

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



Motor type : 1CV4286B

SIMOTICS SD - 280 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 _I /I _N	M _A /M _N T _I /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)																	
415	Δ	50	110.00	-/-	181.00	1490	700.0	96.3	96.6	96.5	0.88	0.85	0.78	9.5	2.9	3.5	IE4
480	Δ	60	110.00	-/-	158.00	1791	590.0	96.2	96.3	95.9	0.87	0.84	0.75	11.0	3.3	3.8	IE4
480	Δ	60	127.00	-/-	180.00	1790	680.0	96.2	96.4	96.2	0.88	0.86	0.79	9.4	2.8	3.3	IE4
IM B5 / IM3001		FS 280 M		IP55		UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m										Locked rotor time (hot / cold) : 23.5 s 35.7 s							

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	69 / 84 dB(A) ^{2) 3)}	73 / 88 dB(A) ^{2) 3)}	Condensate drainage holes	(Standard) Yes
Moment of inertia	2.5500 kg m ²		External earthing terminal	(Standard) Yes
Bearing DE NDE	6316 C3 S0	6316 C3 S0	Vibration severity grade	Grade A
permissible lateral force on (N)	X ₀ ²⁾ 8450	X _{0.5} ²⁾ 7720	Thermal class	F
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	30 g 30 g 8000 h		Frame material	cast iron
Lubricants	UNIREX N3		Net weight of the motor	795 kg
Regreasing device	Flat type lubricating nipple		Coating (paint finish)	Standard paint finish C2
Grease nipple	M10x1 DIN 3404 A		Color, paint shade	RAL7030
Type of bearing	Locating bearing DE		Motor protection	3 PTC thermistors - for tripping (2 terminals)
Bearing insulation DE / Bearing insulation NDE	Yes (Non-drive end)		Method of cooling	IC416 - separately ventilated, surface cooled

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	-/-

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

B02	Acceptance test certificate 3.1 acc. to EN 10204	L51	Bearing insulation NDE
F70	Mounting of separately driven fan		

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