

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

**Motor type:** SD100 IEEE **FS: 254T - 8p - 5 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	5.00	4.00	900	8.80	7.50	6.40	5.50	33.0	86.5	87.0	85.5	61.0	54.0	43.0	41.0	156	210	
Frame Type: 254T		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: 247						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	67.0 dB(A) / 76.0 dB(A)		Thickener	Polyurea					
Octave Band Center Frequencies Hertz			Safe Stall Time Hot	65 s					
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	115 s
SPL@3	50.0	64.0	61.0	57.0	46.0	39.0	dB(A)	Frame material	cast iron
Moment of inertia	1.4 Lb-ft <sup>2</sup>		Color, paint shade	Standard Paint - RAL7030					
Ext Load Inertia Capability:	142.0 Lb ft <sup>2</sup>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)					
<b>Bearings</b>			<b>Ventilation Type</b>						
Bearing DE   NDE	6309 Z C3 S0		6309 Z C3 S0	Method of cooling	TEFC				
Bearing_Type	Ball Bearing		Ball Bearing	Direction of rotation	Bidirectional				
AFBMA:	45BC03JP30		45BC03JP30	Fan Material	Polypropylen ESD				
<b>Grease</b>			VFD	CT: 4:1 VT: 20:1					
Capacity	0.5 oz		0.5 oz	Space heaters	without				
Grease Type:	Exxon Mobile EM		Brake:	without					


## Terminal box

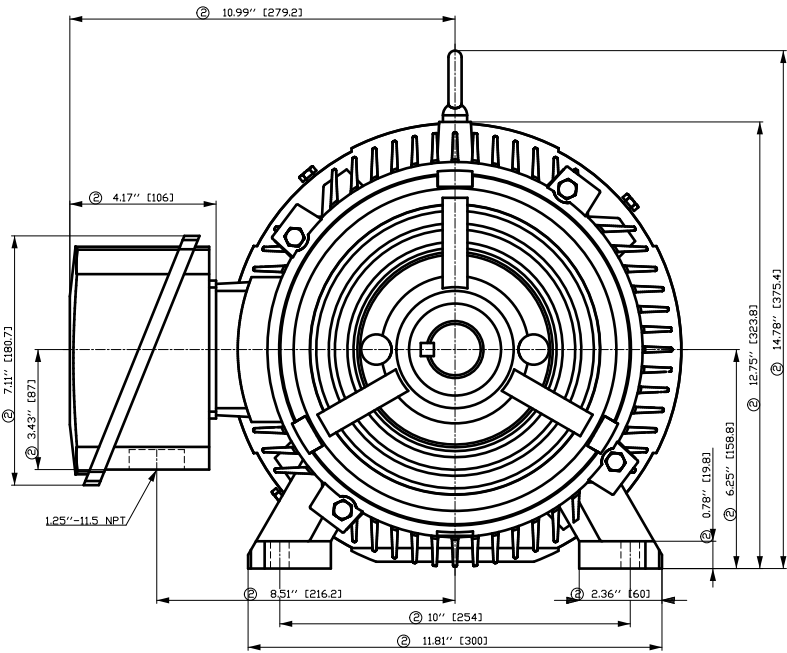
Lead Wire Connection	3 LEAD - WYE				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
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----	T1	T2	T3	----		

### Notes:

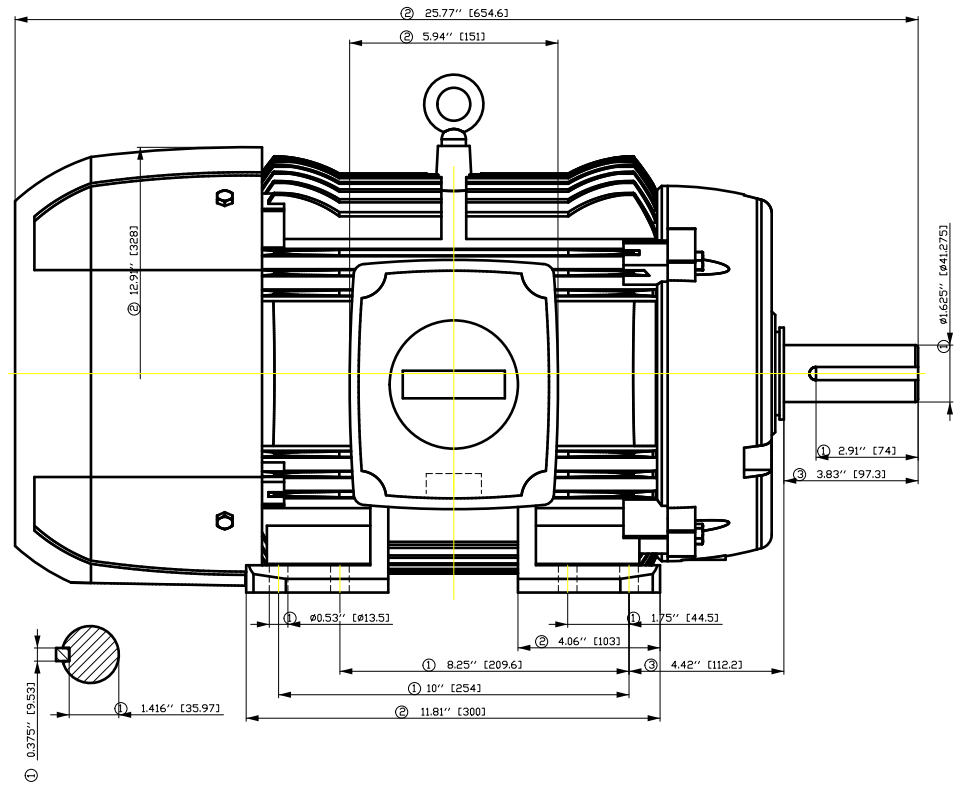
I<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>b</sub>/M<sub>N</sub> = break down torque / nominal torque

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.

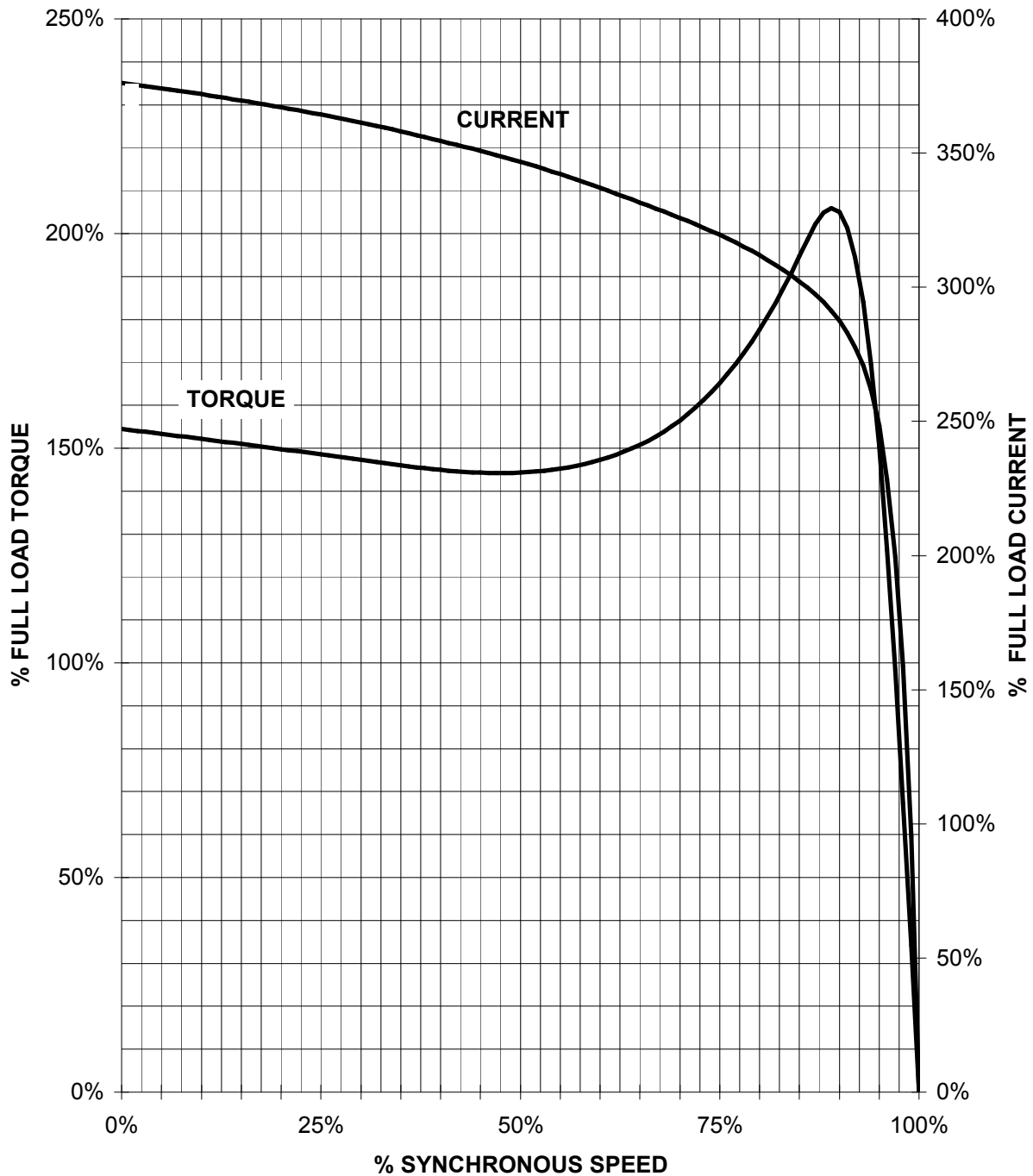


Tolerance	Surface	Material	Weight	Scale
F50G GF300FF300H E	Author Creator Approval Department Change Order	ÖVS T a : ^ & @ } *	E	{ {
<b>SIEMENS</b>	Doc. State	I B ECG	Doc Type	/
	Revision	Index RS	Paper Size	CH
© Siemens AG 2018	Project No	E	1st Language	^
			2nd Language	â
			Sheet	F of F

# SIEMENS INDUSTRY, INC.

HP 5 VOLTS < 600V RPM 900 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 254T NEMA B

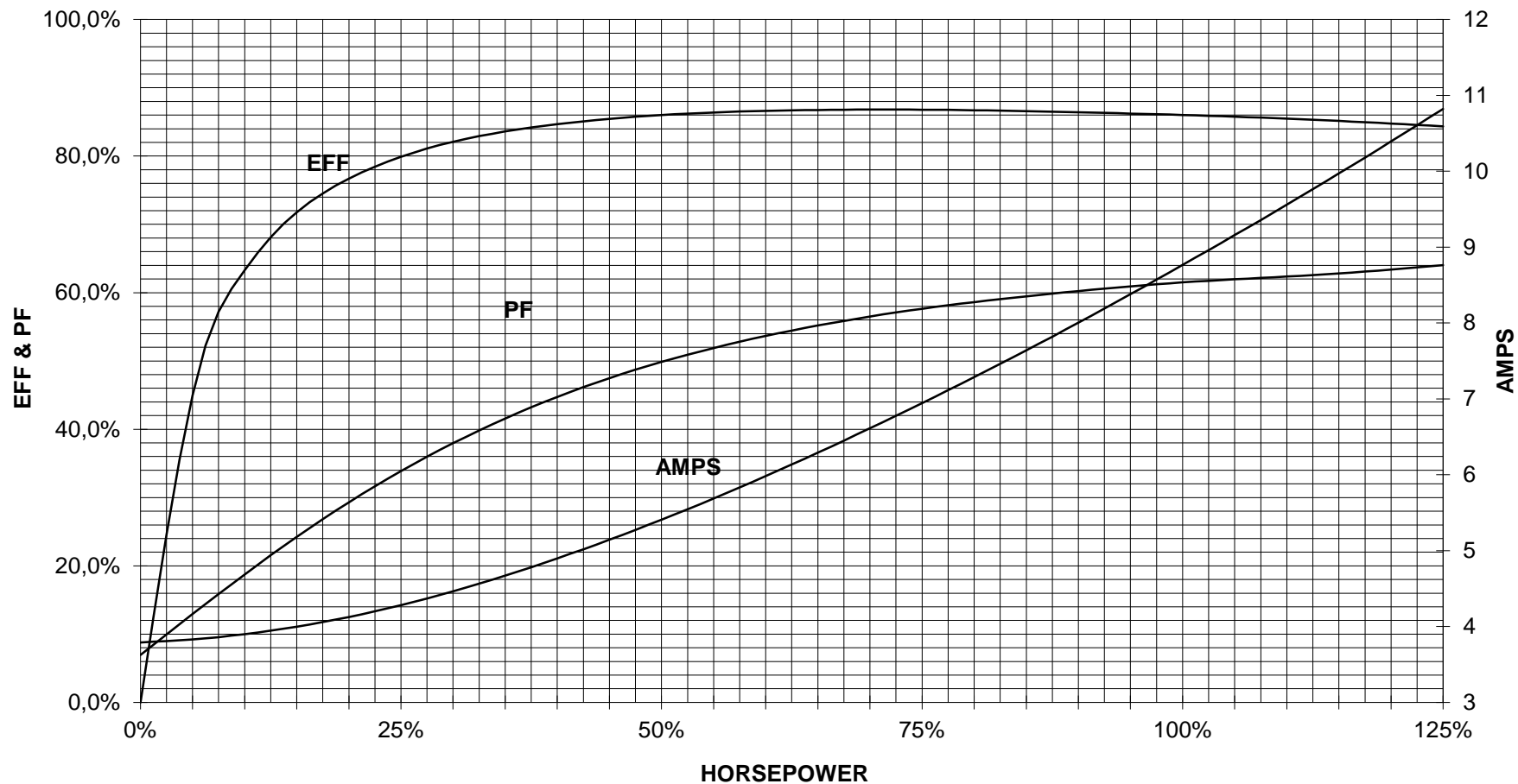
## TORQUE & CURRENT VS. SPEED



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

5 HP 900 RPM 254T 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

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Project

**SIEMENS**

document type  
Wiring Diagram

title  
1LE2421-2BD11-2AA3

document status  
free

document number

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