

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



Motor type : 1CV2090D

INNOMOTICS SD - 90 S - IM B5 - 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 I _V /I _N	M _A /M _N T _I /T _N	M _K /M _N T _B /T _N	IE-CL
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 B5 / IM 3001		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

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