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

Motor type: **SD200 NEMA Premium Next Generation** **FS: 5013S - 2p - 700 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 T2D

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	700.00	522.20	3,585	750	568.80	399.60	160.00	5285.0	95.8	95.6	94.8	91.1	90.4	86.5	1025.5	250	290

Frame Type: 5013S	Type of constr.: (A) Foot Mounted Horizontal (IMB3)	Ins. Cl.:Standard Class H Insulation	Motor Prot.:K: Stator RTD's, 2 Per Phase	NEMA Des.: -/-	S.F.: 1.15
Mtr. WT:5,538		Temp. Rise Cl.: B	Amb. Temp.: + 40 to °C @1000 m	kVA: G	IP 55

Mechanical data

Sound level (SPL / SWL) at 60 Hz	93.0 dB(A) / 106.0 dB(A)

Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3	87.0	77.0	76.0	75.0	75.0	70.0	dB(A)

Moment of inertia	152.0 Lb-ft²
Ext Load Inertia Capability:	503.0 Lb ft²

Bearings

Bearing DE | NDE	6316 Z C3 S0	6316 Z C3 S0
Bearing_Type	Ball Bearing	Ball Bearing
AFBMA:	80BC03JP3	80BC03JP3

Grease

Capacity	9 oz	9 oz
Grease Type:	Exxon Mobil EM	

Thickener	Polyurea
Safe Stall Time Hot	23 s
Safe Stall Time Cold	28 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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document type	document status	customer
datasheet	released	
title	document number	
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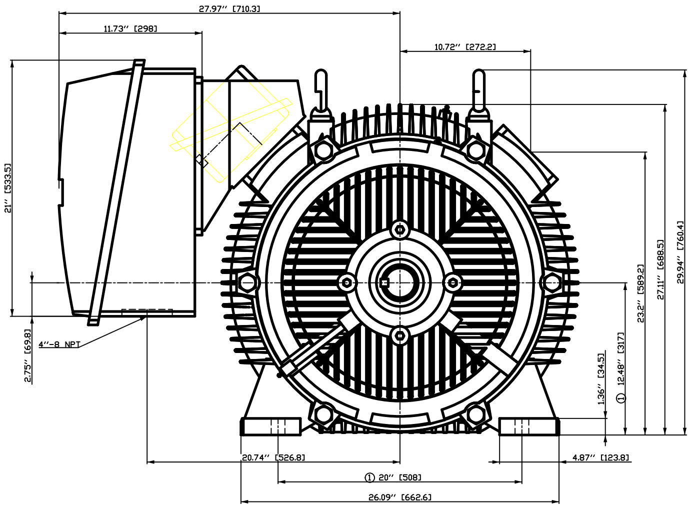

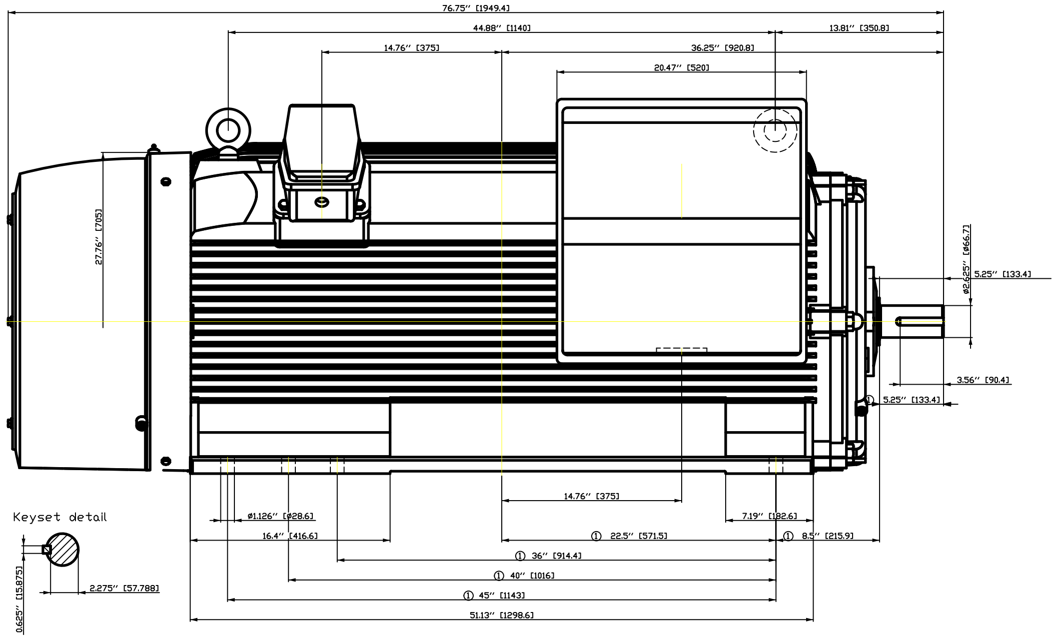

① Tolerances according to NEMA std.

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

Tolerance	Surface	Material	Weight -	Scale mm
1LE6321-5FA71-2AK1 -	Author	Dimensional drawing Maßzeichnung		
	Creator DTK			
	Approval			
	Department			
	Change Order	MLFB		Doc Type
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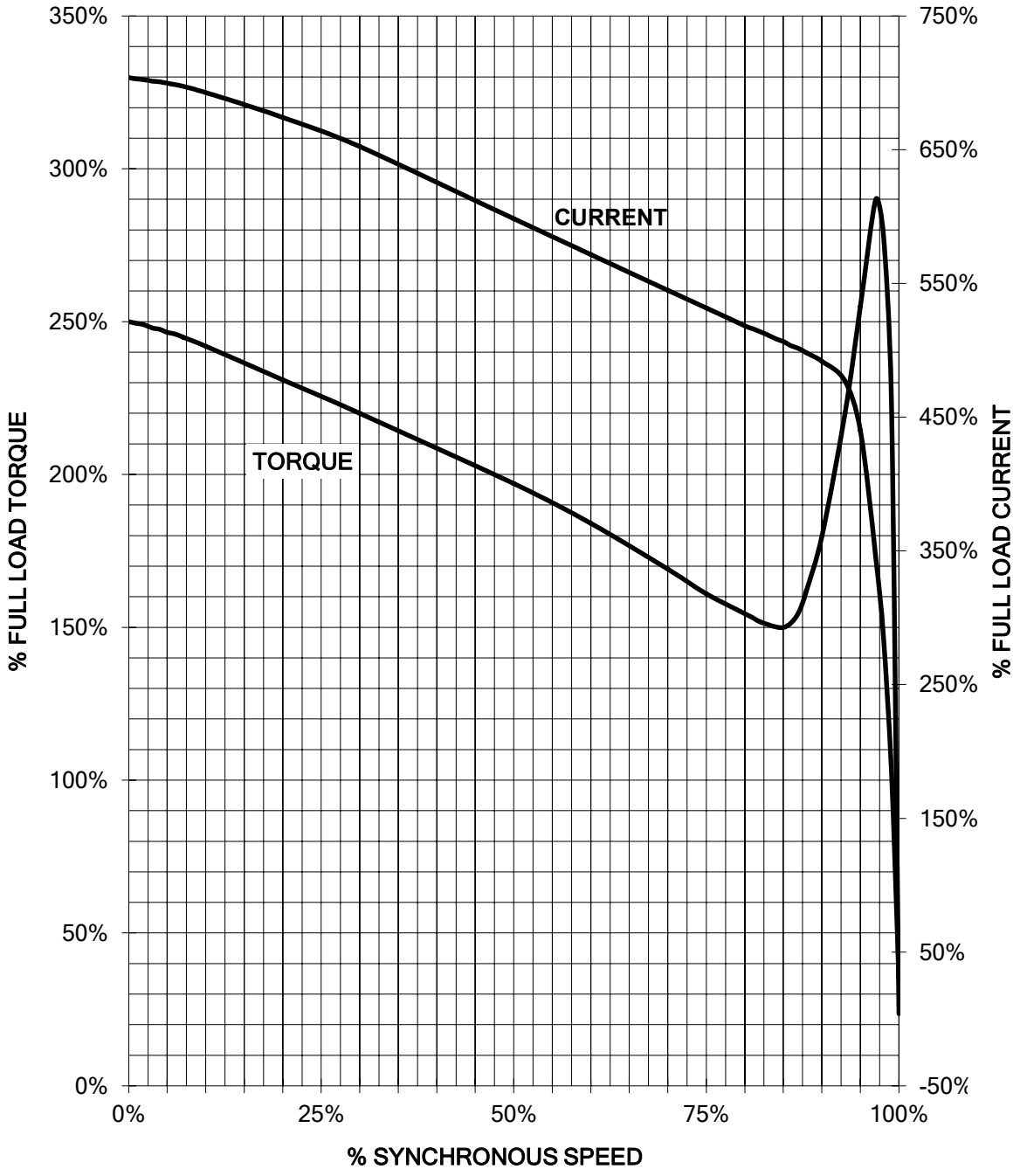
HP	700	VOLTS	460	RPM	3585	TYPE	SD200
HZ	60	PHASE	3	FRAME	5013S	NEMA	

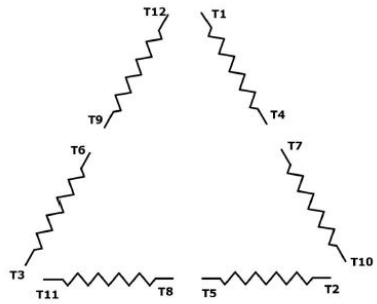
TORQUE & CURRENT VS. SPEED



Unrestricted CUSTOMER: _____ ORDER#: _____

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

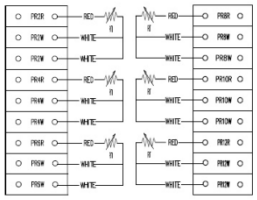
Main terminal diagram



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

Motor protection

3 WIRE STATOR RTDs



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