

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



Motor type : 1CV4280B

SIMOTICS SD - 280 S - IM V1 - 4p

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

Remarks

Electrical data	Safe Area -/-
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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 _f /I _N	T _f /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
415	Δ	50	75.00	-/-	128.00	1490	480.0	96.0	96.1	95.6	0.85	0.81	0.70	9.2	3.4	3.8	IE4
480	Δ	60	86.00	-/-	127.00	1788	460.0	96.2	96.2	95.6	0.85	0.81	0.72	9.1	3.4	3.6	IE4
480	Δ	60	75.00	-/-	112.00	1791	400.0	96.2	96.0	95.2	0.84	0.79	0.68	10.0	4.0	4.2	IE4
IM V1 / IM 3011		FS 280 S				IP55	UKCA	IEC/EN 60034			IEC, DIN, ISO, VDE, EN						
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 34 s 45.6 s								

Mechanical data				
Sound level (SPL / SWL) at 50Hz 60Hz	69 / 83 dB(A) ^{2) 3)}	74 / 88 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	1.7000 kg m²		Vibration severity grade	A
Bearing DE NDE	6317 C3	6317 C3	Thermal class	F
bearing lifetime			Duty type	S1
L _{10mh} F _{Rad} min for coupling operation 50 60Hz ¹⁾	20000 h	16000 h	Direction of rotation	bidirectional
Relubrication interval/quantity DE NDE	30 g 30 g 8000 h		Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	670 kg
Regreasing device	With (standard)		Coating (paint finish)	Special paint finish C3
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing NDE		Motor protection	(B) 3 PTC thermistors - for tripping (standard) (2 terminals)
Condensate drainage holes	With (standard)		Method of cooling	IC411 - self ventilated, surface cooled

Terminal box																	
Terminal box position						top		Max. cross-sectional area				120 mm ²					
Material of terminal box						cast iron		Cable diameter from ... to ...				34 mm - 45 mm					
Type of terminal box						TB1 N01		Cable entry				2xM63x1,5-2xM20x1,5					
Contact screw thread						M10		Cable gland				4 plugs					

Notes:		
I_L/I_N = locked rotor current / current nominal	1) L10mh according to DIN ISO 281 10/2010	3) Value is valid only for DOL operation with motor design IC411
M_L/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											
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