

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



Motor type : 1AV2090C SIMOTICS GP - 90 S - IM B3 - 6p

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

Remarks

Safe Area

Electrical data

-/-

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	
DOL duty (S1) - 155(F) to 130(B)																	
400	Y	50	0.75	-/-	2.05	935	7.7	75.9	76.8	74.5	0.70	0.61	0.48	4.1	2.0	2.5	IE2
460	Y	60	0.86	-/-	2.10	1135	7.2	73.0	73.6	71.7	0.70	0.61	0.49	4.4	2.0	2.6	IE2
460	Y	60	0.75	-/-	1.98	1145	6.3	73.0	72.7	69.7	0.65	0.56	0.44	4.5	2.2	3.0	IE2
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) : 25.9 s 37 s								

Mechanical data				
Sound level (SPL / SWL) at 50Hz 60Hz	43 / 55 dB(A) ^{2) 3)}	46 / 58 dB(A) ^{2) 3)}	Vibration severity grade	A
Moment of inertia	0.0030 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} 50 60Hz ¹⁾ for coupling operation	40000 h	32000 h	Frame material	aluminum
Regreasing device	Without		Net weight of the motor (IM B3)	13 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	(A) without (Standard)
External earthing terminal	Without		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box																	
Terminal box position			top			Max. cross-sectional area			1.5 mm²								
Material of terminal box			Aluminium			Cable diameter from ... to ...			9 mm - 17 mm								
Type of terminal box			TB1 E00			Cable entry			1xM25x1,5								
Contact screw thread			M4			Cable gland			1 plug								

I_A/I_N = locked rotor current / current nominal
M_K/M_N = locked rotor torque / torque nominal
M_B/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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