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

Motor type: **SD200 NEMA Premium Next Generation** **FS: 5,011 - 4p - 500 hp -**

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

Electrical data

Class I Division 2 Gr. A, B, C or D T3

U [V]	Δ / Y	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps] 4/4	3/4	1/2	0	LRC	Nom. Eff Load [%] 4/4	3/4	2/4	Pwr. Factor Load [%] 4/4	3/4	2/4	Torque [lb-ft]	T_A/T_N LRT [%]	T_k/T_N BDT [%]
460	Δ Δ	60	500.00	373.00	1,790	570	425.20	310.20	160.00	3625.0	96.7	96.8	96.5	84.9	85.3	78.2	1469.2	230	250

Frame Type: 5,011	Type of constr.: (A) Foot Mounted Horizontal (IMB3)	Ins. Cl.:Standard Class H Insulation	Motor Prot.:A: No Winding Protection	NEMA Des.: B	S.F.: 1.15
Mtr. WT:4,509		Temp. Rise Cl.: B	Amb. Temp.: + 40 to °C @1000 m	kVA: G	IP 55

Mechanical data

Sound level (SPL / SWL) at 60 Hz	81.0 dB(A) / 94.0 dB(A)

Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3	77.0	75.0	72.0	67.0	62.0	58.0	dB(A)

Moment of inertia	158.0 Lb-ft²
Ext Load Inertia Capability:	1880.0 Lb ft²

Bearings

Bearing DE | NDE	6322 Z C3 S0	6322 Z C3 S0
Bearing_Type	Ball Bearing	Ball Bearing
AFBMA:	110BC03JP3	110BC03JP3

Grease

Capacity	17 oz	17 oz
Grease Type:	Exxon Mobil EM	

Thickener	Polyurea
Safe Stall Time Hot	18 s
Safe Stall Time Cold	22 s
Frame material	Cast iron
Color, paint shade	RAL 7030
Coating (paint finish)	Standard Alkyed + Epoxy (C2)
Ventilation Type	
Method of cooling	TEFC
Direction of rotation	Bi-Directional
Fan Material	Polypropylene ESD
VFD	CT: 4:1 VT: 20:1
Space heaters	without
Brake:	-/-

Terminal box

Lead Wire Connection			12 TERMINAL - Connection DELTA		
Voltage	L1	L1	L1	Connected together	
-- -- --	-- -- --	-- -- --	-- -- --	_ _ _	-
RUN	T12-T7-T6-T1	T10-T8-T4-T2	T11-T9-T5-T13	-- -- --	Δ Δ

Terminal box position	(1) LHS Mount - View From DE (F-1) - DE or Center of Motor
Material of terminal box	Cast Iron
Cable entry	(1) 5" NPT

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

3) Value is valid only for DOL operation with motor design IC411
2) at rated power / at full load

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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datasheet	released		
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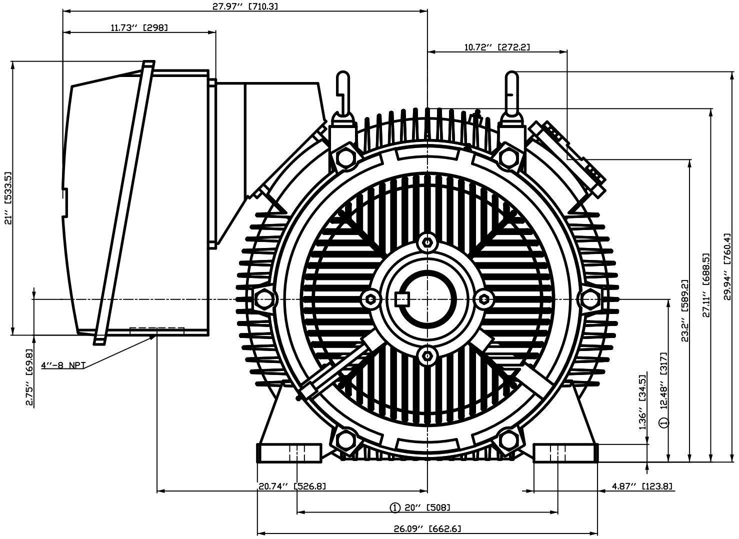
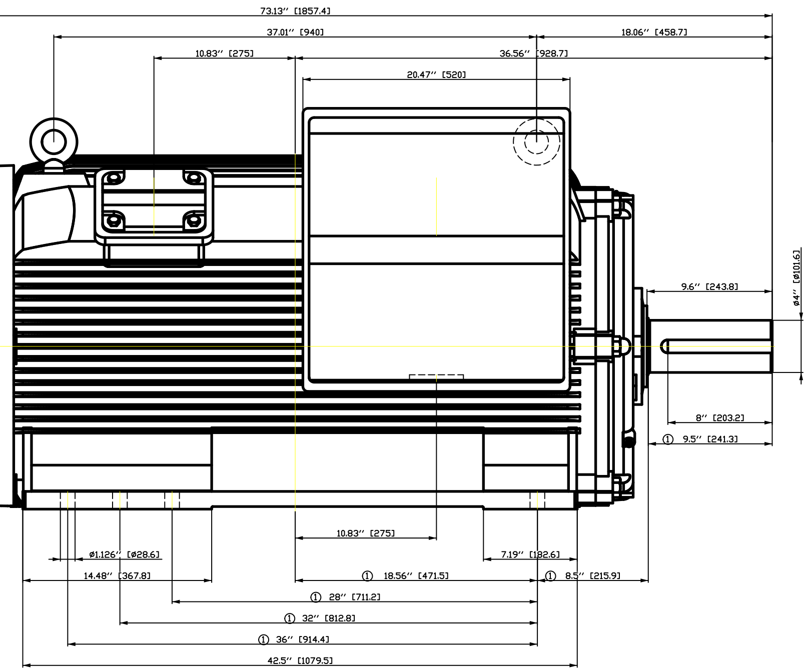
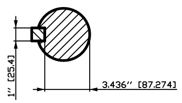




Keyset detail



① Tolerances according to NEMA std.

All dimensions corresponding to assemblies and castings shall have a tolerance as per ISO 8062-3 DCTG 12.

Tolerance	Surface	Material	Weight	Scale
			-	mm
1LE6321-5AB81-2AA1 -	Author	Dimensional drawing MaÇzeichnung		
	Creator DTK			
	Approval			
	Department			
	Change Order	MLFB	Doc Type /	
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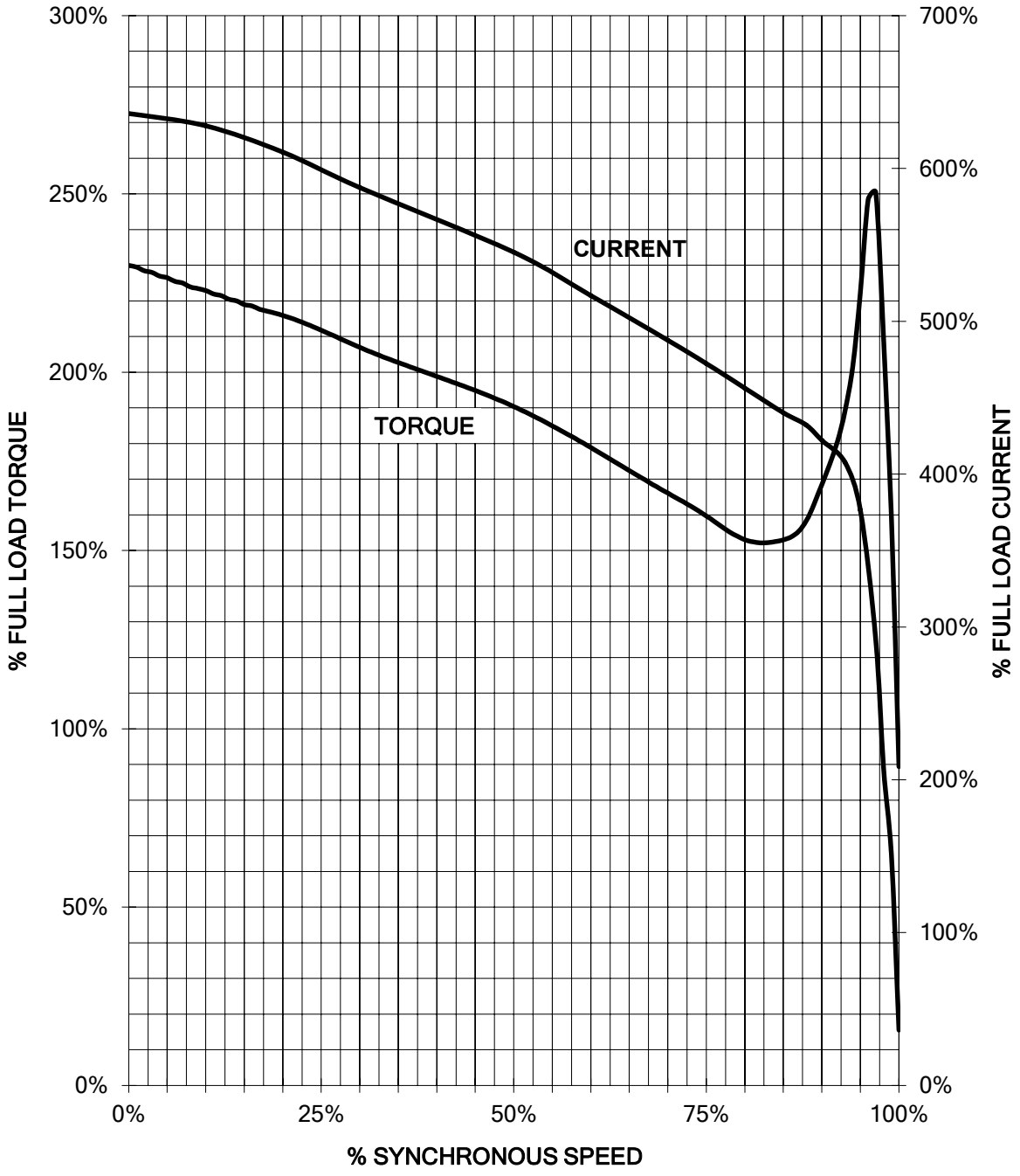
HP	500	VOLTS	460	RPM	1790	TYPE	SD200
HZ	60	PHASE	3	FRAME	5011	NEMA	B

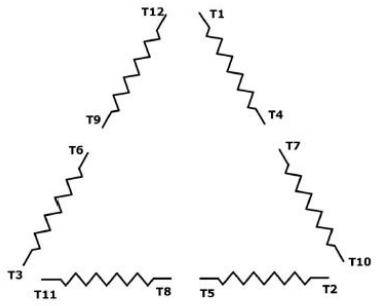
TORQUE & CURRENT VS. SPEED



Unrestricted CUSTOMER: _____ ORDER#: _____

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.
REV. 1

Main terminal diagram



12 LEAD DELTA		
LINES	CONNECT TOGETHER	CONN.
L1	T12 -T7 - T6 - T1	ΔΔ
L2	T10 - T8 - T4 - T2	
L2	T11 - T9 - T5 - T3	

responsible dep. DI MC LVM	technical reference	created by	approved by	Project
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