

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

Motor type: **SD100** 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				
575	Y	60	1.00	0.75	1,200	1.30	1.10	0.90	0.80	8.8	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		Safe Stall Time Hot	18 s						
250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	31 s	
SPL@3	31.0	43.0	47.0	40.0	36.0	31.0	dB(A)	Frame material	cast iron
Moment of inertia	0.2 Lb-ft <sup>2</sup>		Color, paint shade	Standard Paint - RAL7030					
Ext Load Inertia Capability:	15.0 Lb ft <sup>2</sup>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)					
<b>Bearings</b>			<b>Ventilation Type</b>						
Bearing DE   NDE	6205 Z C3 S0		6205 Z C3 S0		Method of cooling	TEFC			
Bearing_Type	Ball Bearing		Ball Bearing		Direction of rotation	Bidirectional			
AFBMA:	25BC02JP30		25BC02JP30		Fan Material	Polypropylen ESD			
<b>Grease</b>			VFD	CT: 4:1 VT: 20:1					
Capacity	0.1 oz		Space heaters	without					
Grease Type:	Exxon Mobile EM		Brake:	without					


## Terminal box

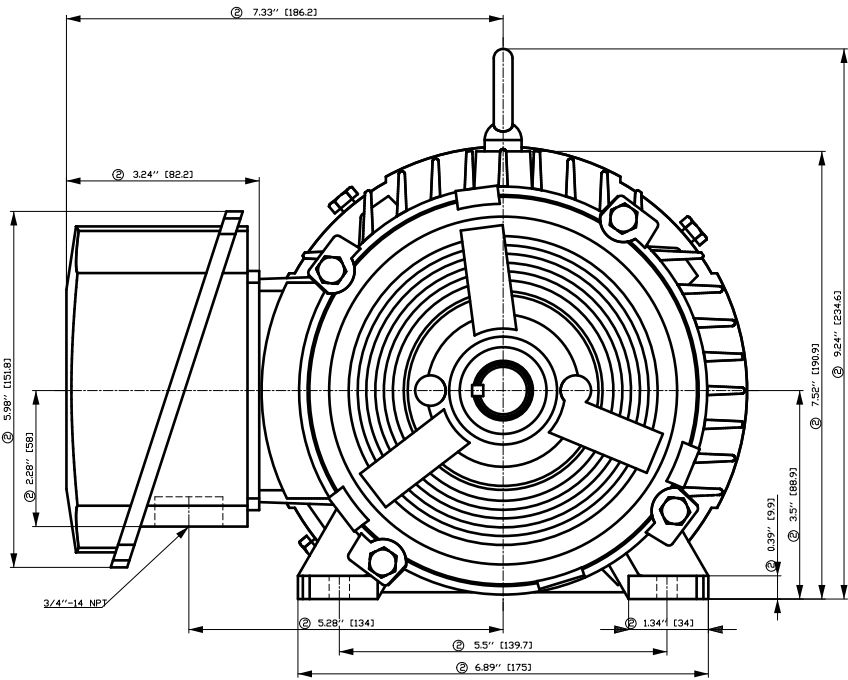
Lead Wire Connection	3 LEAD - WYE				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS	
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron	
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----	T1	T2	T3	----			

### Notes:

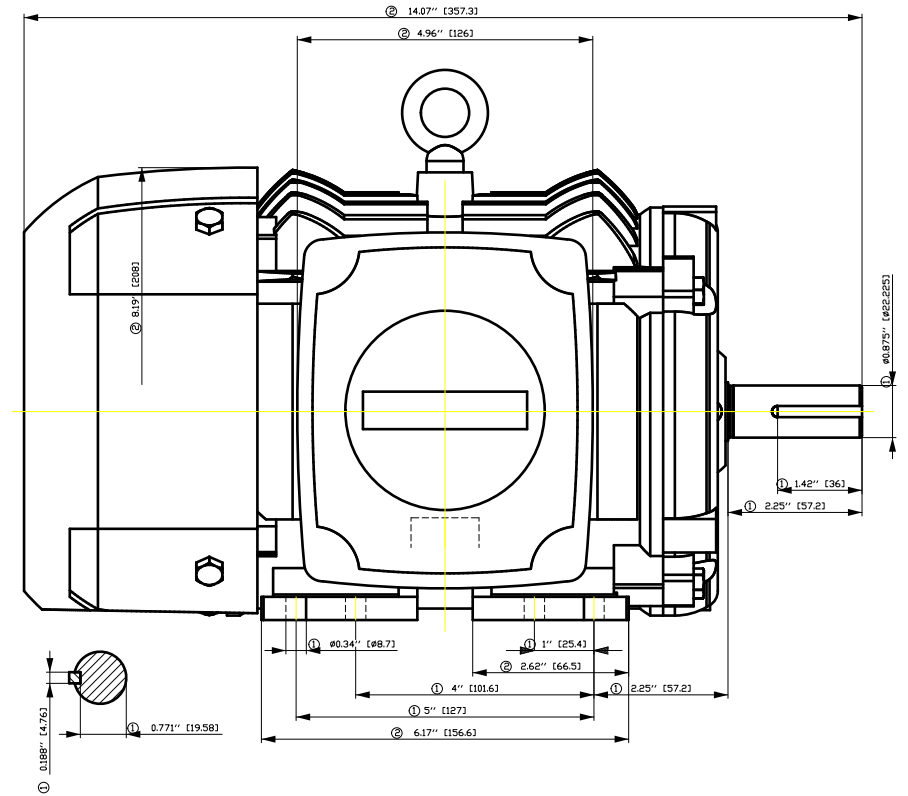
I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>B</sub>/M<sub>N</sub> = break down torque / nominal torque

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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- 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.

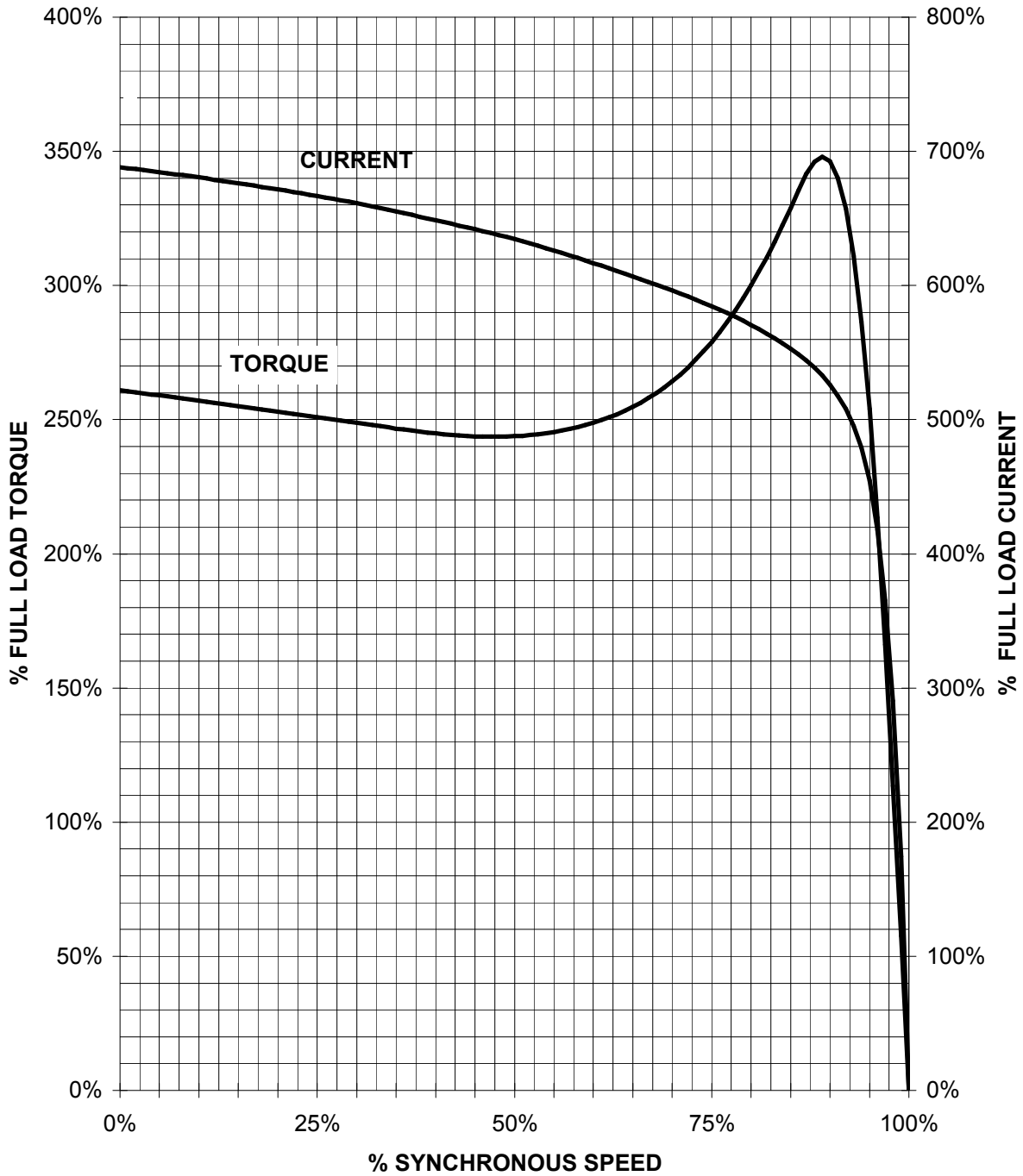


Tolerance	Surface	Material	Weight E	Scale 1:1
F50G-GF-E-CH-E-CH E	Author Creator Approval Department Change Order	ÖVS T a : ^ & @ } *		
SIEMENS	Doc. State Revision	I B B G Index RS	MFB Item No Doc No	Doc Type Paper Size 1st Language 2nd Language
	© Siemens AG 2018	Project No E	Ref No E	Sheet F of F

# SIEMENS INDUSTRY, INC.

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

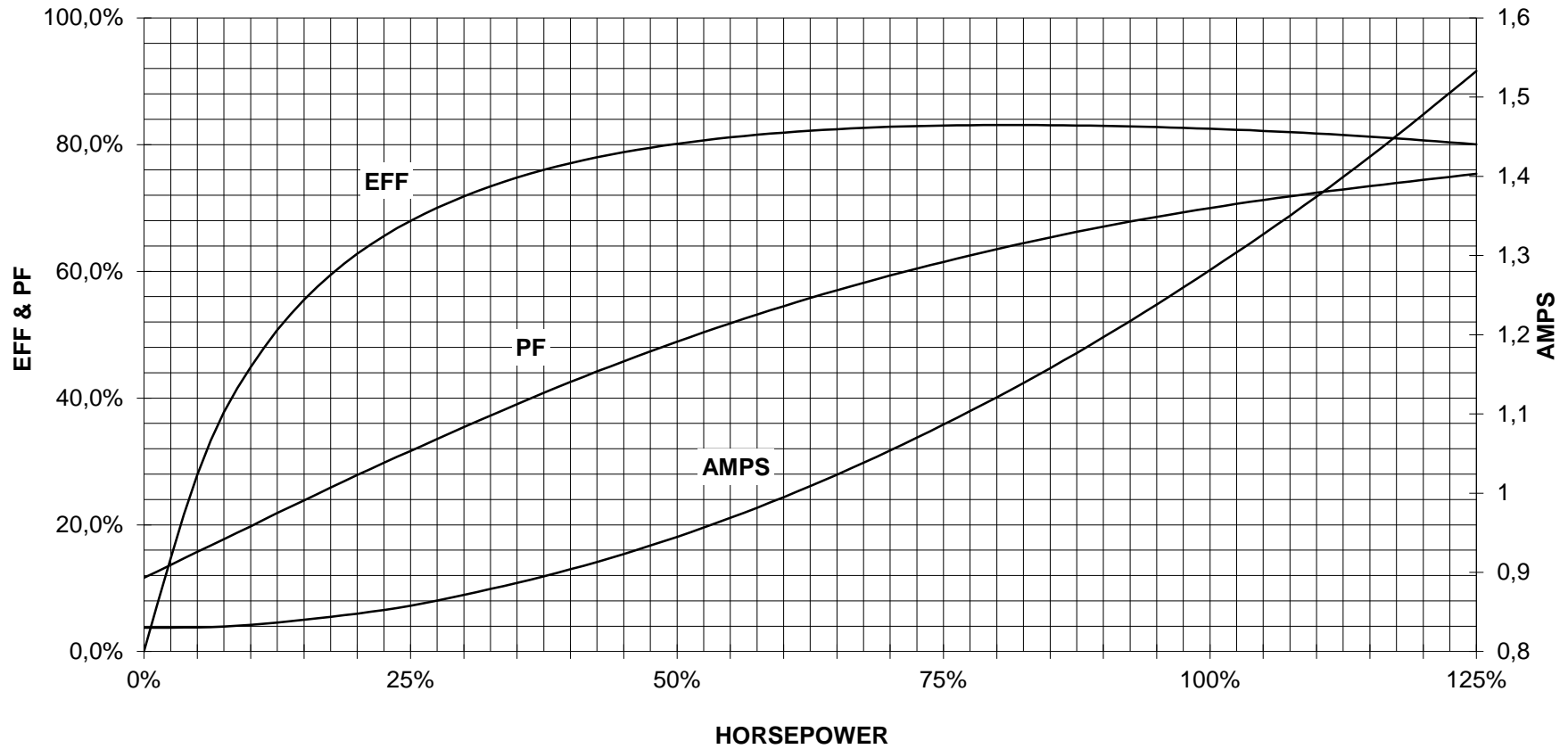
## TORQUE & CURRENT VS. SPEED



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

1 HP 1200 RPM 145T FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

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



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	Y

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DI MC LVM

technical reference

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Project

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document type  
Wiring Diagram

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document status  
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