

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

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Motor type / Motor type : 1CV3090B

SIMOTICS SD - 90 S - IM B5 - 4p

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

Remarks / Remarks

## Safe Area

### Electrical data / 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) / DOL duty (S1) - 155(F) to 130(B)</b>																	
230	Δ	50	1.10	-/-	4.20	1440	7.3	84.1	84.7	83.4	0.78	0.70	0.58	6.9	2.9	3.6	IE3
400	Y	50	1.10	-/-	2.40	1440	7.3	84.1	84.7	83.4	0.78	0.70	0.58	6.9	2.9	3.6	IE3
460	Y	60	1.27	-/-	2.40	1740	7.0	84.0	84.4	83.1	0.79	0.72	0.60	7.4	2.9	3.8	IE2
460	Y	60	1.10	-/-	2.15	1750	6.0	86.5	86.4	84.2	0.75	0.67	0.54	8.2	3.4	4.4	IE3
IM B5 / IM 3001		FS 90 S		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions / Environmental conditions : -20 °C - +40 °C / 1000 m Locked rotor time (hot / cold) / Locked rotor time (hot / cold) : 21.1 s | 25.4 s

### Mechanical data / Mechanical data


Sound level (SPL / SWL) at 50Hz 60Hz Sound level (SPL / SWL) at 50Hz 60Hz	56 / 68 dB(A) <sup>2) 3)</sup>	58 / 70 dB(A) <sup>2) 3)</sup>	Vibration severity grade Vibration severity grade	A A
Moment of inertia Moment of inertia	0.0036 kg m <sup>2</sup>		Thermal class Thermal class	F F
Bearing DE   NDE Bearing DE   NDE	6205 2Z C3	6204 2Z C3	Duty type Duty type	S1
<b>bearing lifetime / bearing lifetime</b>			Direction of rotation Direction of rotation	bidirectional bidirectional
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	40000 h	32000 h	Frame material Frame material	cast iron cast iron
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>			Net weight of the motor (IM B3) Net weight of the motor (IM B3)	25 kg
Regreasing device Regreasing device	Without Without		Coating (paint finish) Coating (paint finish)	Standard paint finish C2 Standard paint finish C2
Grease nipple Grease nipple	-/-		Color, paint shade Color, paint shade	RAL7030
Type of bearing Type of bearing	Preloaded bearing DE Preloaded bearing DE		Motor protection Motor protection	(B) 1 PTC thermistor - for tripping (2 terminals) (B) 1 PTC thermistor - for tripping (2 terminals)
Condensate drainage holes Condensate drainage holes	Without Without		Method of cooling Method of cooling	IC411 - self ventilated, surface cooled IC411 - self ventilated, surface cooled
External earthing terminal External earthing terminal	Without Without			

### Terminal box / Terminal box

Terminal box position Terminal box position	top top	Max. cross-sectional area Max. cross-sectional area	mm <sup>2</sup>
Material of terminal box Material of terminal box		Cable diameter from ... to ... Cable diameter from ... to ...	mm - mm
Type of terminal box Type of terminal box		Cable entry Cable entry	-/-
Contact screw thread Contact screw thread		Cable gland Cable gland	-/-

#### Notes:

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal 1) L<sub>10mh</sub> according to DIN ISO 281 10/2010 3) Value is valid only for DOL operation with motor design IC411  
M<sub>A</sub>/M<sub>N</sub> = locked rotor torque / torque nominal 2) at rated power / at full load  
M<sub>K</sub>/M<sub>N</sub> = break down torque / nominal torque

responsible dep. IN LVM	technical reference	created by SPC	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.	<a href="#">Link documents</a>
	document type datasheet	document status released		document number	
	title 1LE1503-0EB02-2FB4	rev. 953	creation date 2024-02-13		
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