

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

Motor type: **SD100 IEEE** FS: **445T - 4p - 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

U [V]	$\Delta / Y$	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					LRC	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			4/4	3/4	2/4	4/4	3/4	2/4			
575	$\Delta$	60	150.00	110.00	1,800	136.00	104.50	75.30	41.60	868.0	95.8	96.0	95.7	86.0	84.0	78.0	441.0	150	200	

Frame Type: 445T	Type of constr.: (A) Foot mounted - End shield	Ins. Cl.: Standard Class F Insulation	Motor Prot.: (A) Without Protection	NEMA Des.: B	S.F.: 1.15
Mtr. WT: 1,792		Temp. Rise Cl.: B	Amb. Temp.: + 40 to -20 °C @1000 m	kVA: G	IP 55

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	73.0 dB(A) / 84.0 dB(A)							Thickener	Polyurea
Octave Band Center Frequencies Hertz								Safe Stall Time Hot	20 s
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	30 s
SPL@3	64.0	70.0	67.0	66.0	59.0	49.0	dB(A)	Frame material	cast iron
Moment of inertia	44.9 Lb-ft <sup>2</sup>							Color, paint shade	Standard Paint - RAL7030
Ext Load Inertia Capability:	640.0 Lb ft <sup>2</sup>							Coating (paint finish)	Standard Alkyed + Epoxy (C2)
<b>Bearings</b>								<b>Ventilation Type</b>	
Bearing DE   NDE	NU 318			6316 Z C3 S0				Method of cooling	TEFC
Bearing_Type	Roller Bearing			Ball Bearing				Direction of rotation	Bidirectional
AFBMA:	90RU03M0			80BC03JP30				Fan Material	Polypropylen ESD
<b>Grease</b>								VFD	CT: 4:1 VT: 20:1
Capacity	14.5 oz			7.5 oz				Space heaters	without
Grease Type:	Exxon Mobile EM							Brake:	without


## Terminal box

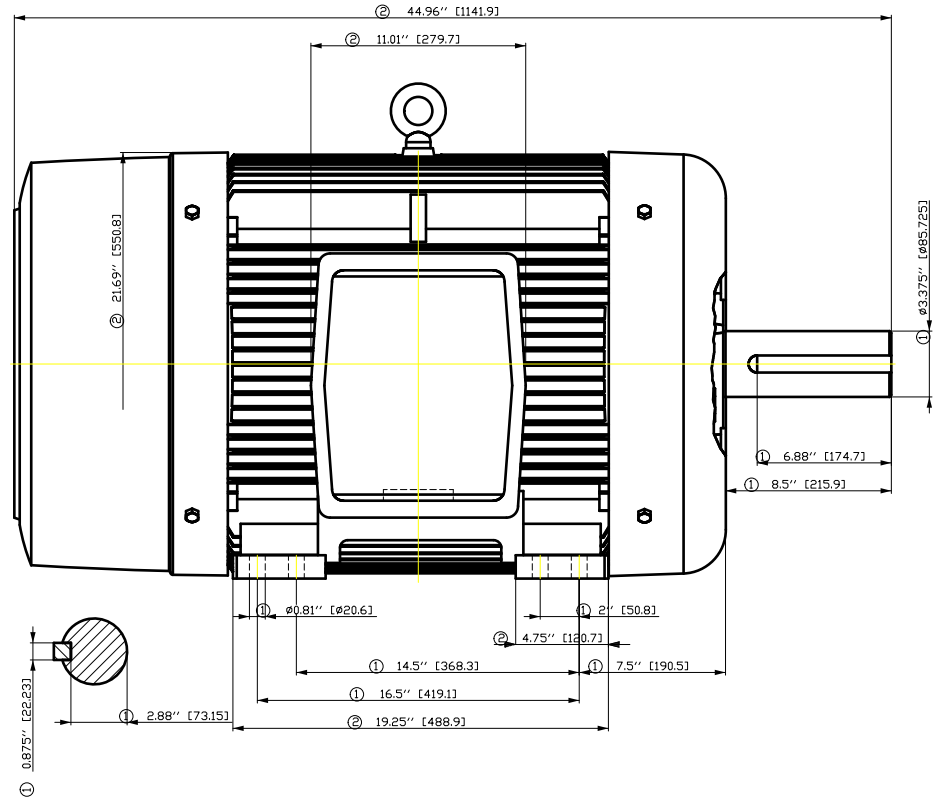
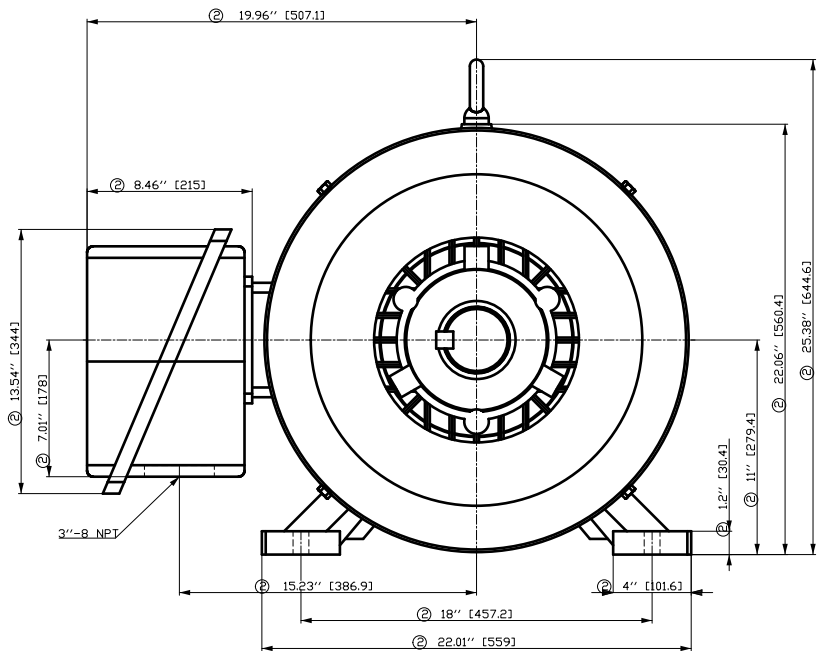
Lead Wire Connection					Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
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----	T1	T2	T3	----		

### 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>B</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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	title 1LE2421-4CB21-3AA3	document number			
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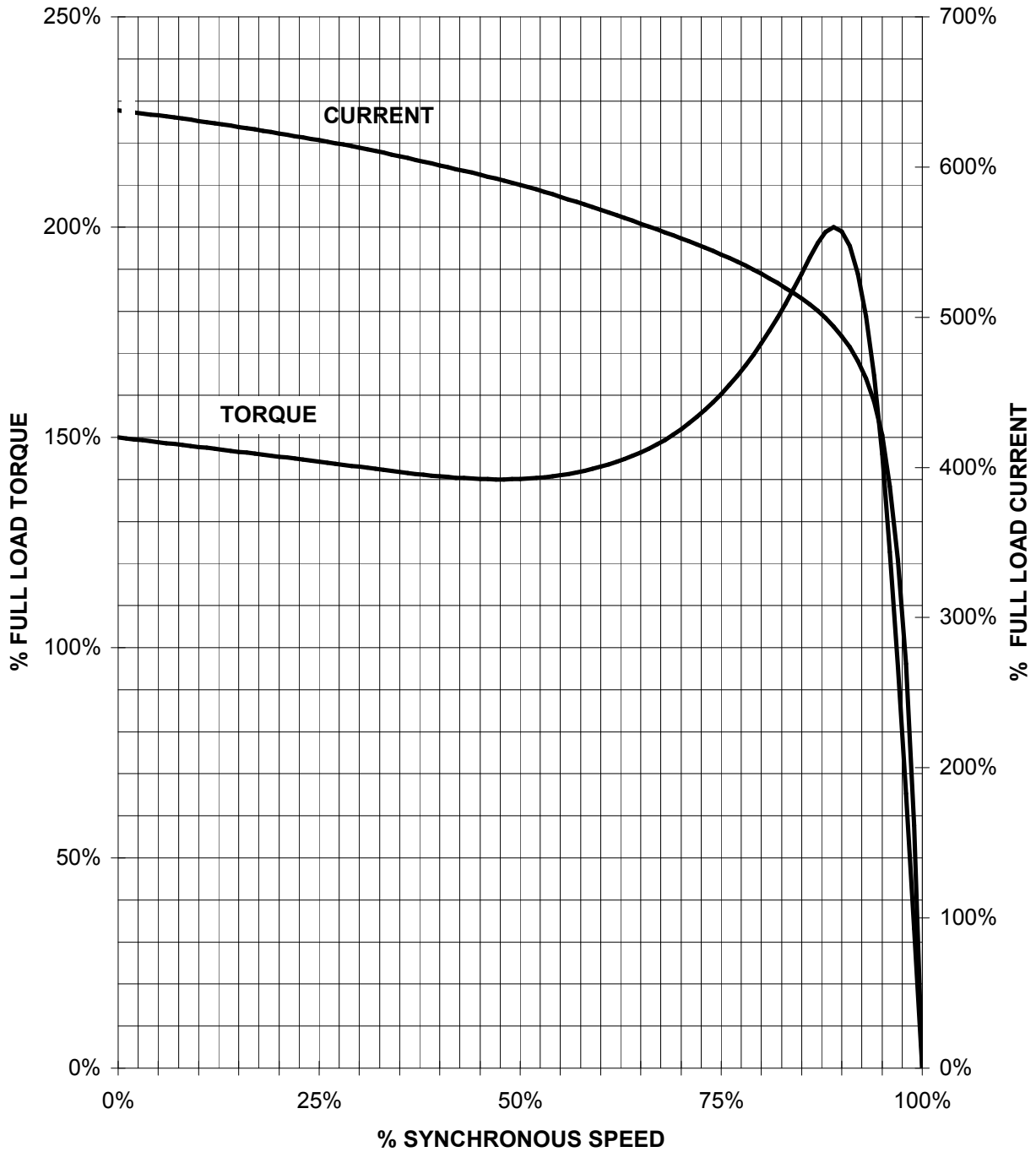
- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.

Tolerance	Surface	Material	Weight	Scale	
F50G GF8 OÖGF8 H0EH	Author	ÖS T a : ^@~ } *	E		
E	Creator				ÖVS
	Approval				
	Department				
	Change Order	MFB	Doc Type	/	
<b>SIEMENS</b>	Doc. State	I EBG	Item No	Paper Size	
	Revision	Index RS	Doc No	1st Language ^	
© Siemens AG 2018	Project No	E	Ref No	E	
				2nd Language ^	
				Sheet F of F	

# SIEMENS INDUSTRY, INC.

HP 150 VOLTS < 600V RPM 1800 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 445T NEMA B

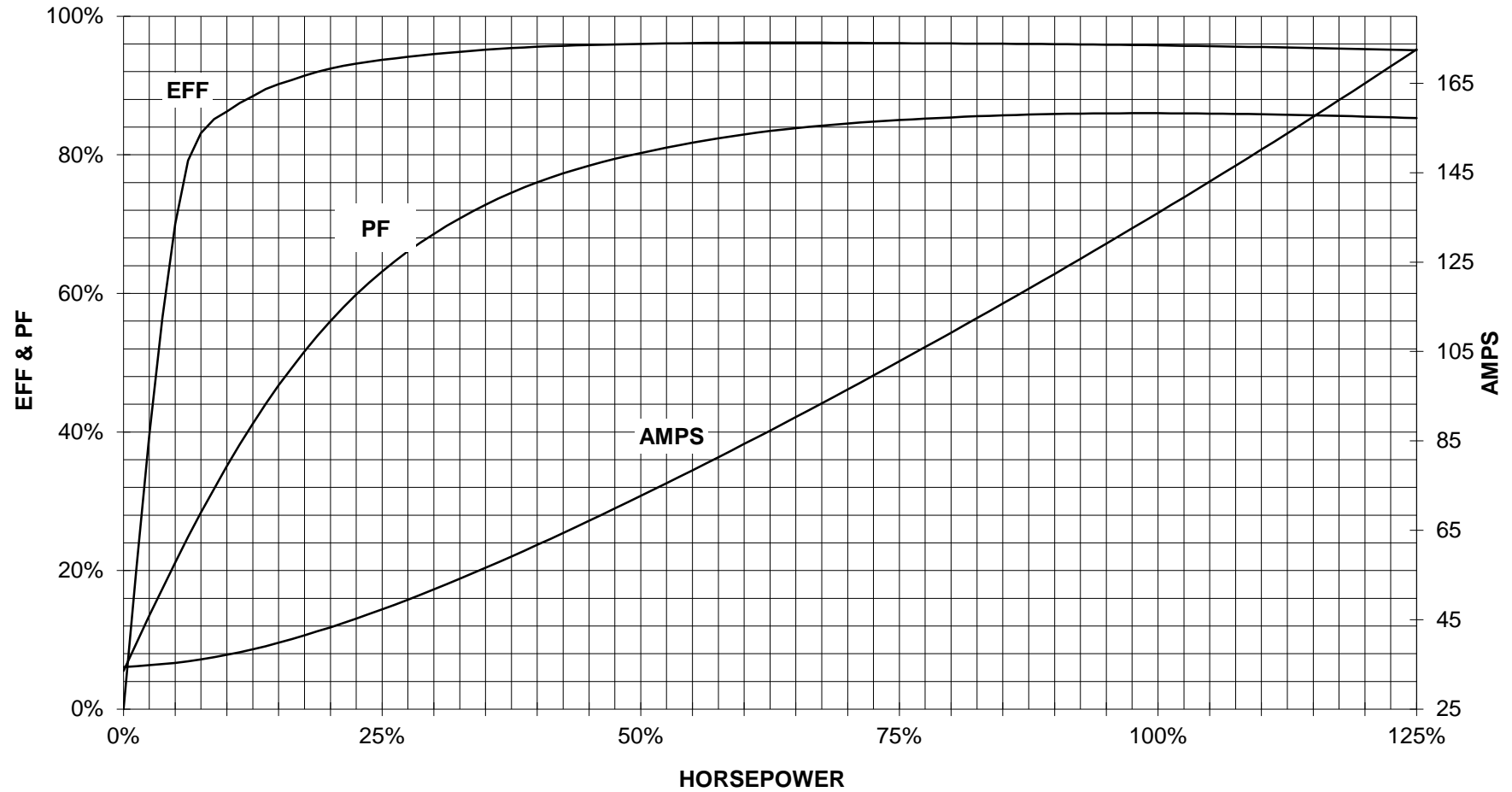
## TORQUE & CURRENT VS. SPEED



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

150 HP 1800 RPM 445T FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**SD100 IEEE841**

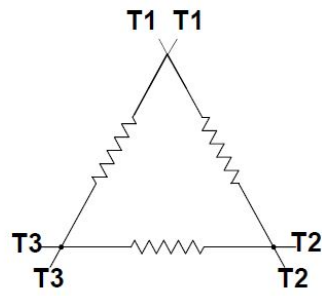


CUSTOMER: \_\_\_\_\_ ORDER #: \_\_\_\_\_


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

REV. 1

Main terminal diagram



6 LEAD DELTA			
LINES			CONN.
L1	L2	L3	
T1	T2	T3	Δ

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