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

Motor type : 1CV4184B **SIMOTICS SD - 180 L - 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) 4/4	η 3) 3/4	η 3) 2/4	cosφ 3) 4/4	cosφ 3) 3/4	cosφ 3) 2/4	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
DOL duty (S1) - 155(F) to 130(B)																	
380	Δ	50	22.00	-/-	43.50	1475	142.0	94.5	95.0	94.8	0.81	0.75	0.64	7.7	2.9	3.8	IE4
660	Y	50	22.00	-/-	25.00	1475	142.0	94.5	95.0	94.8	0.81	0.75	0.64	7.7	2.9	3.8	IE4
440	Δ	60	25.30	-/-	43.00	1775	136.0	94.5	94.8	94.6	0.82	0.77	0.67	7.8	2.8	3.7	IE4
440	Δ	60	22.00	-/-	38.50	1778	118.0	94.5	94.6	94.0	0.79	0.73	0.61	8.9	3.1	4.3	IE4
IM B5 / IM 3001		FS 180 L			IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN						Grade 2	

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)	
Moment of inertia	0.1800 kg m²		
Bearing DE | NDE	6310 C3	6310 C3 INS	
bearing lifetime			
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h	
Relubrication interval/quantity DE | NDE	15 g | 15 g 8000 h		
Lubricants	Unirex N3		
Regreasing device	With regreasing nipple		
Grease nipple	M10x1 DIN 71412 A		
Type of bearing	Locating bearing NDE		
Bearing insulation DE / Bearing insulation NDE	Yes (non-drive end)		
Condensate drainage holes	With (standard)		

External earthing terminal	With (standard)
Vibration severity grade	A
Thermal class	F
Duty type	S1
Direction of rotation	bidirectional
Frame material	cast iron
Net weight of the motor (IM B3)	192 kg
Coating (paint finish)	Special paint finish C3
Color, paint shade	RAL7030
Motor protection	(B) 3 PTC thermistors - for tripping (standard) (2 terminals)
Method of cooling	IC416 - separately ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	25 mm²
Material of terminal box	cast iron	Cable diameter from ... to ...	27 mm - 35 mm
Type of terminal box	TB1 L61	Cable entry	2xM50x1,5-1xM16x1,5
Contact screw thread	M6	Cable gland	1 gland, 2 plugs

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 department	Technical reference	Created by	Approved by	
IN LVM		SPC	Created automatically	*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.*

Link documents

SIEMENS

Document type	Document status
Technical data sheet	Released
Document title	**Document number**
1LE1604-1EB43-3FB4-Z	TDS-240406-194536
B02+D34+F70+G04+H70+L19+L51+R15+R50+R52+R62	

Restricted	Revision	Creation date	Language	Page
	AA	2024-04-06	en	1/2

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

Motor type : 1CV4184B **SIMOTICS SD - 180 L - IM B5 - 4p**

Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	L51	Bearing insulation NDE
D34	China Energy Efficiency Label	R15	One metal cable gland
F70	Mounting of separately driven fan	R50	Larger terminal box
G04	Mounted rotary pulse encoder LL 861 900 220	R52	Drilled removable entry plate
H70	Second outer earthing	R62	Cast iron auxiliary terminal box (small)
L19	Regreasing device with regreasing nipple M10X1 acc.to DIN 71412-A		