

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

**Motor type:** 7CV3090B **SIMOTICS SD - 90S - IM B3 - 4 p**

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

Remarks

## Electrical data

## Safe Area

U	$\Delta/Y$	f	P	P	I	n	M	M	$\eta^{3)}$			$\cos\phi^{3)}$			$I_A/I_N$	$M_A/M_N$	$M_K/M_N$	IE-CL
[V]±10%		[Hz]±5%	[kW]	[hp]	[A]	[1/min]	[kgf.m]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4				
<b>Motordaten / Motor Data</b>																		
415	Y	50	1.10	-/-	2.30	1443	0.7	7.3	85.0	85.2	83.3	0.77	0.69	0.56	6.5	3.4	4.0	IE3
IM B3 / IM 1001			FS 90S		24 kg		SF:1		IS 12615 / IEC 60034-1									

Environmental conditions : -20 °C - +50 °C / 1,000 m

Locked rotor time (hot / cold) : 18 s | 24 s

## Mechanical data

Sound pressure level 50Hz   60Hz	62 dB(A)   65 dB(A)	External earthing terminal	Yes (standard)
Moment of inertia   Rotor GD <sup>2</sup>	0.0034 kg m <sup>2</sup>   0.0135 kgf.m <sup>2</sup>	Vibration severity grade	A (Standard)
Bearing DE   NDE	6205 2ZC3   6204 2ZC3	Insulation	155(F) utilized to 130(B)
<b>bearing lifetime</b>		Duty type	S1
L <sub>10mh</sub> F <sub>Rad max</sub> according catalogue 50 60Hz <sup>1)</sup>	20.000 h   16.000 h	Direction of rotation	Bidirectional
L <sub>10mh</sub> F <sub>Rad min</sub> for coupling operation 50 60Hz <sup>1)</sup>	50.000 h   40.000 h	Frame material	Cast iron
Type of bearing	Locating (fixed) bearing, NDE	Forced ventilation motor details	- / -
Relubrication interval/quantity DE   NDE	- / - g   - / - g - / - h	Net weight of the motor (IM B3)	24 kg
Type of construction	IM B3 / IM 1001	Rotor weight	5 kg
Degree of protection	IP55	Data of anti condensation heating	- / V, - / W
Lubricants	Esso Unirex N3	Coating (paint finish)	Standard paint finish
Regreasing device	- / -	Color, paint shade	RAL7030
Grease nipple	- / -	Motor protection	(A) without
Condensate drainage holes	No	Method of cooling	IC411 - Self ventilated, surface cooled

## Terminal box




Terminal box position	Top	Cable diameter from ... to ...	9.0 mm - 17.0 mm
Material of terminal box	Aluminium	Cable entry	1xM16x1.5+1xM25x1.5
Type of terminal box	TB7 D04	Cable gland	2 Plugs
Contact screw thread	M4		
Max. cross-sectional area	6 mm <sup>2</sup>		

## 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

3) Value is valid only for DOL operation with motor design IC411

1) L10mh according to DIN ISO 281 10/2010

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>	<a href="#">Link documents</a>
	document type datasheet			document status released	
	MLFB and Order Code 1LE7503-0EB02-3AA4			document number	
© Siemens AG 2022		rev. 01	creation date 2022-09-30	language en	