

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

Totally Enclosed Fan Cooled (TEFC)



**MLFB-Ordering data:** 1LE2421-4CD51-2AA3

**Motor type:** SD100 IEEE841 - NEMA Premium Efficiency

Client order no.:

Order no.:

Offer no.:

Remarks:

Item no.:

Consignment no.:

Project:

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]	$T_A/T_N$ LRT [%]	$T_k/T_N$ BDT [%]
						4/4	3/4	1/2	0	4/4		3/4	1/2	4/4	3/4	1/2				
460	$\Delta$	60	150.00	110.00	885	180.00	139.30	103.40	61.00	1085.0	94.1	94.5	94.3	83.0	80.0	72.0	890.0	130	200	

Frame Type 449T	Type of constr.: (A) Foot mounted - End shield	Ins. Cl.: F	Motor Prot.: (A) Without Protection	NEMA Des.: B	S.F.: 1.15
Mtr WT: 2,499 lbs	Mounting: (3) F-1, Standard Floor Mount, T. Box LHS	Temp. Rise Cl.: B	Amb. Temp.: +40 to -20 °C @1000 m	kVA: G	IP55

### Mechanical data

#### WK2

Rotor Moment of Inertia:	0	Lb-ft <sup>2</sup>
Ext Load Inertia Capability:	3460.0	Lb-ft <sup>2</sup>

#### Safe Stall Time

Hot:	20.0	s
Cold:	25.0	s

#### Typical Noise Data

A-weighted Sound		
Sound Pressure:	86.0	dB(A)
Sound Power:	74.0	dB(A)

#### Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3 feet	65.0	69.0	70.0	65.0	61.0	52.0	dB(A)

#### Bearings

	DE	NDE
Bearing size:	NU 320	6316 Z C3 S0
Bearing Type:	Roller Bearing	Ball Bearing
AFBMA:	100RU03M0	80BC03JP30

#### Grease

Capacity:	14.50	oz	7.50	oz
Type:	Exxon Mobile EM			
Thickener:	Polyurea			

#### Frame

Frame material:	cast iron
Coating (paint finish):	Standard Paint
Color, paint shade:	RAL 7030

#### Terminal box

Terminal box position:	(3) F-1, Standard Floor Mount, T. Box LHS
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#### Lead Wire Connection

Description:	6 LEAD - DELTA				
Voltage	L1	L2	L3	Connected together	
----	----	----	----	----	-
----	T1	T2	T3	----	$\Delta$

#### Ventilation Type

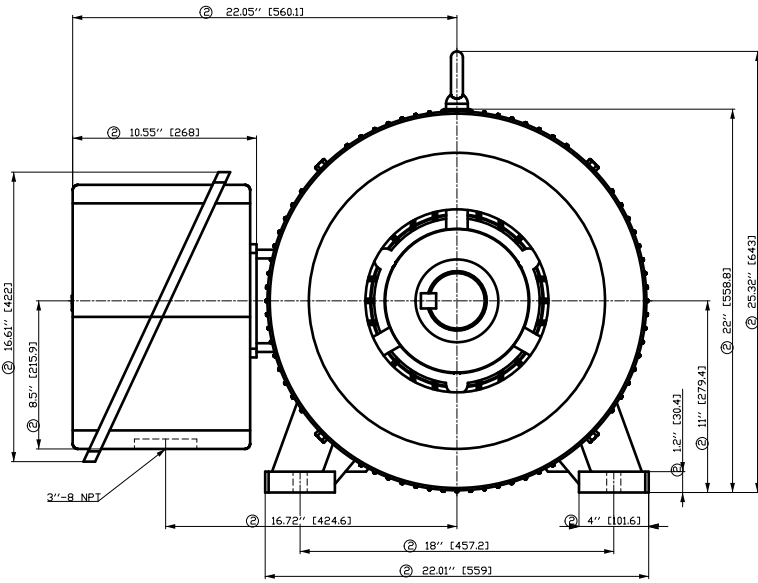
Type of Cooling:	TEFC
Fan Material:	Polypropylen ESD
Fan Rotation:	Bidirectional

#### Additional information

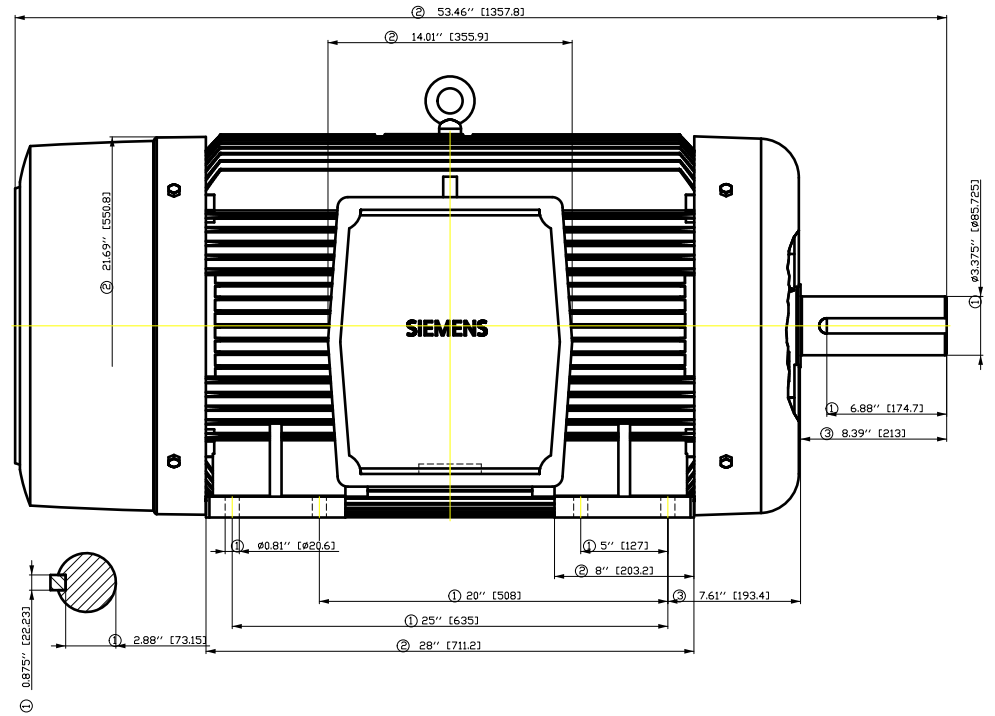
VFD Operation:	CT: 4:1	VT: 20:1
Area: classification:	Class I Division 2 Gr. A, B, C or D	

#### Notes

$I_L/I_N$  = locked rotor current / current nominal  $T_k/T_N$  = break down torque / nominal torque  
 $T_A/T_N$  = locked rotor torque / torque nominal <sup>1)</sup> Value is valid only for DOL operation with motor design IC411



- 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.

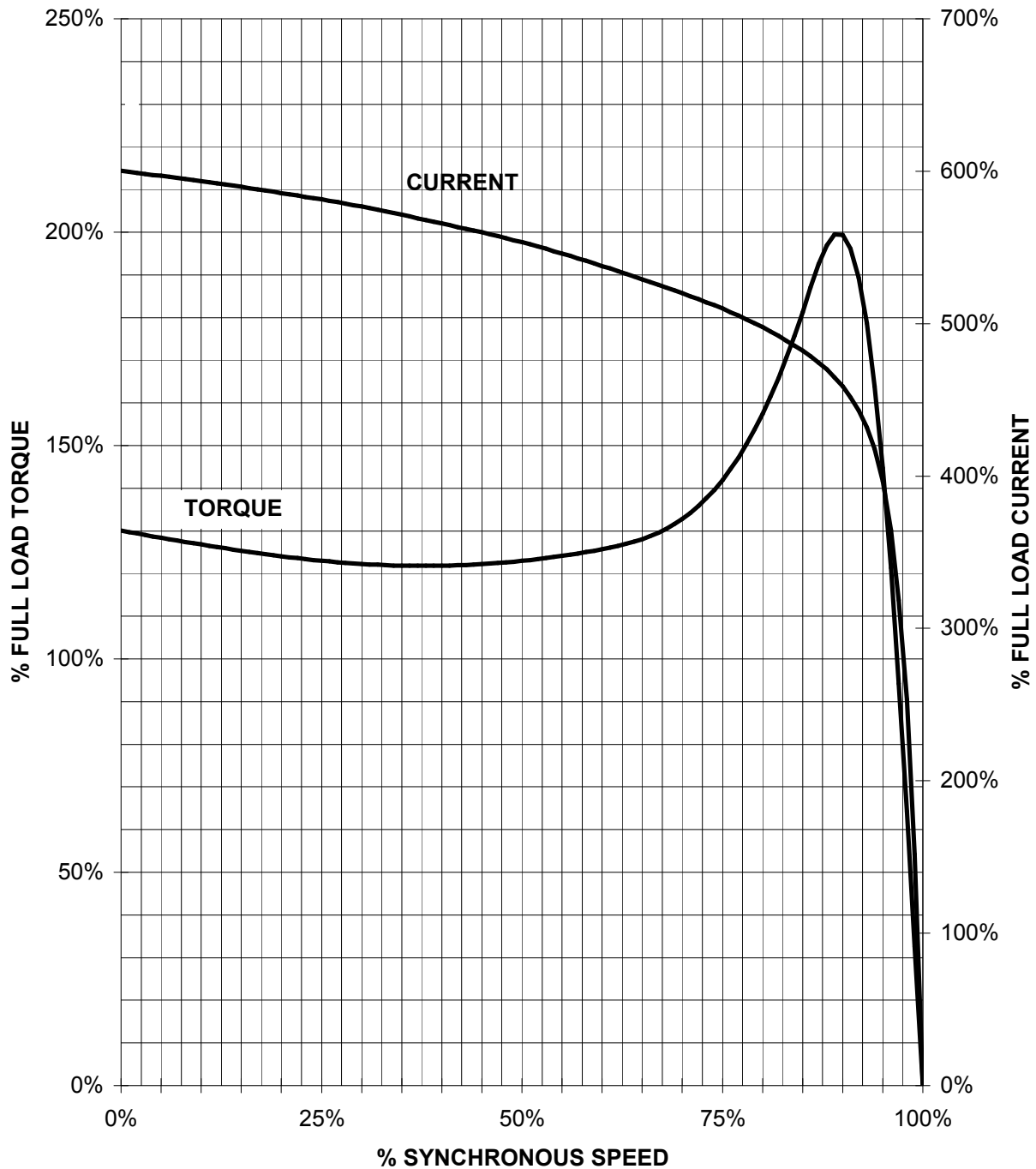


Tolerance	Surface	Material	Weight	Scale
F50G GF8 ÖÖI FÉ00H É	Author Creator Approval Department Change Order	ÖS T æ : ^ & @ } *	É	{ {
SIEMENS	Doc State Revision	MFB Item No Doc No	Doc Type Paper Size	CH ^ } â ^
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# SIEMENS INDUSTRY, INC

HP 150 VOLTS < 600V RPM 900 TYPE SD100 IEEE841  
HZ 60 PHASE 3 FRAME 449T NEMA B

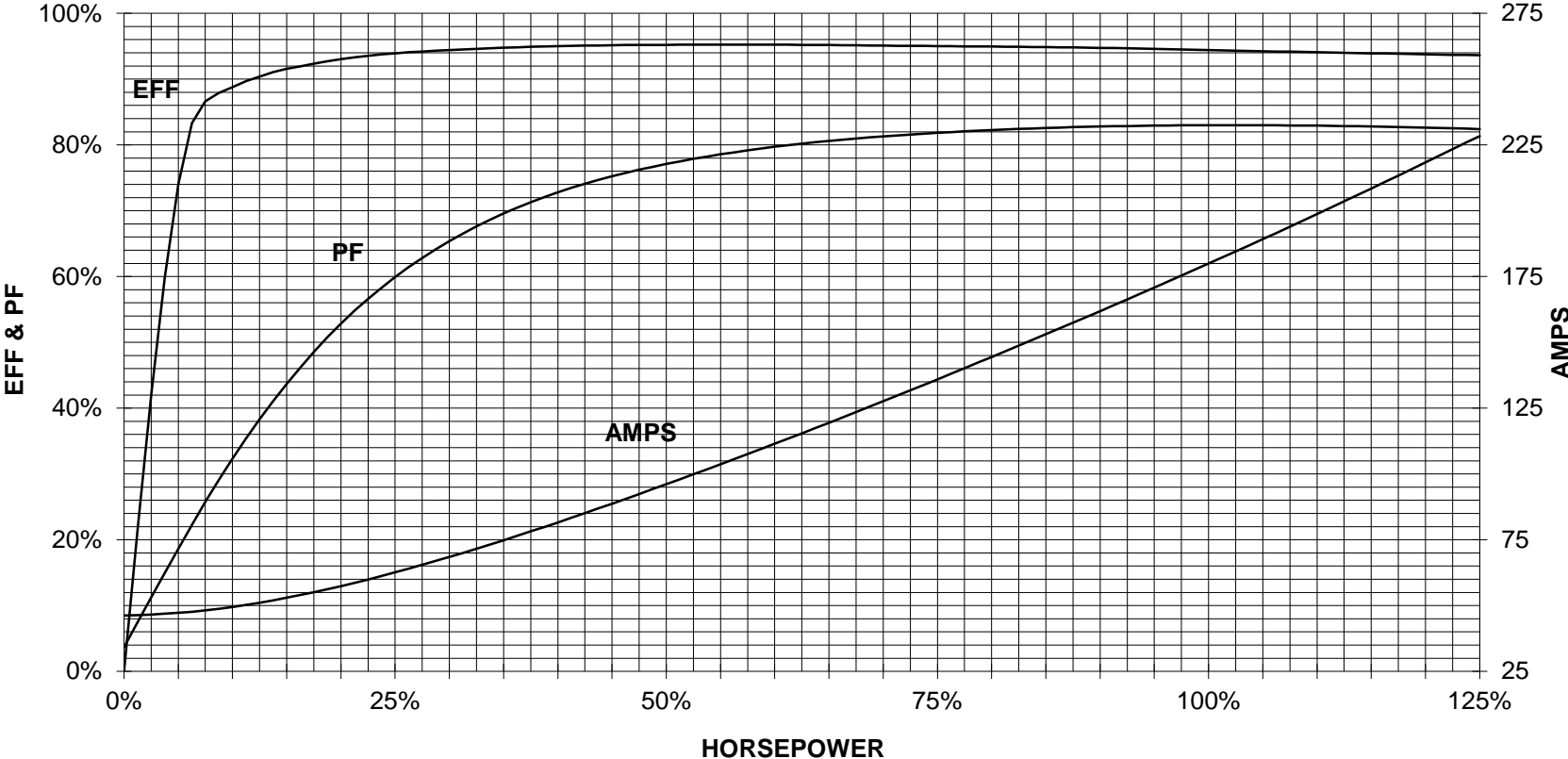
## TORQUE & CURRENT VS. SPEED



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

150 HP 900 RPM 449T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

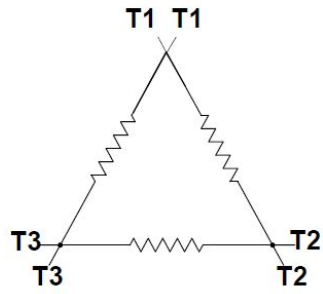
**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**SD100 IEEE841**



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

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

Main terminal diagram



6 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  
1LE2421-4CD51-2AA3

document status  
free

document number

customer