

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

**Motor type:** SD100 IE3E **FS: 184T - 2p - 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				
575	Y	60	5.00	4.00	3,600	4.80	3.70	2.70	1.60	36.8	88.5	89.1	88.2	88.2	85.9	78.1	7.5	173	427	
Frame Type: 184T		Type of constr.: ( G ) Round body - C-Face				Ins. Cl.: Standard Class F Insulation		Motor Prot.: (A) Without Protection			NEMA Des.: B		S.F.: 1.15							
Mtr. WT: 129						Temp. Rise Cl.: B		Amb. Temp.: + 40 to -20 °C @1000 m			kVA: J		IP 55							

## Mechanical data

Sound level (SPL / SWL) at 60 Hz	69.0 dB(A) / 81.0 dB(A)		Thickener	Polyurea					
Octave Band Center Frequencies Hertz			Safe Stall Time Hot	15 s					
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Cold	29 s
SPL@3	49.0	61.0	66.0	64.0	60.0	50.0	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:	57.0 Lb ft <sup>2</sup>		Coating (paint finish)	Standard Alkyed + Epoxy (C2)					
<b>Bearings</b>			<b>Ventilation Type</b>						
Bearing DE   NDE	6206 Z C3 S0		6206 Z C3 S0	Method of cooling	TEFC				
Bearing_Type	Ball Bearing		Ball Bearing	Direction of rotation	Bidirectional				
AFBMA:	30BC02JP30		30BC02JP30	Fan Material	Polypropylen ESD				
<b>Grease</b>			VFD	CT: 4:1 VT: 20:1					
Capacity	0.2 oz		0.2 oz	Space heaters	without				
Grease Type:	Exxon Mobile EM		Brake:	without					


## Terminal box

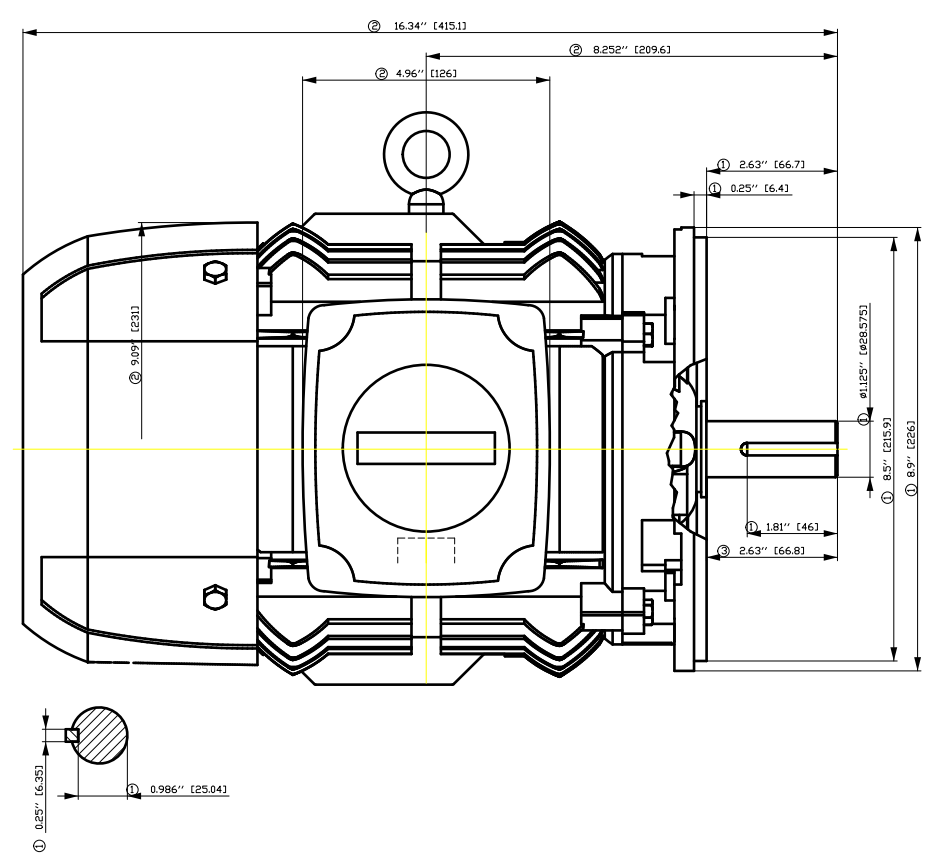
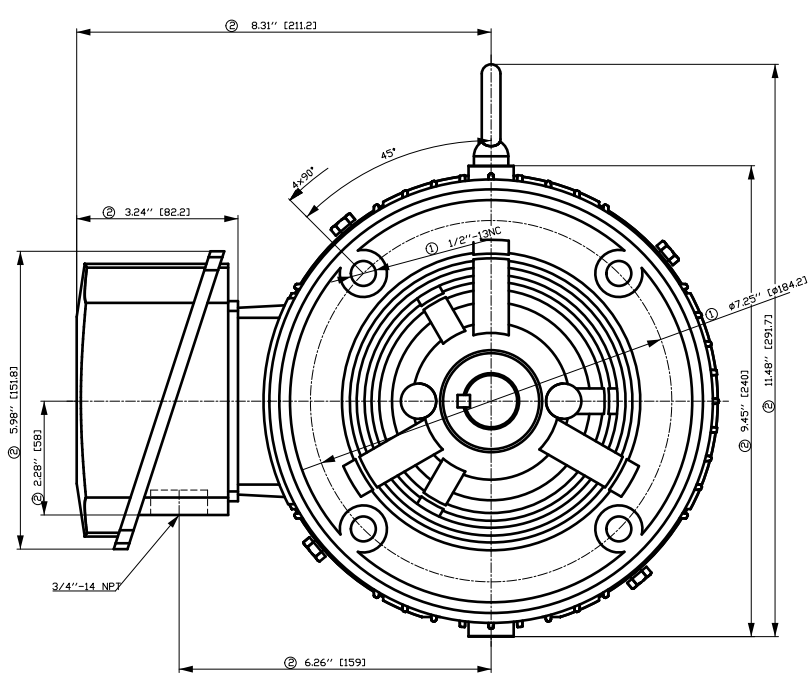
Lead Wire Connection	3 LEAD - WYE				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
----	----	----	----	----	Cable entry	.75" NPT
----	T1	T2	T3	----		

### Notes:

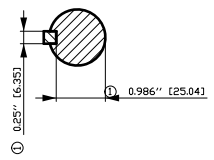
I<sub>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>L</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>B</sub>/M<sub>N</sub> = break down torque / nominal torque

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>	
	document type datasheet	document status released	customer		
	title 1LE2421-1CA31-3GA3	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.

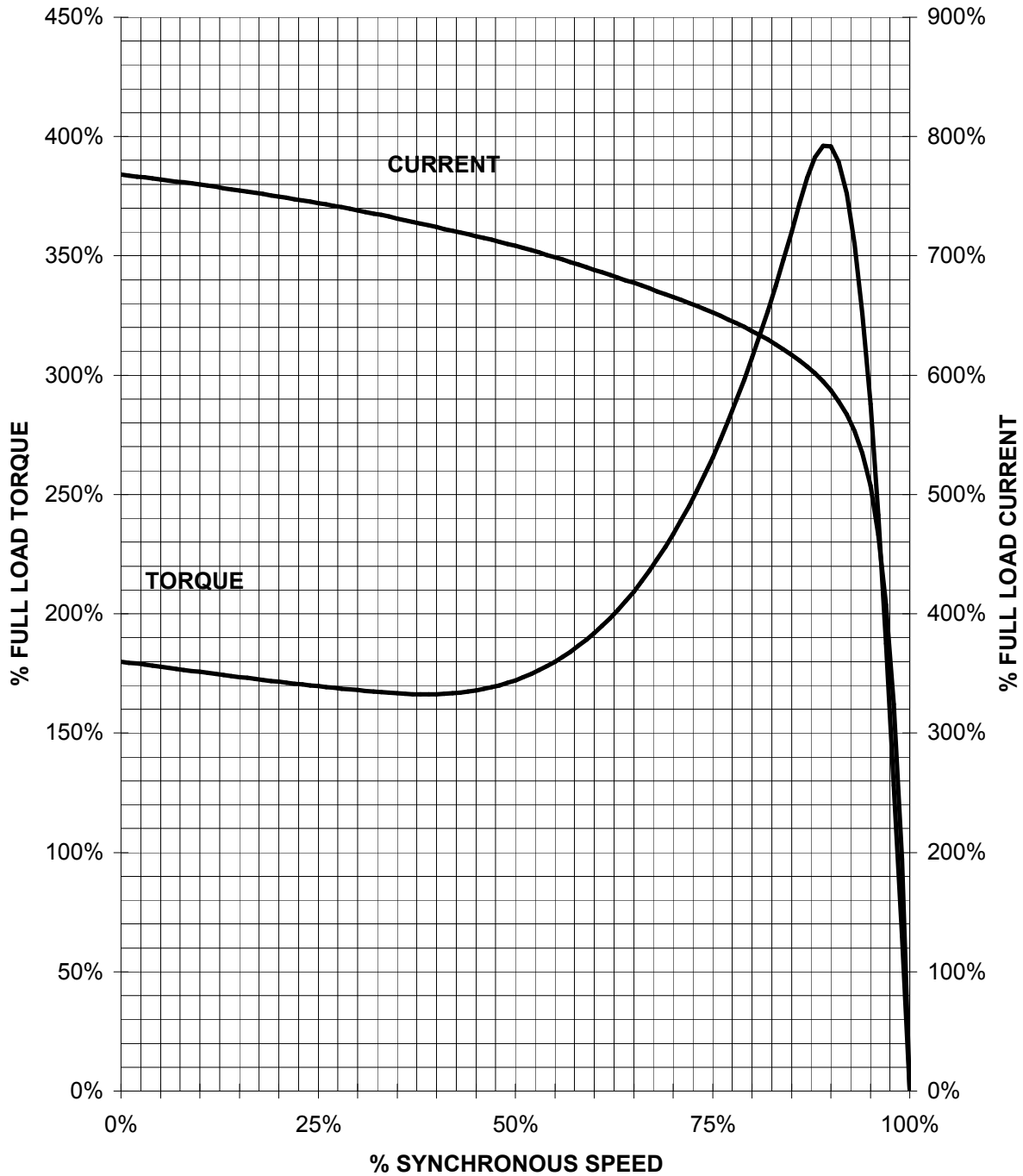


Tolerance	Surface	Material	Weight	Scale	
F50G GF-ÖÖ-FH-ÖÖH	Author	ÖS } • } 2/4 } 2/4 } *	E		
E	Creator				ÖVS
	Approval				T a: ^ 2/4 } *
	Department				
	Change Order	MFB		Doc Type	
SIEMENS	Doc. State	I 2/4 } ÖG	Item No	Paper Size	
	Revision	Index	RS	1st Language	
© Siemens AG	Project No	E	Ref No	E	
2018				2nd Language	
				Sheet	

# SIEMENS INDUSTRY, INC.

HP 5 VOLTS < 600V RPM 3600 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 184T NEMA B

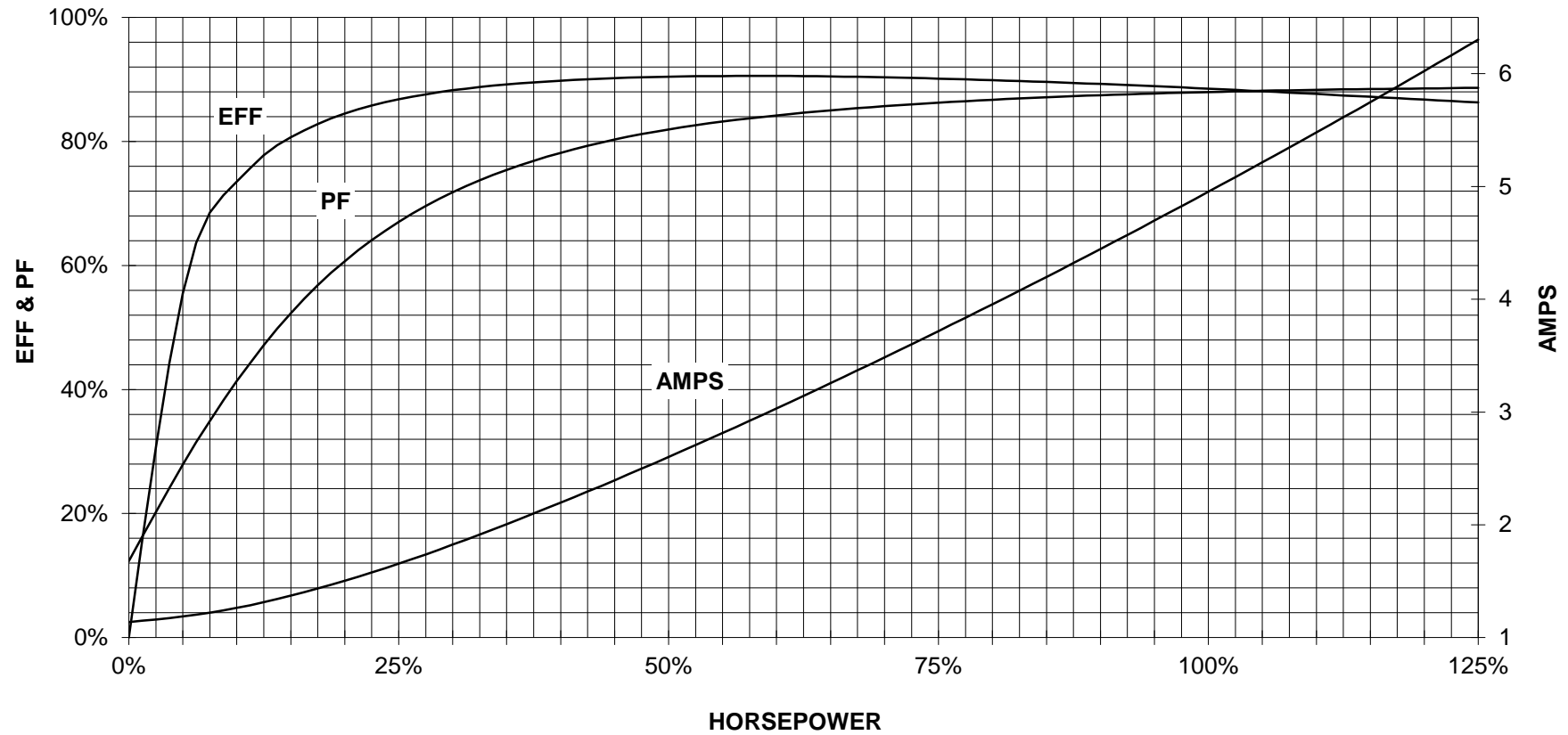
## TORQUE & CURRENT VS. SPEED



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

5 HP 3600 RPM 184T FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

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

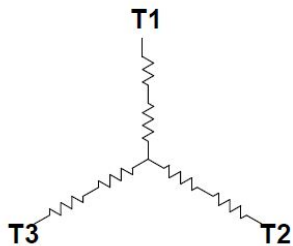


CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_


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	

responsible dep. DI MC LVM	technical reference	created by	approved by	Project			
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