

Data sheet for three-phase Squirrel-Cage-Motors Innomotics



Motor type : 1CV2090D

INNOMOTICS SD - 90 S - IM B3 - 8p

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 ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N T _I /T _N	M _K /M _N T _B /T _N	IE-CL
4/4	3/4	2/4	4/4	3/4	2/4												
DOL duty (S1) - 155(F) to 130(B)																	
230	Δ	50	0.37	-/-	2.35	675	5.2	56.1	55.6	49.6	0.71	0.60	0.47	2.6	1.4	1.7	IE2
400	Y	50	0.37	-/-	1.34	675	5.2	56.1	55.6	49.6	0.71	0.60	0.47	2.6	1.4	1.7	IE2
460	Y	60	0.43	-/-	1.33	830	5.0	58.0	57.5	52.5	0.70	0.59	0.46	2.9	1.4	1.8	IE2
460	Y	60	0.37	-/-	1.25	845	4.2	58.0	55.8	49.5	0.64	0.54	0.42	3.0	1.6	2.1	IE2
IM B3 / IM 1001		FS 90 S		IP55				IEC/EN 60034			IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 43.60 s 68.00 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	53.0 / 65.0 dB(A) 2) 3)	57.0 / 69.0 dB(A) 2) 3)	Vibration severity grade	A
Moment of inertia	0.0019 kg m²		Thermal class	F
Bearing DE NDE	6205 2Z C3	6204 2Z C3	Duty type	S1
Bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Frame material	cast iron
Regreasing device	Without		Net weight of the motor (IM B3)	20 kg
Grease nipple	-/-		Coating (paint finish)	Standard paint finish C2
Type of bearing	Preloaded bearing DE		Color, paint shade	RAL7030
Condensate drainage holes	Without		Motor protection	(B) 1 PTC thermistor - for tripping (2 terminals)
External earthing terminal	Without		Method of cooling	IC411 - self ventilated, surface cooled
			Carbon footprint (without options)	46kg

Terminal box

Terminal box position	top	Main cable entry	1xM25x1.5
Material of terminal box	cast iron	Main cable gland	1 plug
Type of terminal box	TB1 D01	Auxiliary cable entry	1xM16x1.5
Contact screw thread	6xM4	Auxiliary cable gland	1 plug
Max. cross-sectional area	2.5 mm²		

Implicit options

F74	Sheet steel fan cowl

I_A/I_N = locked rotor current / current nominal
M_K/M_N = locked rotor torque / torque nominal
M_K/M_N = break down torque/ nominal torque
1) L_{10mh} 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

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LV	Technical reference	Created by IPC	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
INNOMOTICS	Document type Technical data sheet			Document status Released			
	Document title 1LE1501-OED02-2AB4			Document number TDS-260811-110449			
Restricted © Innomotics 2026				Revision AA	Creation date 2026-08-11	Language en	Page 1/1