

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



Motor type : 1CV4312B

SIMOTICS SD - 315 M - IM B3 - 4p

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		
DOL duty (S1) - 155(F) to 130(B)																		
400	Δ	50	132.00	-/-	235.00	1490	850.0	96.4	96.6	96.3	0.85	0.81	0.73	8.2	3.3	3.2	IE4	
690	Y	50	132.00	-/-	135.00	1490	850.0	96.4	96.6	96.3	0.85	0.81	0.73	8.2	3.3	3.2	IE4	
460	Δ	60	132.00	-/-	205.00	1791	700.0	96.5	96.5	95.9	0.84	0.80	0.71	9.2	3.6	3.6	IE4	
460	Δ	60	152.00	-/-	235.00	1790	810.0	96.5	96.6	96.3	0.85	0.82	0.74	8.1	3.2	3.1	IE4	
IM B3 / IM1001			FS 315 M				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1,000 m										Locked rotor time (hot / cold) : 25.4 s 39.5 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67 / 81 dB(A) ^{2) 3)}	72 / 86 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	2.9100 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	6319 C3	6319 C3	Thermal class	F
permissible lateral force on (N)	X ₀ : 9300	X _{0.5} : 8650	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
Relubrication interval/quantity DE NDE	40 g 40 g	6000 h	Net weight of the motor	942 kg
Lubricants	UNIREX N3		Coating (paint finish)	No paint finish (cast iron parts primed)
Regreasing device	-/-		Color, paint shade	RAL7030
Grease nipple	-/-		Motor protection	3 PTC thermistors - for tripping (2 terminals)
Type of bearing	Locating bearing NDE		Method of cooling	IC411 - self ventilated, surface cooled
Condensate drainage holes	(Standard) Yes			

Terminal box

Terminal box position	box at the top	Max. cross-sectional area	240 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	34 mm - 45 mm
Type of terminal box	TB1Q01	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM12	Cable gland	4 plugs

Notes:			
I _A /I _N = locked rotor current / current nominal		1) L _{10mh} 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.		Link documents		
IN LVM		SPC						
SIEMENS	document type	datasheet			document status			
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	title	1LE5504-3AB23-4AB4-Z			document number			
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F74	Sheet steel fan cowl	Q72	2 Pt100 resistance thermometers for bearings (4 terminals)
M11	Stainless steel rating plate	R62	Cast iron auxiliary terminal box (small)
Q02	Anti-condensation heating for 230 V (2 terminals)	S00	No paint finish, only GG parts primed
Q60	3 PT100 resistance thermometers in stator winding - 2 wire (6 terminals)		

Space heaters

Technical data: 1-phase, 230V, 218W

Notes:

responsible dep. IN LVM	technical reference	created by SPC	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
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