

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



Motor type : 1AV3090B

INNOMOTICS GP - 90 S - IM B3 - 4p

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 _r /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	1.10	-/-	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 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) : 21.50 s 25.90 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	56.0 / 68.0 dB(A) 2) 3)	58.0 / 70.0 dB(A) 2) 3)	Vibration severity grade	A
Moment of inertia	0.0036 kg m²		Thermal class	F
Bearing DE NDE	6205 2Z C3	6004 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	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	15 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)	77kg

Terminal box

Terminal box position	top	Main cable entry	1xM25x1.5
Material of terminal box	Aluminium	Main cable gland	1 plug
Type of terminal box	TB1 E00	Auxiliary cable entry	1xM16x1.5
Contact screw thread	3xM4	Auxiliary cable gland	1 plug
Max. cross-sectional area	4.0 mm²		

I_A/I_N = locked rotor current / current nominal
M_r/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 IN LV	Technical reference	Created by IPC	Approved by	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 1LE1003-OEB02-2AB4-Z H01			Document number TDS-260512-132304			
Restricted © Innomotics 2026				Revision AA	Creation date 2026-05-12	Language en	Page 1/2

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Special design

H01 Bolted on mounting feet (instead of cast)

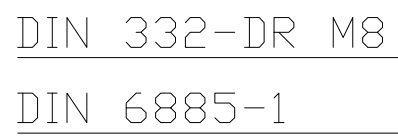
I_{Δ}/I_N = locked rotor current / current nominal
 M_{Δ}/M_N = locked rotor torque / torque nominal
 M_b/M_N = break down torque / nominal torque

1) $L_{100\%}$ 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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Tolerance	Surface	Material	Weight	Scale  mm
1LE1003-0EB02-2AB4-Z H01	Author	Dimensional drawing Maßzeichnung		
	Creator12/05/2026IPC			
	ApprovalCreated automatically			
	DepartmentIN LVM			
	Change Order	MLFB	Doc. Type	
	Doc. StateReleased	Item No	Paper Size	A3
	RevisionAAIndexRS	Doc. No	1st Languageen 2nd Languagede	
©Innomotics2026	Project No	Ref. No	Sheet	1 of 1

Technische Änderungen vorbehalten!
Technical data are subject to change!

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