

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



Motor type : 1CV2314B

SIMOTICS SD - 315 L - 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	
400	Δ	50	160.00	-/-	280.00	1490	1030.0	94.9	95.0	94.5	0.87	0.84	0.77	7.2	2.8	3.1	IE2
690	Y	50	160.00	-/-	162.00	1490	1030.0	94.9	95.0	94.5	0.87	0.84	0.77	7.2	2.8	3.1	IE2
460	Δ	60	184.00	-/-	275.00	1788	980.0	95.4	95.4	94.6	0.88	0.86	0.79	7.2	2.9	3.0	IE2
460	Δ	60	160.00	-/-	245.00	1790	850.0	95.0	94.7	93.5	0.87	0.83	0.75	8.3	3.1	3.2	IE2
IM B3 / IM 1001		FS 315 L		940 kg		IP55		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							

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

Locked rotor time (hot / cold) : 23.2 s | 39.1 s

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	76.0 / 91.0 dB(A) ²⁾	80.0 / 95.0 dB(A) ²⁾	External earthing terminal	Yes (standard)
Moment of inertia	2.8000 kg m ²		Vibration severity grade	A
Bearing DE NDE	6319 C3	6319 C3	Insulation	155(F) to 130(B)
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	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)	Special paint finish, resistant to salt-laden air C4
Regreasing device	Yes (standard)		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	(F) 1 temperature sensor KTY84-130 (2 terminals)
Type of bearing	Locating bearing DE		Method of cooling	IC411 - self 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					
	document type	datasheet		document status		customer	
				released			
	title	1LE1601-3AB43-4AF4-Z		document number			
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	01			2021-04-23 15:31	en	1/2	

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L51	Bearing insulation NDE	S03	Special paint finish in sea air resistant C4
Q01	Measuring nipple for SPM shock pulse measurement to monitor bearings		

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