

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



Motor type : 1AV2090A

SIMOTICS GP - 90 S - IM B35 - 2p

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

Remarks

Electrical data

Safe Area

U	Δ / Y	f	P	P	I	n	M	η ³⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL
[V]		[Hz]	[kW]	[hp]	[A]	[1/min]	[Nm]	4/4	3/4	2/4	4/4	3/4	2/4	I _I /I _N	T _I /T _N	T _B /T _N	
400	Δ	50	1.50	-/-	3.15	2900	5.0	81.3	81.7	79.7	0.84	0.77	0.63	6.9	2.7	3.6	IE2
690	Y	50	1.50	-/-	1.84	2900	5.0	81.3	81.7	79.7	0.84	0.77	0.63	6.9	2.7	3.6	IE2
460	Δ	60	1.75	-/-	3.10	3480	4.8	84.0	84.4	82.6	0.85	0.79	0.68	7.4	2.6	3.8	IE2
460	Δ	60	1.50	-/-	2.75	3505	4.1	84.0	83.5	80.7	0.82	0.74	0.62	8.5	3.1	4.5	IE2
IM B35 / IM 2001		FS 90 S		13 kg		IP65		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 6.55 s 10.9 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	65.0 / 77.0 dB(A) ²⁾	69.0 / 81.0 dB(A) ²⁾	External earthing terminal	No
Moment of inertia	0.0017 kg m ²		Vibration severity grade	A
Bearing DE NDE	6205 2Z C3	6004 2Z C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Direction of rotation	bidirectional
Lubricants	Unirex N3		Frame material	aluminum
Regreasing device	No		Coating (paint finish)	Standard paint finish C2
Grease nipple	-/-		Color, paint shade	RAL7030
Type of bearing	Preloaded bearing DE		Motor protection	(A) without (Standard)
Condensate drainage holes	-/-		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	1.5 mm ²
Material of terminal box	Aluminium	Cable diameter from ... to ...	9.0 mm - 17.0 mm
Type of terminal box	TB1 E00	Cable entry	1xM25x1,5
Contact screw thread	M4	Cable gland	1 plug

Notes:

I _A /I _N = locked rotor current / current nominal	1) L10mh according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M _K /M _N = locked rotor torque / torque nominal	2) at rated power / at full load	
M _B /M _N = break down torque / nominal torque		

responsible dep.	technical reference	created by	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.				
DI MC LVM		DT Configurator						
	document type			document status		customer		
	datasheet			released				
		title		document number				
	1LE1001-0EA03-4JA4-Z							
© Siemens AG 2021	B02+H20+H23				rev.	creation date	language	Page
					01	2021-04-22 22:32	en	1/2

SIMOTICS GP - 90 S - IM B35 - 2p

B02	Acceptance test certificate 3.1 acc. to EN 10204	H23	Radial sealing ring at the DE for flange types of construction, oil-tight up to 0.1 bar
H20	IP 65 degree of protection		

H23	Radial sealing ring at the DE for flange types of construction, oil-tight up to 0.1 bar
-----	---

H20	IP 65 degree of protection
-----	----------------------------

Notes:

Technical data are subject to change! There may be discrepancies between calculated and rating plate values.

customer

document number

rev.	creation date	language	Page
01	2021-04-22 22:32	en	2/2