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

Motor type : 1CV4280B **SIMOTICS SD - 280 S - IM B3 - 4p**

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

Electrical data

Safe Area

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
230	Δ	50	75.00	-/-	230.00	1490	480.0	96.0	96.1	95.6	0.85	0.81	0.70	9.2	3.4	3.8	IE4
400	Y	50	75.00	-/-	133.00	1490	480.0	96.0	96.1	95.6	0.85	0.81	0.70	9.2	3.4	3.8	IE4
460	Y	60	86.00	-/-	132.00	1788	460.0	96.2	96.2	95.6	0.85	0.81	0.72	9.1	3.4	3.6	IE4
460	Y	60	75.00	-/-	116.00	1791	400.0	96.2	96.0	95.2	0.84	0.79	0.68	10.3	4.0	4.2	IE4

IM B3 / IM 1001	FS 280 S	IP55	IEC/EN 60034	IEC, DIN, ISO, VDE, EN

Environmental conditions : -20 °C - +40 °C / 1000 m

Locked rotor time (hot / cold) : 33.6 s | 45.2 s

Mechanical data

Sound level (SPL / SWL) at 50Hz|60Hz	69 / 83 dB(A) 2)	74 / 88 dB(A) 2)	
Moment of inertia	1.7000 kg m²		
Bearing DE | NDE	6317 C3	6317 C3	
bearing lifetime			
L_{10mh} $F_{Rad\ min}$ for coupling operation 50|60Hz 1)	40000 h	32000 h	
Relubrication interval/quantity DE | NDE	30 g | 30 g 8000 h		
Lubricants	Unirex N3		
Regreasing device	Yes (standard)		
Grease nipple	M10x1 DIN 3404 A		
Type of bearing	Locating bearing NDE		
Condensate drainage holes	Yes (standard)		

External earthing terminal	Yes (standard)
Vibration severity grade	A
Insulation	155(F) to 130(B)
Duty type	S1
Direction of rotation	bidirectional
Frame material	cast iron
Net weight of the motor (IM B3)	670 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	IC411 - self ventilated, surface cooled

Terminal box

Terminal box position	top	Max. cross-sectional area	120 mm²
Material of terminal box	cast iron	Cable diameter from ... to ...	34 mm - 42 mm
Type of terminal box	TB1 N01	Cable entry	2xM63x1,5-2xM20x1,5
Contact screw thread	M10	Cable gland	4 plugs

Notes:

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) L10mh 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 dep.	technical reference	created by	approved by	
DI MC LVM		DT Configurator		*Technical data are subject to change! There may be discrepancies between calculated and rating plate values.*

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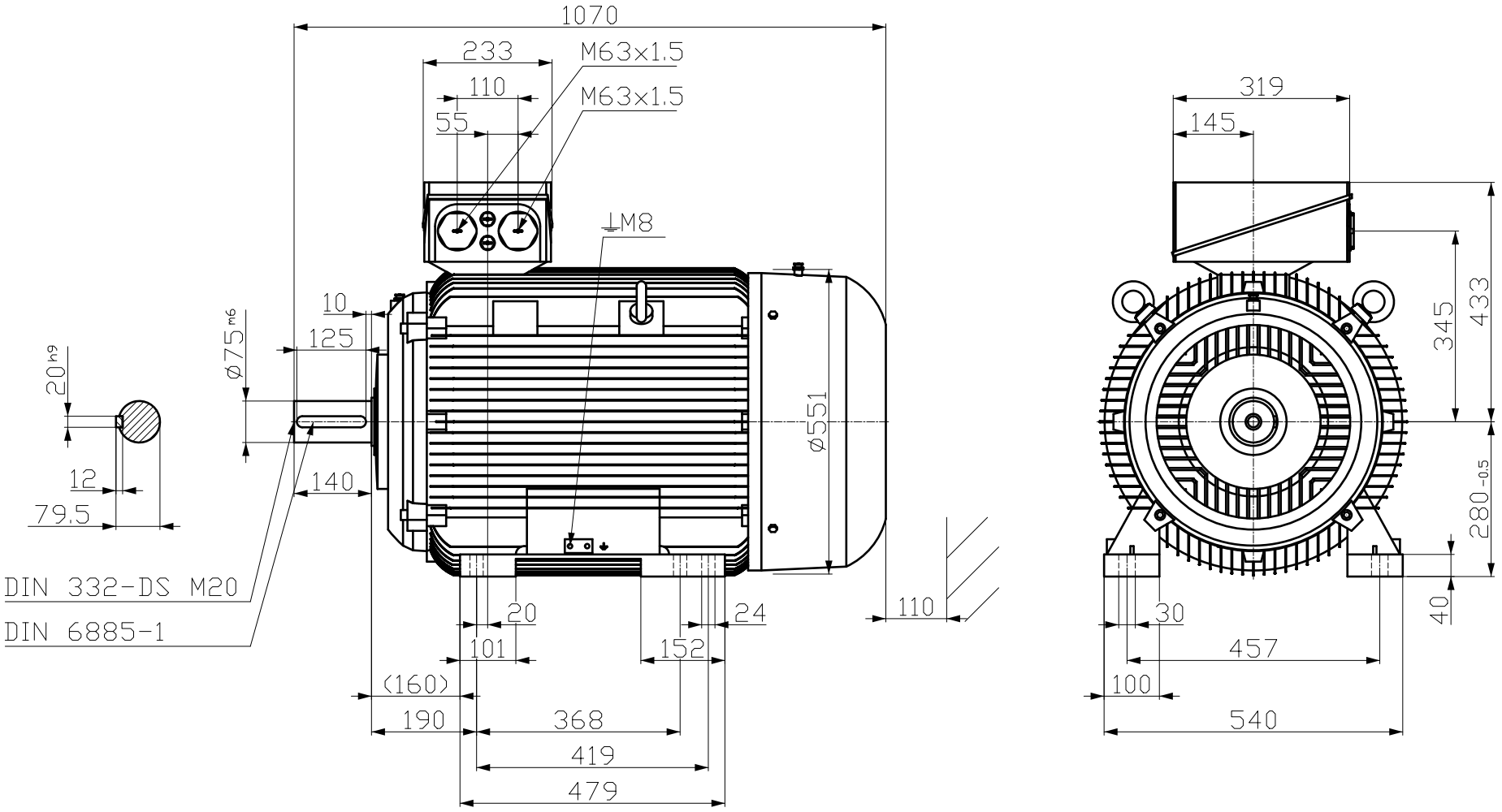

Tolerance	Surface	Material	Weight: -	Scale: mm
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