

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

**Motor type:** SD100 IEEE **FS: 145T - 4p - 2 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	2.00	1.50	1,800	2.20	1.80	1.50	1.20	19.2	86.5	87.2	86.0	77.3	70.8	57.8	6.0	322	393	
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: 75						Temp. Rise Cl.: B		Amb. Temp.: + 40 to -20 °C @1000 m			kVA: L		IP 55							

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	50.0 dB(A) / 62.0 dB(A)	Thickener	Polyurea							
Octave Band Center Frequencies Hertz		Safe Stall Time Hot	14 s							
250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	22 s		
SPL@3		37.0	40.0	49.0	45.0	37.0	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:	11.0 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: 20:1	VT: 20:1						
Capacity	0.1 oz	0.1 oz	Space heaters	without						
Grease Type:	Exxon Mobile EM		Brake:	without						


## Terminal box

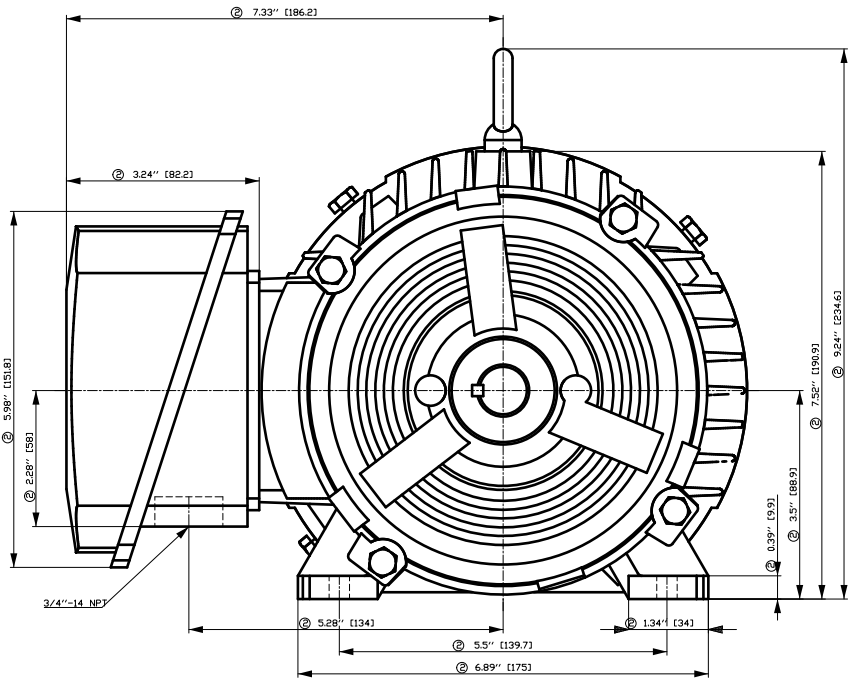
Lead Wire Connection	3 LEAD - WYE				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
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----	T1	T2	T3	----		

### Notes:

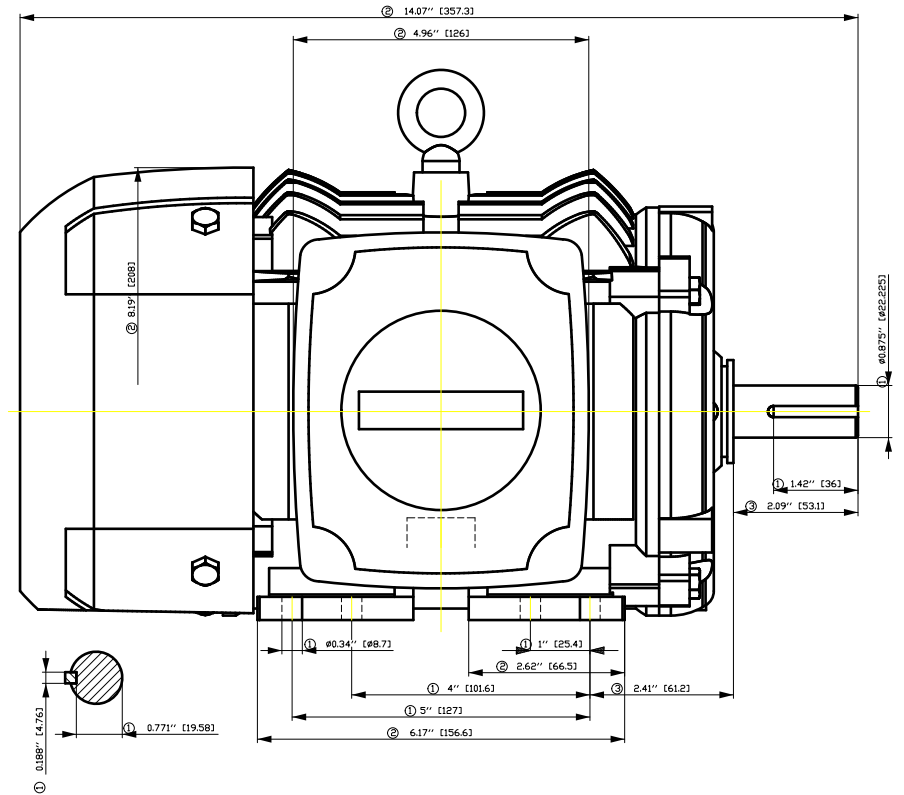
I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>B</sub>/M<sub>N</sub> = break down torque / nominal torque

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 datasheet and customer's surface</i>	
	document type datasheet	document status released	customer		
	title 1LE2421-1AB41-3AA3	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.

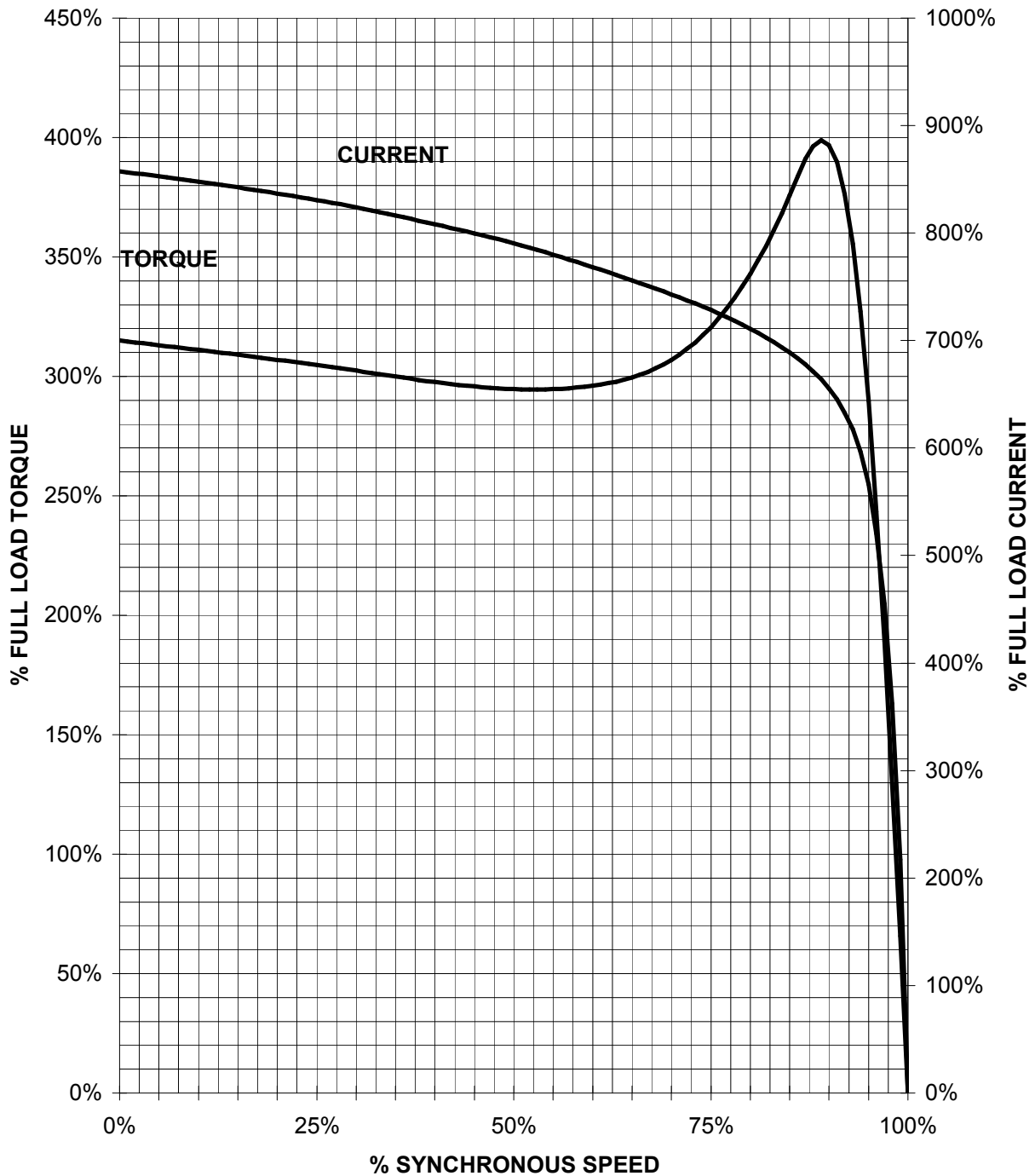


Tolerance	Surface	Material	Weight	Scale
F50G GF-E01 F-E00H E	Author Creator Approval Department Change Order	ÖVS T a : ^ & @ } *	E	{ {
SIEMENS	Doc. State	I B B G	Doc Type	/
	Revision	Index RS	Paper Size	CH
© Siemens AG 2018	Project No	E	1st Language	^
			2nd Language	â
			Sheet	F of F

# SIEMENS INDUSTRY, INC.

HP 2 VOLTS < 600V RPM 1800 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 145T NEMA B

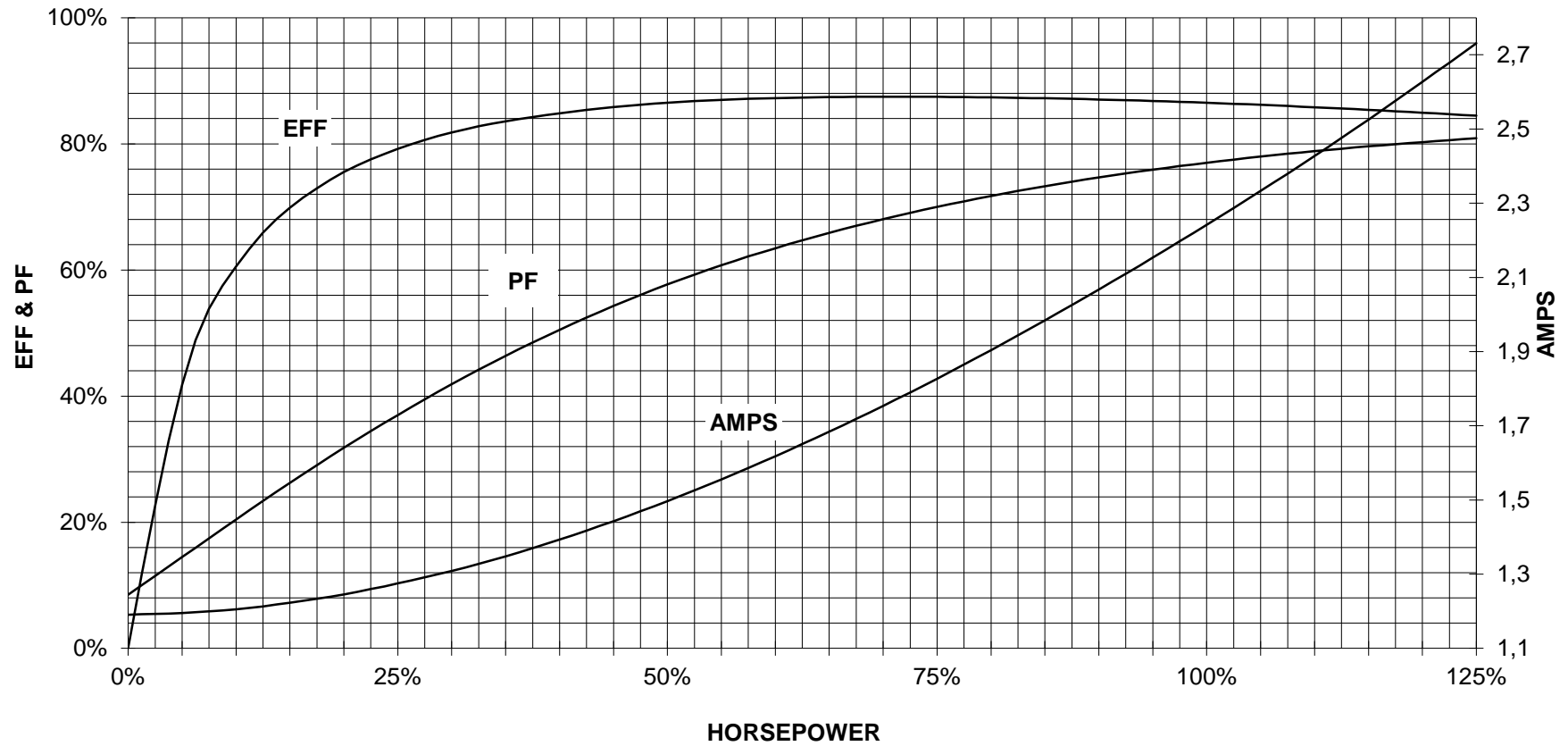
## TORQUE & CURRENT VS. SPEED



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

2 HP 1800 RPM 145T 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

**SIEMENS**

document type  
Wiring Diagram

title  
1LE2421-1AB41-3AA3

document status  
free

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