

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

Motor type: **SD100 IEEE** FS: **256T - 4p - 20 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	20.00	15.00	1,800	20.00	15.80	12.30	8.40	116.0	93.0	93.4	93.1	80.5	75.9	65.3	60.0	183	240	
Frame Type: 256T		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: 319						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	61.0 dB(A) / 73.0 dB(A)							Thickener	Polyurea
Octave Band Center Frequencies Hertz									
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Hot	15 s
SPL@3	47.0	53.0	59.0	56.0	47.0	38.0	dB(A)	Safe Stall Time Cold	33 s
Moment of inertia	2.1 Lb-ft <sup>2</sup>							Frame material	cast iron
Ext Load Inertia Capability:	99.0 Lb ft <sup>2</sup>							Color, paint shade	Standard Paint - RAL7030
<b>Bearings</b>								Coating (paint finish)	Standard Alkyed + Epoxy (C2)
Bearing DE   NDE	6309 Z C3 S0			6309 Z C3 S0			<b>Ventilation Type</b>		
Bearing_Type	Ball Bearing			Ball Bearing			Method of cooling	TEFC	
AFBMA:	45BC03JP30			45BC03JP30			Direction of rotation	Bidirectional	
<b>Grease</b>								Fan Material	Polypropylen ESD
Capacity	0.5 oz			0.5 oz			VFD	CT: 20:1 VT: 20:1	
Grease Type:	Exxon Mobile EM							Space heaters	without
								Brake:	without


## Terminal box

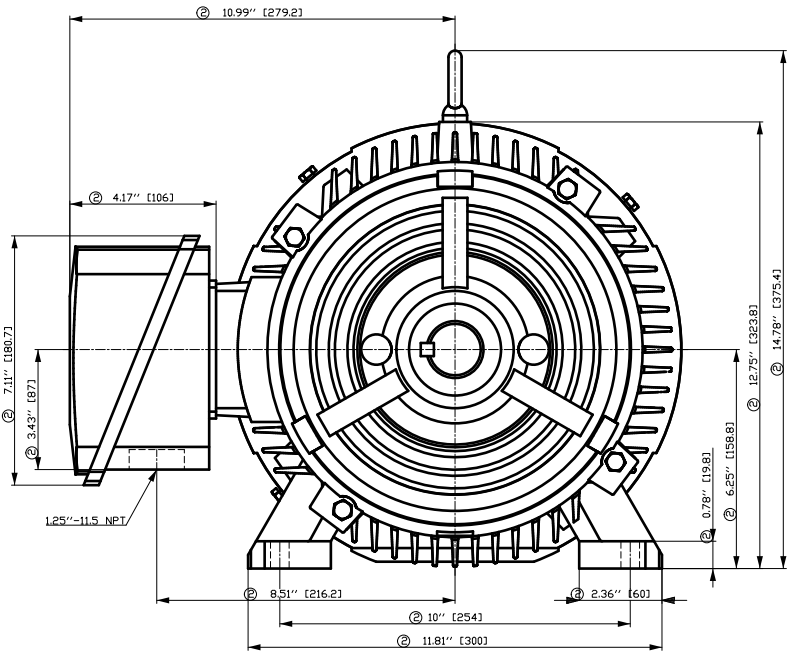
Lead Wire Connection	3 LEAD - WYE				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
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----	T1	T2	T3	----		

### Notes:

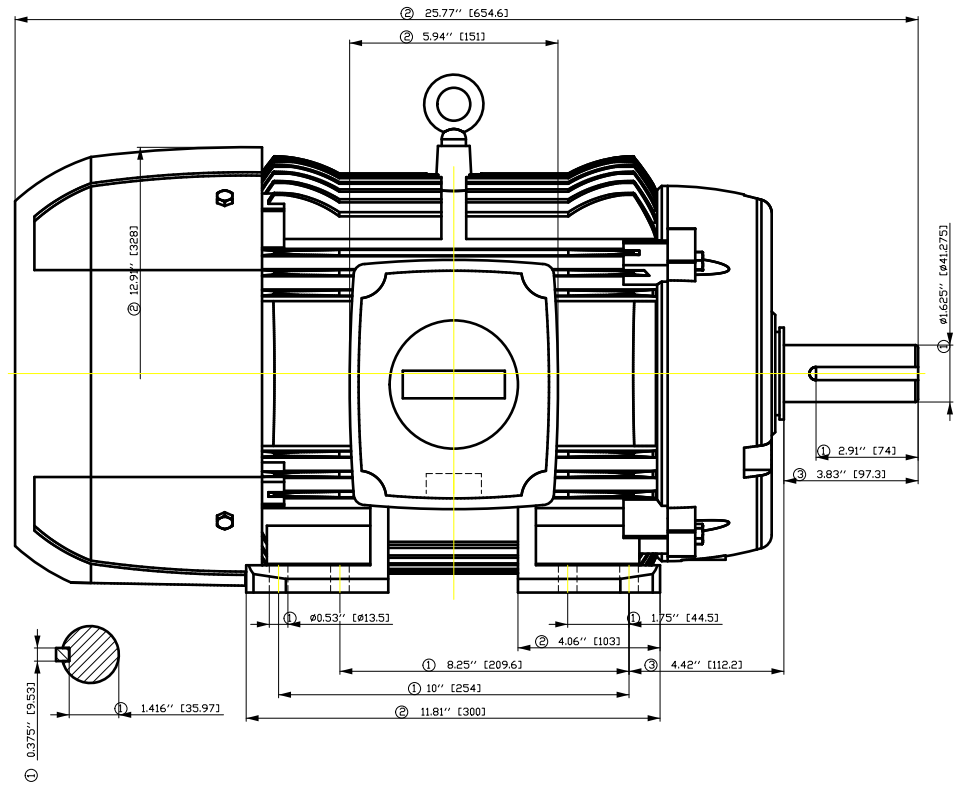
I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>B</sub>/M<sub>N</sub> = break down torque / nominal torque

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 our website and our data sheets.</i>	
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	title 1LE2421-2BB21-3AA3	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.

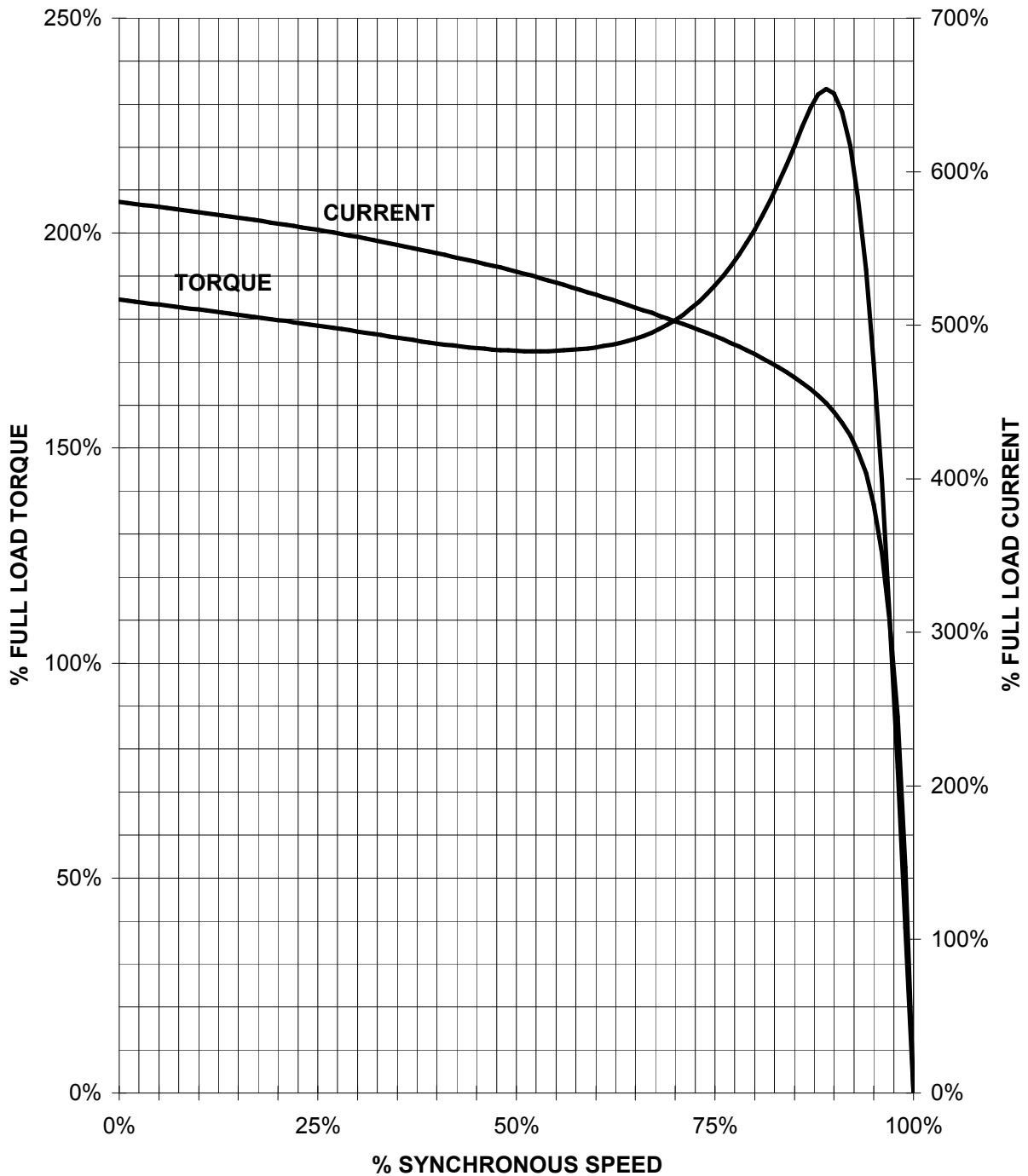


Tolerance	Surface	Material	Weight	Scale
F50G GF E300GF H00EH	Author	ÖS	E	
E	Creator			
	Approval			
	Department			
	Change Order	MFB	Doc Type	/
	Doc. State	I 000G	Item No	Paper Size
	Revision	Index RS	Doc No	1st Language
				2nd Language
© Siemens AG 2018	Project No	E	Ref No	E
				Sheet F of F

# SIEMENS INDUSTRY, INC.

HP 20 VOLTS < 600V RPM 1800 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 256T NEMA B

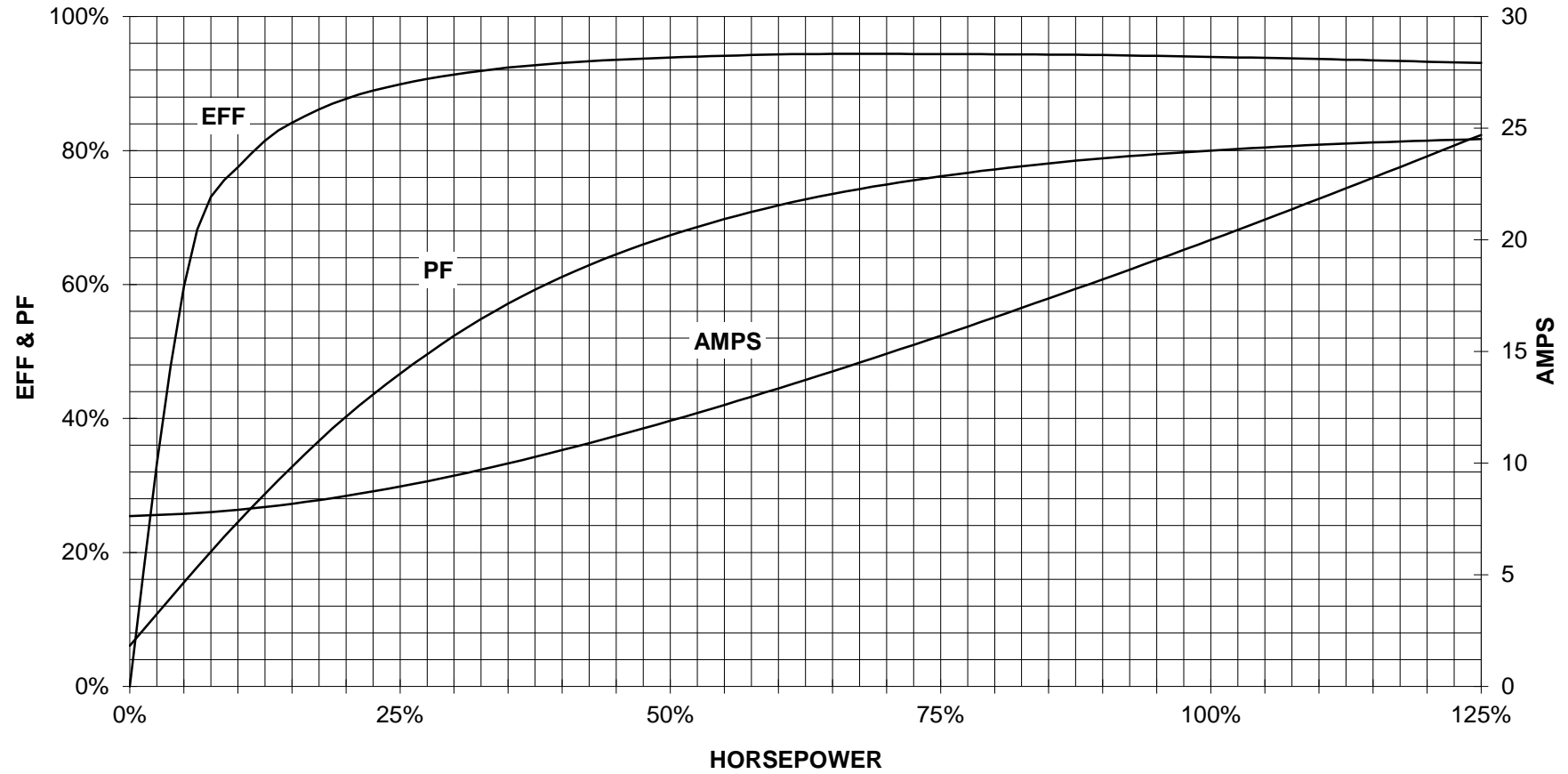
## TORQUE & CURRENT VS. SPEED



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

20 HP 1800 RPM 256T FRAME 575 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	Y

responsible dep.  
DI MC LVM

technical reference

created by

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Project

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document type  
Wiring Diagram

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document status  
free

document number

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