

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



Motor type : 1CV4184B

SIMOTICS SD - 180 L - IM B3 - 4p

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

Remarks	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	
DOL duty (S1) - 155(F) to 130(B)																	
230	Δ	50	22.00	-/-	72.00	1475	142.0	94.5	95.0	94.8	0.81	0.75	0.64	7.7	2.9	3.8	IE4
400	Y	50	22.00	-/-	41.50	1475	142.0	94.5	95.0	94.8	0.81	0.75	0.64	7.7	2.9	3.8	IE4
460	Y	60	25.30	-/-	41.00	1775	136.0	94.5	94.8	94.6	0.82	0.77	0.67	7.8	2.8	3.7	IE4
460	Y	60	22.00	-/-	37.00	1778	118.0	94.5	94.6	94.0	0.79	0.73	0.61	8.9	3.1	4.3	IE4
IM B3 / IM 1001		FS 180 L				IP55	UKCA	IEC/EN 60034		IEC, DIN, ISO, VDE, EN							
Environmental conditions : -20 °C - +40 °C / 1000 m									Locked rotor time (hot / cold) : 34.7 s 48.1 s								

Mechanical data				
Sound level (SPL / SWL) at 50Hz 60Hz	62 / 75 dB(A) ^{2) 3)}	76 / 87 dB(A) ^{2) 3)}	External earthing terminal	With (standard)
Moment of inertia	0.1800 kg m²		Vibration severity grade	A
Bearing DE NDE	6310 C3	6310 C3	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	15 g 15 g 8000 h		Frame material	cast iron
Lubricants	Unirex N3		Net weight of the motor (IM B3)	192 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			16 mm ²								
Material of terminal box			cast iron			Cable diameter from ... to ...			19 mm - 28 mm								
Type of terminal box			TB1 J01			Cable entry			2xM40x1,5-1xM16x1,5								
Contact screw thread			M5			Cable gland			3 plugs								

I_A/I_N = locked rotor current / current nominal
M_K/M_N = locked rotor torque / torque nominal
M_B/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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