

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



Motor type : 1CV4280B

SIMOTICS SD - 280 S - IM B35 - 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⁾			cosφ ³⁾			I _A /I _N	M _A /M _N	M _K /M _N	IE-CL
								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	75.00	-/-	130.00	1490	480.0	96.0	96.2	96.0	0.87	0.84	0.76	8.5	2.8	3.4	IE4
690	Y	50	75.00	-/-	75.00	1490	480.0	96.0	96.2	96.0	0.87	0.84	0.76	8.5	2.8	3.4	IE4
460	Δ	60	75.00	-/-	114.00	1792	400.0	96.2	96.2	95.7	0.86	0.82	0.74	10.0	3.2	3.8	IE4
460	Δ	60	86.00	-/-	129.00	1790	460.0	96.2	96.4	96.1	0.87	0.85	0.78	8.9	2.8	3.3	IE4
IM B35 / IM2001			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) : 32.7 s 46 s							

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	64 / 78 dB(A) ^{2) 3)}	67 / 82 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes	
Moment of inertia	1.7400 kg m ²		Vibration severity grade	Grade A	
Bearing DE NDE	6316 C3 S0		6316 C3 S0	Thermal class	F
permissible lateral force on (N)	X ₀ : 8600	X _{0.5} : 7900	X _{max} : 7200	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	30 g 30 g		8000 h	Net weight of the motor	630 kg
Lubricants	UNIREX N3			Coating (paint finish)	Standard paint finish C2
Regreasing device				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	120 mm ²
Material of terminal box	cast iron	Cable diameter from ... to ...	34 mm - 45 mm
Type of terminal box	TB4N01	Cable entry	2xM63x1,5 - 2xM20x1,5
Contact screw thread	6xM10	Cable gland	-/-

Notes:

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

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			
	document type	document status			
	datasheet	released			
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