

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

Motor type: **SD200 NEMA Premium Next Generation** FS: **445TS - 2p - 150 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 Class II**  
**Division 2 Gr. F or G T3C**

U [V]	$\Delta/Y$	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T <sub>A</sub> /T <sub>N</sub> LRT [%]	T <sub>k</sub> /T <sub>N</sub> BDT [%]
						4/4	3/4	1/2	0	LRC	4/4	3/4	2/4	4/4	3/4	2/4			
460	$\Delta \Delta$	60	150.00	111.90	3,575	170	132.20	98.30	58.00	1085.0	95.8	95.8	95.1	86.5	83.2	75.1	218.0	160	290

Frame Type: 445TS	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: 1,557		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) / 92.0 dB(A)							Thickener	Polyurea
Octave Band Center Frequencies Hertz								Safe Stall Time Hot	15 s
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	18 s
SPL@3	75.0	77.0	74.0	73.0	66.0	61.0	dB(A)	Frame material	Cast iron
Moment of inertia	24.0 Lb-ft <sup>2</sup>							Color, paint shade	RAL 7030
Ext Load Inertia Capability:	133.0 Lb ft <sup>2</sup>							Coating (paint finish)	Standard Alkyed + Epoxy (C2)
<b>Bearings</b>								<b>Ventilation Type</b>	
Bearing DE   NDE	6315 Z C3 S0			6315 Z C3 S0			Method of cooling	TEFC	
Bearing_Type	Ball Bearing			Ball Bearing			Direction of rotation	Bi-Directional	
AFBMA:	75BC03JP3			75BC03JP3			Fan Material	Polypropylene ESD	
<b>Grease</b>								VFD	CT: 4:1 VT: 20:1
Capacity	15 oz			15 oz			Space heaters	without	
Grease Type:	Exxon Mobil EM							Brake:	-/-

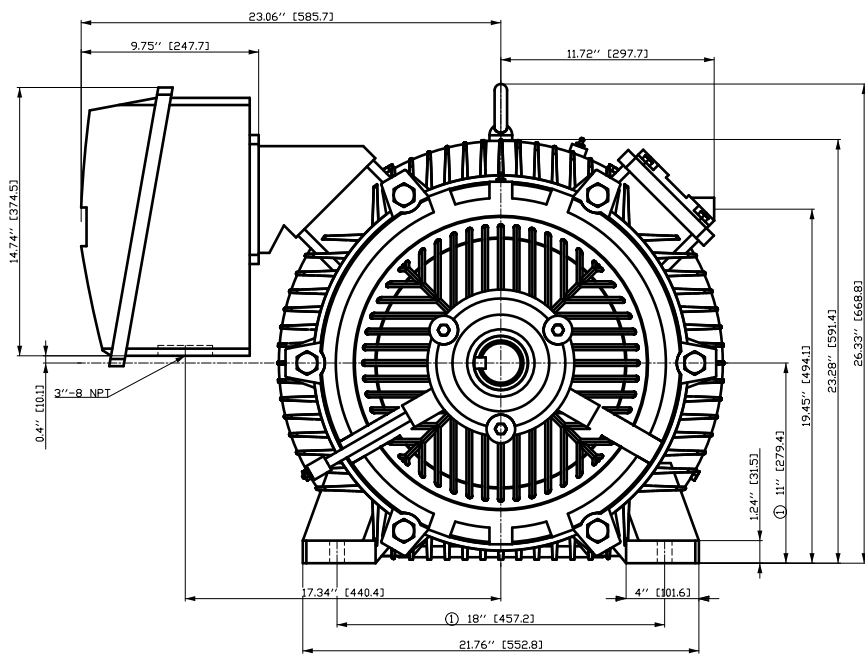
**Terminal box**

Lead Wire Connection	12 TERMINAL - Connection DELTA					Terminal box position	(1) LHS Mount - View From DE (F-1) - DE or Center of Motor
Voltage	L1	L1	L1	Connected together		Material of terminal box	Cast Iron
---	---	---	---	---	-	Cable entry	(1) 3" NPT
RUN	T12-T7-T6-T1	T10-T8-T4-T2	T11-T9-T5-T13	---	$\Delta \Delta$		

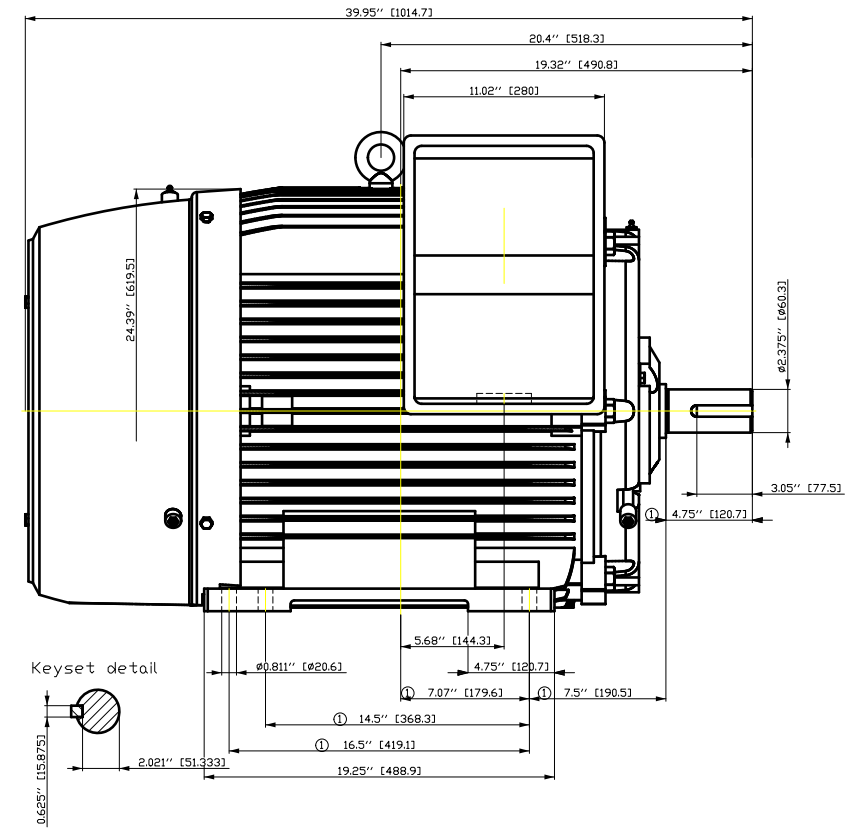
**Notes:**  
 I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
 M<sub>d</sub>/M<sub>N</sub> = break down torque / nominal torque  
 3) Value is valid only for DOL operation with motor design IC411  
 2) at rated power / at full load

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i>
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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.



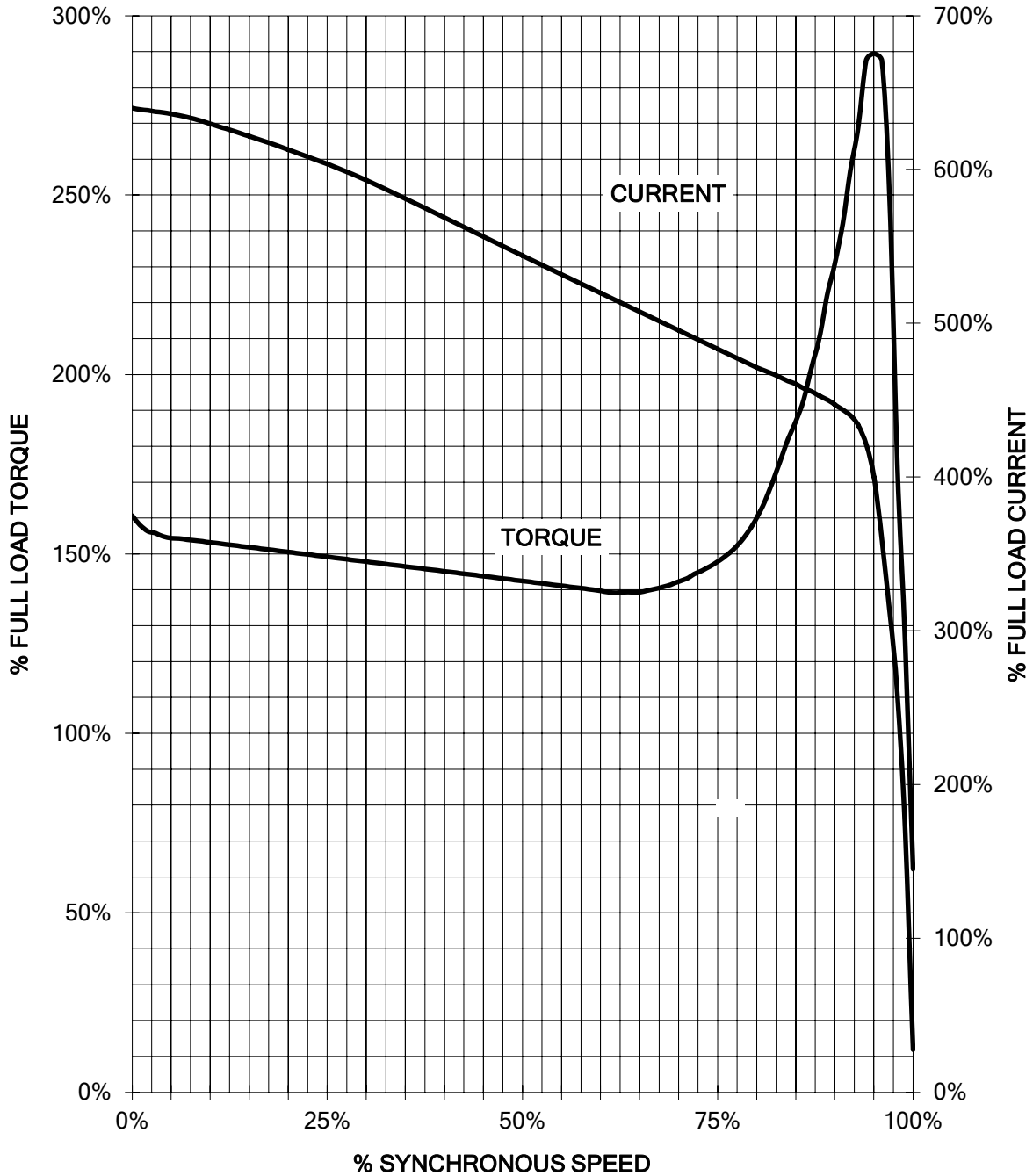
刀线管  
 用文  
 全图  
 版  
 积  
 01  
 2  
 3  
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 6  
 7  
 8  
 A  
 B  
 C  
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 E  
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Tolerance	Surface	Material	Weight	Scale
F501 HGF 006000F	Author	ÖS	É	{ { }
É	Creator	ÖVS		
	Approval	T a : ^ & @ } *		
	Department			
	Change Order	MFB		Doc Type
	Doc State	I E B G		Paper Size
	Revision	Index RS		1st Language
				2nd Language
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				F of F

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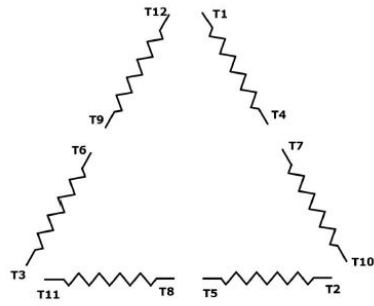
HP 150    VOLTS 460    RPM 3570    TYPE SD200  
HZ 60    PHASE 3    FRAME 445T    NEMA B

## TORQUE & CURRENT VS. SPEED



Unrestricted CUSTOMER: \_\_\_\_\_ ORDER#: \_\_\_\_\_

Main terminal diagram

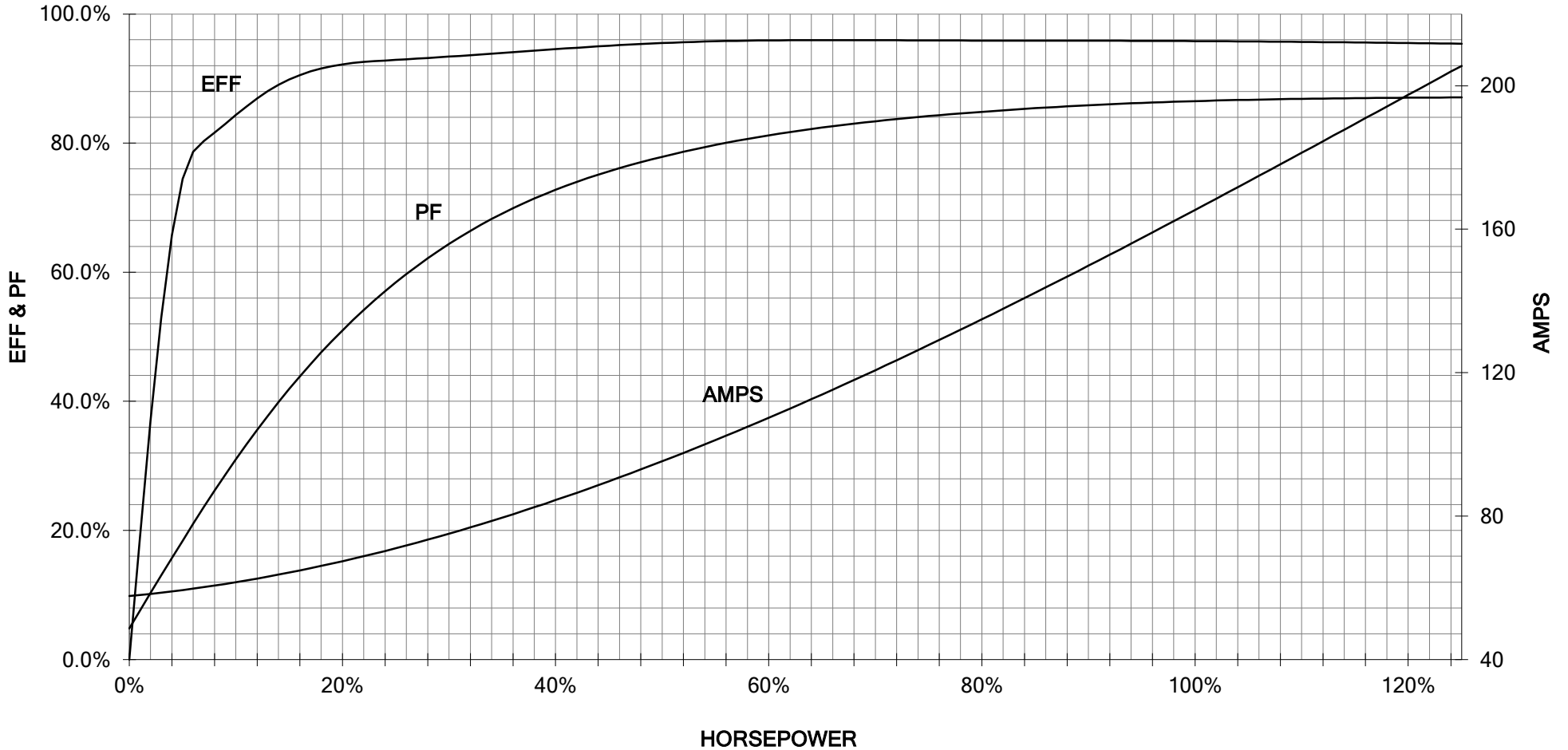


12 LEAD DELTA		
LINES	CONNECT TOGETHER	CONN.
L1	T12 - T7 - T6 - T1	ΔΔ
L2	T10 - T8 - T4 - T2	
L2	T11 - T9 - T5 - T3	

responsible dep. DI MC LVM	technical reference	created by	approved by	Project
<b>SIEMENS</b>	document type Wiring Diagram	document status free		customer
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150 HP 3600 RPM 445T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.  
PERFORMANCE CURVE  
SD200



CUSTOMER: \_\_\_\_\_ ORDER #: \_\_\_\_\_

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

REV. 1