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

Motor type : 1AV1090A **INNOMOTICS GP - 90 S - IM B3 - 2p**

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) 4/4	η 3) 3/4	η 3) 2/4	cosφ 3) 4/4	cosφ 3) 3/4	cosφ 3) 2/4	I_A/I_N I_I/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	1.50	-/-	5.70	2835	5.1	77.2	78.2	76.8	0.85	0.79	0.66	5.5	2.6	2.9	IE1
400	Y	50	1.50	-/-	3.30	2835	5.1	77.2	78.2	76.8	0.85	0.79	0.66	5.5	2.6	2.9	IE1
460	Y	60	1.75	-/-	3.15	3425	4.9	81.0	81.6	80.5	0.86	0.81	0.70	6.0	2.6	3.1	IE1

IM B3 / IM 1001	FS 90 S	IP55	UKCA	IEC/EN 60034	IEC, DIN, ISO, VDE, EN

Environmental conditions : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) : 10.20 s | 19.30 s

Mechanical data

Sound level (SPL / SWL) at 50Hz|60Hz	70.0 / 77.0 dB(A) 2) 3)	73.0 / 80.0 dB(A) 2) 3)
Moment of inertia	0.0036 kg m²	
Bearing DE | NDE	6205 2Z C3	6004 2Z C3
Bearing lifetime		
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h
Regreasing device	Without	
Grease nipple	-/-	
Type of bearing	Preloaded bearing DE	
Condensate drainage holes	Without	
External earthing terminal	Without	

Vibration severity grade	A
Thermal class	F
Duty type	S1
Direction of rotation	bidirectional
Frame material	aluminum
Net weight of the motor (IM B3)	13 kg
Coating (paint finish)	Standard paint finish C2
Color, paint shade	RAL7030
Motor protection	(A) without (Standard)
Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top
Material of terminal box	Aluminium
Type of terminal box	TB1 E00
Contact screw thread	3xM4

Max. cross-sectional area	4.0 mm²
Main cable entry	1xM25x1.5
Main cable gland	1 plug

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

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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Responsible department	Technical reference	Created by	Approved by	
IN LV		IPC		***Technical data are subject to change! There may be discrepancies between calculated and rating plate values.***

Link documents

INNOMOTICS

Document type	Document status
Technical data sheet	Released
Document title	**Document number**
1LE1002-0EA02-2AA4-Z **D22**	TDS-260328-200437

Restricted	Revision	Creation date	Language	Page
© Innomotics 2026	AA	2026-03-28	en	1/2

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Special design

D22	Motor without CE character for export outside the EEA (see EU regulation 2019/1781)

I_A/I_N = locked rotor current / current nominal
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