

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

Motor type: **SD100 IEEE** FS: **145T - 6p - 1 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				
460	Y	60	1.00	0.75	1,200	1.60	1.30	1.20	1.00	11.0	82.5	82.5	80.2	70.9	63.3	50.2	4.5	256	344	

Frame Type: 145T	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: 70		Temp. Rise Cl.: B	Amb. Temp.: + 40 to -20 °C @1000 m	kVA: K	IP 55

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	50.0 dB(A) / 58.0 dB(A)	Thickener	Polyurea
Octave Band Center Frequencies Hertz	250 500 1000 2000 4000 8000 Hz	Safe Stall Time Hot	18 s
SPL@3	31.0 43.0 47.0 40.0 36.0 31.0 dB(A)	Safe Stall Time Cold	31 s
Moment of inertia	0.2 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	15.0 Lb ft <sup>2</sup>	Color, paint shade	Standard Paint - RAL7030
<b>Bearings</b>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)
Bearing DE   NDE	6205 Z C3 S0   6205 Z C3 S0	<b>Ventilation Type</b>	
Bearing_Type	Ball Bearing   Ball Bearing	Method of cooling	TEFC
AFBMA:	25BC02JP30   25BC02JP30	Direction of rotation	Bidirectional
<b>Grease</b>		Fan Material	Polypropylen ESD
Capacity	0.1 oz   0.1 oz	VFD	CT: 4:1 VT: 20:1
Grease Type:	Exxon Mobile EM	Space heaters	without
		Brake:	without

## Terminal box


Lead Wire Connection	3 LEAD - WYE	Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1 L1 L1 Connected together	Material of terminal box	Cast Iron
---	---	Cable entry	.75" NPT
---	T1 T2 T3 ---		

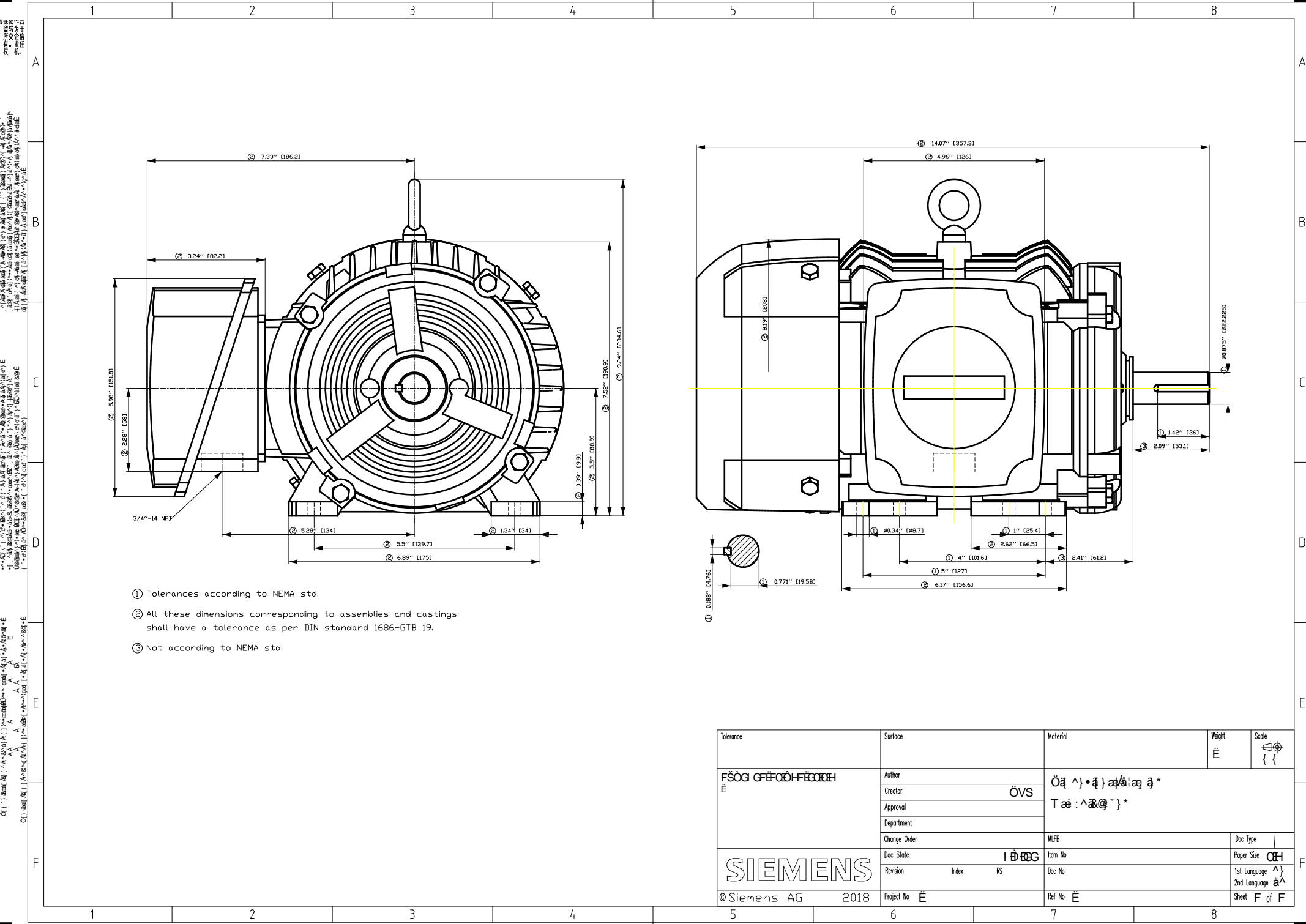
## Notes:

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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- 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.

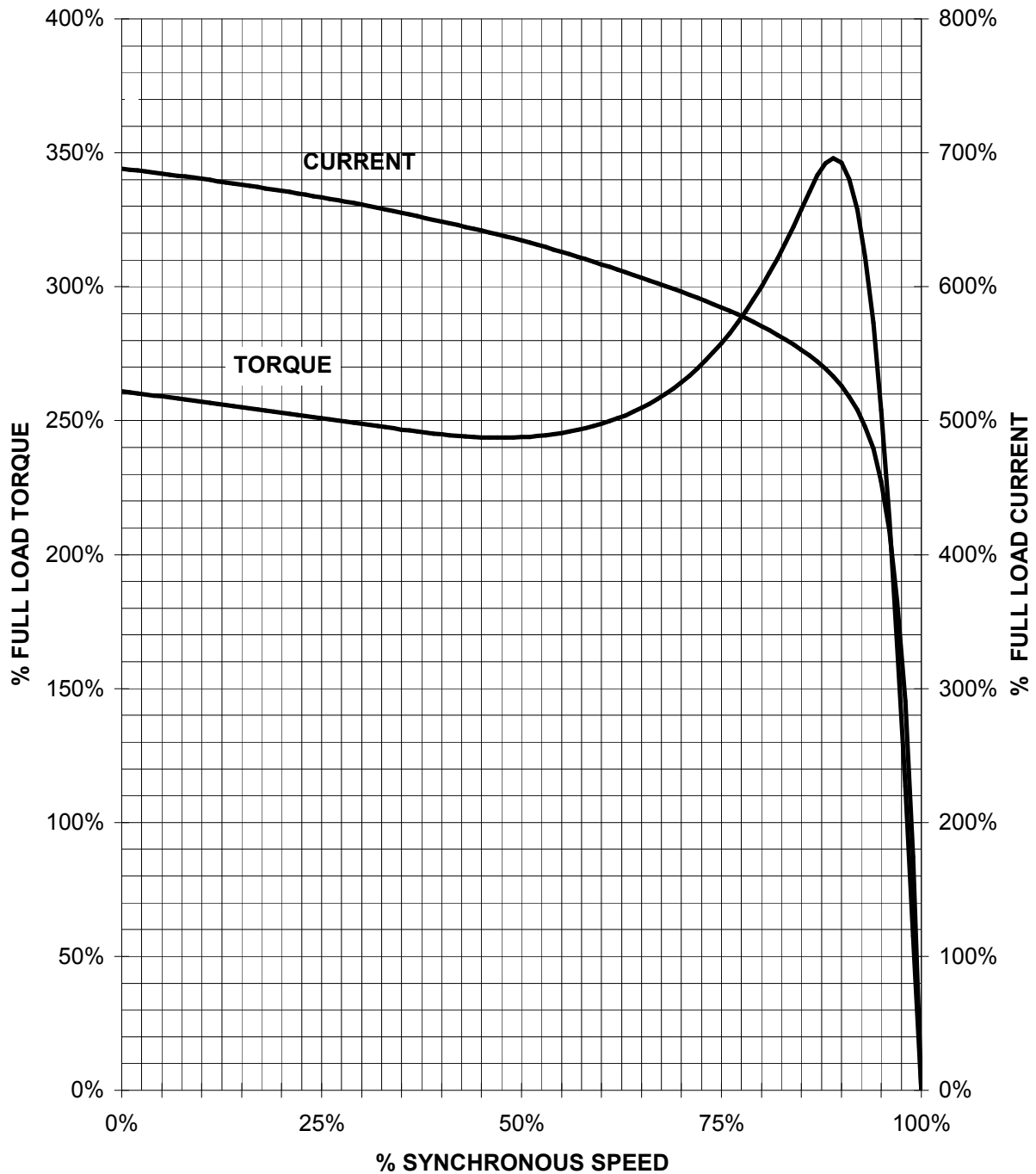
刀纹等用英文标注在图中  
 凡在图中出现的尺寸均为英寸  
 括号内为毫米  
 1. 所有尺寸均以装配体和铸件为准  
 2. 所有尺寸均以装配体和铸件为准  
 3. 所有尺寸均以装配体和铸件为准  
 4. 所有尺寸均以装配体和铸件为准

Tolerance	Surface	Material	Weight	Scale
F50G GF0H F600H E	Author Creator Approval Department Change Order	ÖVS T æ : ^ &@ } *	E	{ {
SIEMENS © Siemens AG 2018	Doc State Revision Index RS Project No E	MFB Item No Doc No Ref No E	Doc Type	Paper Size CH 1st Language ^ 2nd Language ä^ Sheet F of F

# SIEMENS INDUSTRY, INC.

HP 1 VOLTS < 600V RPM 1200 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 145T NEMA B

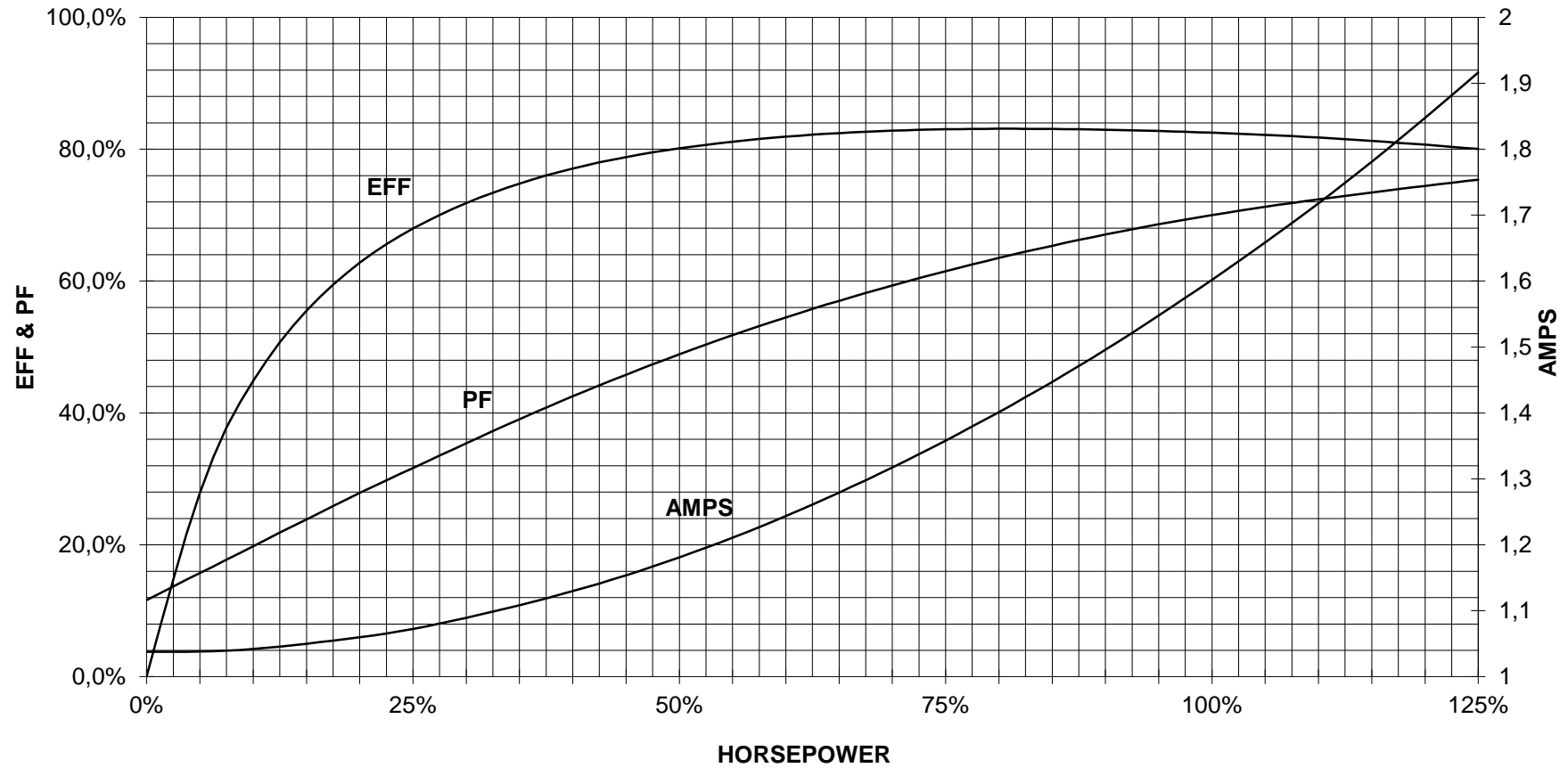
## TORQUE & CURRENT VS. SPEED



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

1 HP 1200 RPM 145T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

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



CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

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

REV. 1

Main terminal diagram



3 LEAD WYE			
LINES			CONN.
L1	L2	L3	
T1	T2	T3	

responsible dep.  
DI MC LVM

technical reference

created by

approved by

Project

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document type  
Wiring Diagram

title  
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document status  
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