93.6	93.6	92.7	0.81	0.74	0.62	8.7	2.6	3.8	IE3
IM B5 / IM 3001		FS 180 M		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 28.7 s   41.6 s							

**Mechanical data**

Sound level (SPL / SWL) at 50Hz 60Hz	66 / 73 dB(A) <sup>2) 3)</sup>	68 / 75 dB(A) <sup>2) 3)</sup>	Vibration severity grade	A
Moment of inertia	0.1300 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	cast iron
Regreasing device	Without		Net weight of the motor (IM B3)	165 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Locating bearing NDE		Color, paint shade	RAL7030
Condensate drainage holes	With (standard)		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
External earthing terminal	With (standard)		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	cast iron	Cable diameter from ... to ...	19 mm - 28 mm
Type of terminal box	TB1 J01	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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