

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



Motor type : 1CV4280B INNOMOTICS SD - 280 S - IM V1 - 4p

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

Remarks

Safe Area

Electrical data -/-

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 _f /I _N	T _f /T _N	T _B /T _N	
DOL duty (S1) - 155(F) to 130(B)																	
380	Δ	50	75.00	-/-	136.00	1490	480.0	96.0	96.2	96.0	0.87	0.84	0.76	8.5	2.8	3.4	IE4
660	Y	50	75.00	-/-	79.00	1490	480.0	96.0	96.2	96.0	0.87	0.84	0.76	8.5	2.8	3.4	IE4
440	Δ	60	75.00	-/-	119.00	1792	400.0	96.2	96.2	95.7	0.86	0.82	0.74	10.0	3.2	3.8	IE4
440	Δ	60	86.00	-/-	135.00	1790	460.0	96.2	96.4	96.1	0.87	0.85	0.78	8.9	2.8	3.3	IE4
IM V1 / IM3011			FS 280 S				IP55	UKCA		IEC/EN 60034		IEC, DIN, ISO, VDE, EN, GB 18613-2012					Grade 2
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	Duty type	S1
bearing lifetime			Direction of rotation	bidirectional
L _{10mh} F _{Rad, min} for coupling operation 50 60Hz ¹⁾	20000 h	16000 h	Frame material	cast iron
Relubrication interval/quantity DE NDE	30 g 30 g 8000 h		Net weight of the motor	620 kg
Lubricants	UNIREX N3		Coating (paint finish)	Standard paint finish C2
Regreasing device	Flat type lubricating nipple		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	-/-

I_f/I_N = locked rotor current / current nominal
M_f/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 I at full load

3) Value is valid only for DOL operation with motor design IC411

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
INNOMOTICS	Document type Technical data sheet			Document status Released			
	Document title 1LE5504-2DB03-3GB4-Z			Document number TDS-240923-124425			
Restricted © Innomotics 2024	B12+D34+N30			Revision AA	Creation date 2024-09-23	Language en	Page 1/2

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



Motor type : 1CV4280B

INNOMOTICS SD - 280 S - IM V1 - 4p

Special design

B12	Sea worthy packaging	N30	Increased air humidity/temperature with 30 to 60 g water per m3 air
D34	China Energy Efficiency Label		

Transmittal, reproduction, dissemination and/or editing of this document as well as utilization of its contents and communication thereof to others without express authorization are prohibited. Offenders will be held liable for payment of damages. All rights created by patent grant or registration of a utility model or design patent are reserved.

Responsible department IN LVM	Technical reference	Created by SPC	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
INNOMOTICS	Document type Technical data sheet			Document status Released			
	Document title 1LE5504-2DB03-3GB4-Z			Document number TDS-240923-124425			
Restricted © Innomotics 2024	B12+D34+N30			Revision AA	Creation date 2024-09-23	Language en	Page 2/2