

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



Motor type : 1CV4282B SIMOTICS SD - 280 M - IM B3 - 4p

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

Remarks

Electrical data 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)																	
400	Δ	50	90.00	-/-	154.00	1488	580.0	96.1	96.4	96.3	0.88	0.85	0.78	8.5	2.8	3.4	IE4
690	Y	50	90.00	-/-	89.00	1488	580.0	96.1	96.4	96.3	0.88	0.85	0.78	8.5	2.8	3.4	IE4
460	Δ	60	90.00	-/-	135.00	1790	480.0	96.2	96.3	95.9	0.87	0.84	0.75	9.8	3.2	3.7	IE4
460	Δ	60	104.00	-/-	154.00	1788	560.0	96.2	96.4	96.3	0.88	0.86	0.79	8.7	2.8	3.2	IE4
IM B3 / IM1001			FS 280 M				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN					
Environmental conditions : -20 °C - +40 °C / 1,000 m									Locked rotor time (hot / cold) : 29.5 s 43.7 s								

Mechanical data

Sound level (SPL / SWL) at 50Hz 60Hz	67 / 81 dB(A) ^{2) 3)}	74 / 88 dB(A) ^{2) 3)}	External earthing terminal	(Standard) Yes
Moment of inertia	2.0300 kg m ²		Vibration severity grade	Grade A
Bearing DE NDE	NU 316 C3	6316 C3 S0	Thermal class	F
permissible lateral force on (N)	X ₀ : 27000	X _{0.5} : 17400	Duty type	S1
		X _{max} : 10600	Direction of rotation	bidirectional
bearing lifetime			Frame material	cast iron
L _{10mh} F _{Rad min} for coupling operation 50 60Hz ¹⁾	40000 h	32000 h	Net weight of the motor	681 kg
Lubricants	UNIREX N3		Coating (paint finish)	Standard paint finish C2
Regreasing device	(Standard) Flat type lubricating nipple acc. DIN 3404		Color, paint shade	RAL7030
Grease nipple	M10x1 DIN 3404 A		Motor protection	6 PTC thermistors - for alarm and tripping (4 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 1) L_{10mh} according to DIN ISO 281 10/2010 3) Value is valid only for DOL operation with motor design IC411
M_K/M_N = locked rotor torque / torque nominal 2) at rated power / at full load
M_K/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			
SIEMENS	document type				document status
	datasheet				released
	title				document number
	1LE5504-2DB23-4AC4-Z				
© INNOMOTICS 2023	B02+L22				rev.
					creation date
				language	Page
				en	1/2

SIMOTICS SD - 280 M - IM B3 - 4p

Special design

B02	Acceptance test certificate 3.1 acc. to EN 10204	L22	Bearing design for increased cantilever forces
-----	--	-----	--

Notes:

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			
	title			document number			
	1LE5504-2DB23-4AC4-Z						
	B02+L22			rev.	creation date	language	Page
© INNOMOTICS 2023				951	2023-12-14	en	2/2