

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

**Motor type:** SD100 IEEE **FS: 286T - 4p - 30 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	$\Delta$	60	30.00	22.00	1,800	28.00	21.80	16.40	9.60	174.4	93.6	94.1	93.9	85.0	82.0	73.0	89.0	180	251	

Frame Type: 286T	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: 478		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	65.0 dB(A) / 76.0 dB(A)							Thickener	Polyurea
Octave Band Center Frequencies Hertz									
	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Hot	24 s
SPL@3	51.0	55.0	55.0	62.0	59.0	51.0	dB(A)	Safe Stall Time Cold	44 s
Moment of inertia	4.8 Lb-ft <sup>2</sup>							Frame material	cast iron
Ext Load Inertia Capability:	144.0 Lb ft <sup>2</sup>							Color, paint shade	Standard Paint - RAL7030
<b>Bearings</b>								Coating (paint finish)	Standard Alkyed + Epoxy (C2)
Bearing DE   NDE	6310 Z C3 S0			6310 Z C3 S0			<b>Ventilation Type</b>		
Bearing_Type	Ball Bearing			Ball Bearing			Method of cooling	TEFC	
AFBMA:	50BC03JP30			50BC03JP30			Direction of rotation	Bidirectional	
<b>Grease</b>								Fan Material	Polypropylen ESD
Capacity	2.6 oz			2.6 oz			VFD	CT: 20:1 VT: 20:1	
Grease Type:	Exxon Mobile EM							Space heaters	without
								Brake:	without


## Terminal box

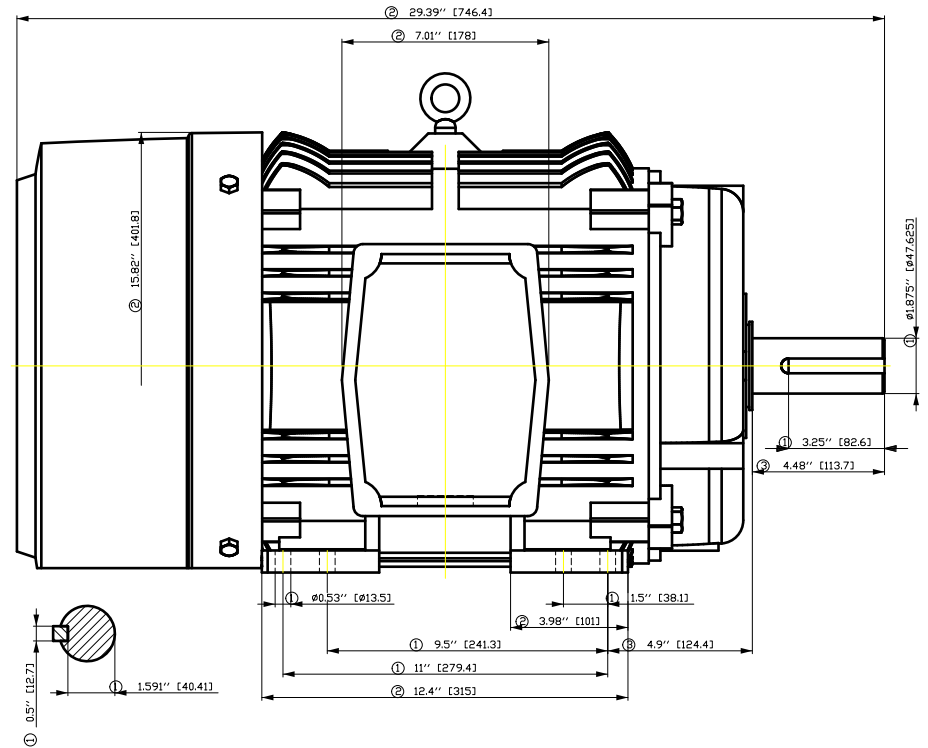
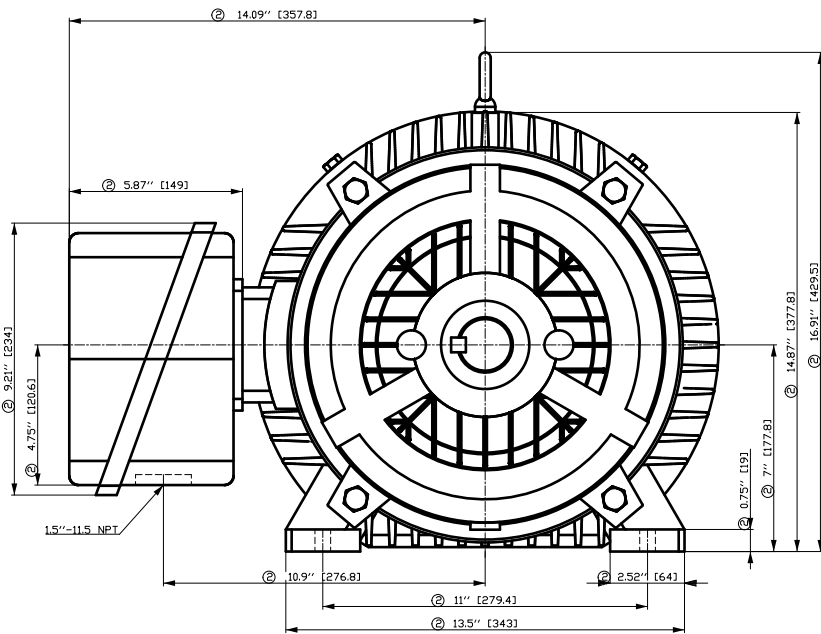
Lead Wire Connection	3 LEAD - DELTA				Terminal box position	(3) F-1, Standard Floor Mount, T. Box LHS
Voltage	L1	L1	L1	Connected together	Material of terminal box	Cast Iron
----	----	----	----	----	Cable entry	1.5" NPT
----	T1	T2	T3	----		

### 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 1LE2421-2CB21-3AA3	document number					
© Siemens AG 2022	rev. 01	creation date 2022-04-08 20:46	language en	Page 1/1			



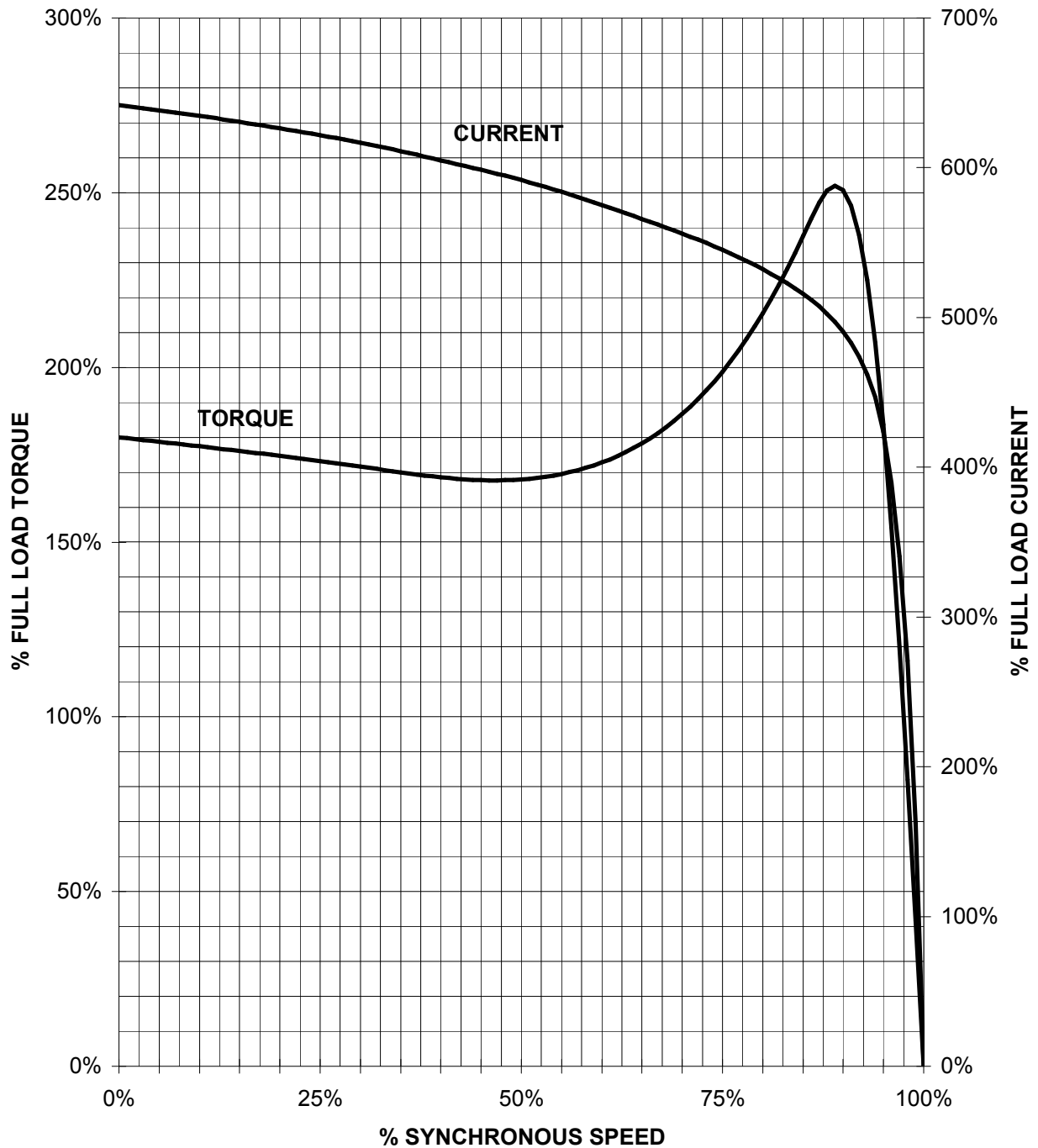
- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.

Tolerance	Surface	Material	Weight	Scale
F50G GF E00GF H00H E	Author Creator Approval Department Change Order	ÖVS T æ : ^ æ @ } *	E	{ {
SIEMENS	Doc. State	Item No	Doc Type	
	Revision	Index	Doc No	Paper Size
© Siemens AG	Project No	Ref No	1st Language	2nd Language
2018	E	E	^	â
			Sheet	F of F

# SIEMENS INDUSTRY, INC.

HP 30 VOLTS < 600V RPM 1800 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 286T NEMA B

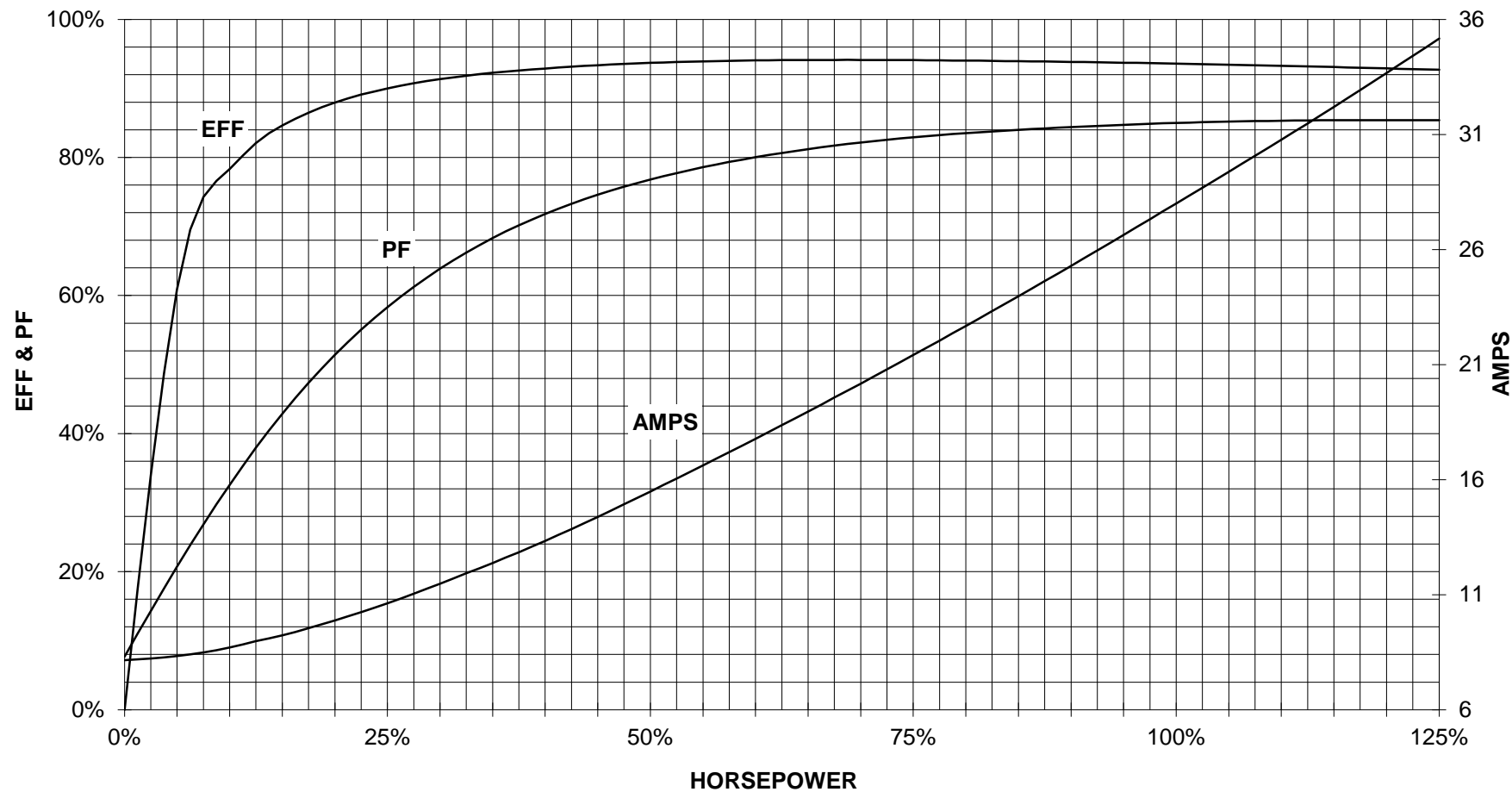
## TORQUE & CURRENT VS. SPEED



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

30 HP 1800 RPM 286T FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

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

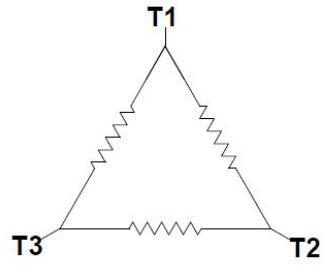


CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.

REV. 1

Main terminal diagram



3 LEAD DELTA			
LINES			CONN.
L1	L2	L3	
T1	T2	T3	Δ

responsible dep.  
DI MC LVM

technical reference

created by

approved by

Project

**SIEMENS**

document type  
Wiring Diagram

title  
1LE2421-2CB21-3AA3

document status  
free

document number

customer