

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



Motor type : 1CV4312B

SIMOTICS SD - 315 M - IM B5 - 4p

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

Remarks **Safe Area**

Electrical data

-/-

U [V]	Δ / Y	f [Hz]	P [kW]	P [hp]	I [A]	n [1/min]	M [Nm]	η ³⁾			cos φ ³⁾			I _A /I _N I _f /I _N	M _A /M _N T _f /T _N	M _K /M _N T _B /T _N	IE-CL	
								4/4	3/4	2/4	4/4	3/4	2/4					
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 B5 / IM3001			FS 315 M			IP55		UKCA		IEC/EN 60034			IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1000 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) (N)	X _{0:} ¹⁾ 9300	X _{0.5:} 8650	X _{max:} 8000	Duty type	S1
bearing lifetime	L _{10mh} F _{Rad, min} for coupling operation 50 60Hz ¹⁾		Direction of rotation	bidirectional	
	40000 h	32000 h	Frame material	cast iron	
Relubrication interval/quantity DE NDE	40 g 40 g 6000 h		Net weight of the motor	991 kg	
Lubricants	UNIREX N3		Coating (paint finish)	Standard paint finish C2	
Regreasing device	Flat type lubricating nipple		Color, paint shade	RAL7030	
Grease nipple	M10x1 DIN 3404 A		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

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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Special design

F74	Sheet steel fan cowl	Q31	1/3 Bi-metallic sensors (opener) for tripping (2 terminals)
M11	Stainless steel rating plate		

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