

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



Motor type : 1CV2312B

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	
380	Δ	50	132.00	-/-	245.00	1490	850.0	94.7	94.9	94.6	0.87	0.84	0.76	7.1	2.7	2.9	IE2
660	Y	50	132.00	-/-	140.00	1490	850.0	94.7	94.9	94.6	0.87	0.84	0.76	7.1	2.7	2.9	IE2
440	Δ	60	152.00	-/-	240.00	1788	810.0	95.0	95.1	94.5	0.87	0.85	0.78	7.1	2.6	2.8	IE2
440	Δ	60	132.00	-/-	210.00	1790	700.0	95.0	94.8	94.0	0.86	0.83	0.74	7.8	3.1	3.2	IE2
IM B3 / IM 1001		FS 315 M		870 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

Environmental conditions : -20 °C - +40 °C / 1,000 m

Locked rotor time (hot / cold) : 28.4 s | 46.1 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	72.9 / 87.3 dB(A) ²⁾	76.7 / 91.1 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	2.3000 kg m ²		Vibration severity grade	A
Bearing DE NDE	NU 319	6319 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
Relubrication interval/quantity DE NDE	40 g 40 g	6000 h	Frame material	cast iron
Lubricants	Unirex N3		Coating (paint finish)	Standard paint finish C2
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	(B) 3 PTC thermistors - for tripping (2 terminals)
Type of bearing	Locating bearing NDE		Method of cooling	IC416 - separately ventilated, surface cooled
Condensate drainage holes	Yes (standard)			

Terminal box

Terminal box position	top	Max. cross-sectional area	240.0 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	38.0 mm - 45.0 mm
Type of terminal box	TB1 Q01	Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread	M12	Cable gland	4 plugs

Notes:

I_A/I_N = locked rotor current / current nominal
M_K/M_N = locked rotor torque / torque nominal
M_K/M_N = break down torque / nominal torque

1) L10mh 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

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					
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Special design

F70	Mounting of separately driven fan	Q78	2 Pt100 resistance thermometers in 3-wire input for bearing (6 terminals)
L22	Bearing design for increased cantilever forces	Y56	Paint finish in special RAL colours
Q02	Anti-condensation heating for 230 V (2 terminals)	Y74	Mounting of HOG 10 DN 1024 I + centrifugal switch, (speed rpm), terminal box protection against humidity
Q11	1/3 PTC thermistors - for tripping (2 terminals)	Y81	External fan with non-standard voltage and/or frequency:

Additional information:

Space heaters

Technical data: 1-phase, 230 V 109W

Notes:

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.			
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