

Data sheet for three-phase Squirrel-Cage-Motors

Totally Enclosed Fan Cooled (TEFC)



MLFB-Ordering data: 1LE2311-1AA21-4AA3

Motor type: SD100 - NEMA Premium Efficiency Plus

Client order no.:

Order no.:

Offer no.:

Remarks:

Item no.:

Consignment no.:

Project:

U [V]	Δ/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	Y	60	1.50	1.00	3,550	1.90	1.60	1.20	0.80	20.0	87.5	86.0	83.0	84.0	79.0	69.0	2.2	227	477	
230	YY	60	1.50	1.00	3,550	3.80	3.10	2.45	1.60	40.0	87.5	86.0	83.0	84.0	79.0	69.0	2.2	227	477	

Frame Type 143T	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: 70 lbs	Mounting: (3) F-1, Standard Floor Mount, T. Box LHS	Temp. Rise Cl.: B	Amb. Temp.: +40 to -20 °C @1000 m	kVA: M	IP55

Mechanical data

WK2

Rotor Moment of Inertia: 0 Lb-ft²

Ext Load Inertia Capability: 1.8 Lb-ft²

Safe Stall Time

Hot: 19.0 s

Cold: 26.0 s

Typical Noise Data

A-weighted Sound

Sound Pressure: 76.0 dB(A)

Sound Power: 64.0 dB(A)

Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3 feet	44.0	52.0	62.0	59.0	54.0	46.0	dB(A)

Bearings

	DE	NDE
Bearing size:	6205 Z C3 S0	6205 Z C3 S0
Bearing Type:	Ball Bearing	Ball Bearing
AFBMA:	25BC02JP30	25BC02JP30

Grease

Capacity:	0.10 oz	0.10 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

Lead Wire Connection

Description:	9 LEAD - WYE				
Voltage	L1	L2	L3	Connected together	
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6	YY
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y

Ventilation Type

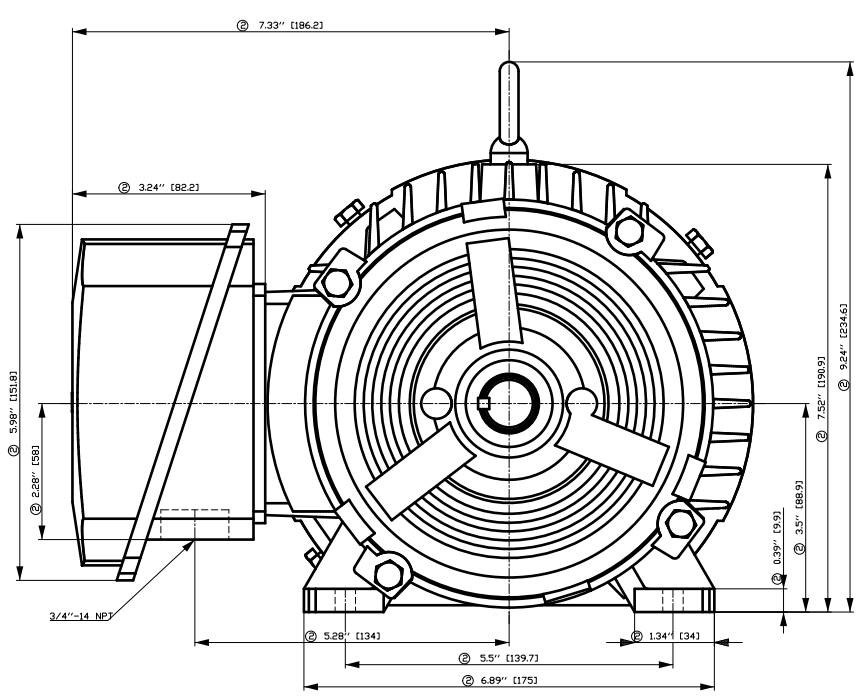
Type of Cooling:	TEFC
Fan Material:	Polypropylen ESD
Fan Rotation:	Bidirectional

Additional information

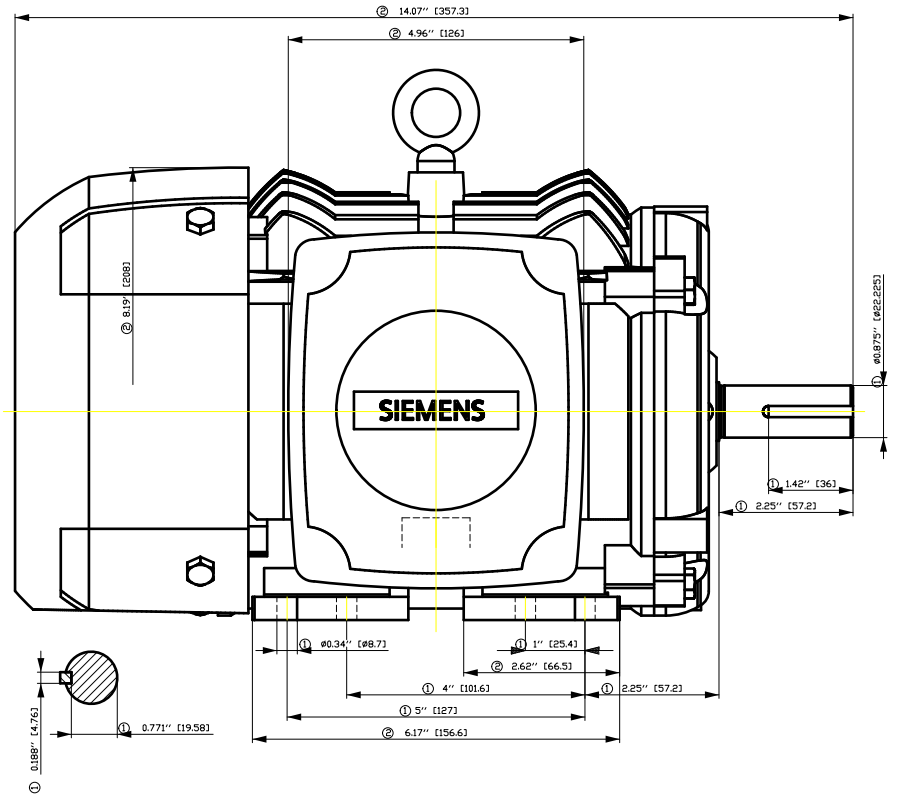
VFD Operation:	CT: 4:1	VT: 20:1
Area: classification:	Class I Division 2 Gr. A, B, C or D	

Notes

I_A/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 ¹⁾ 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.

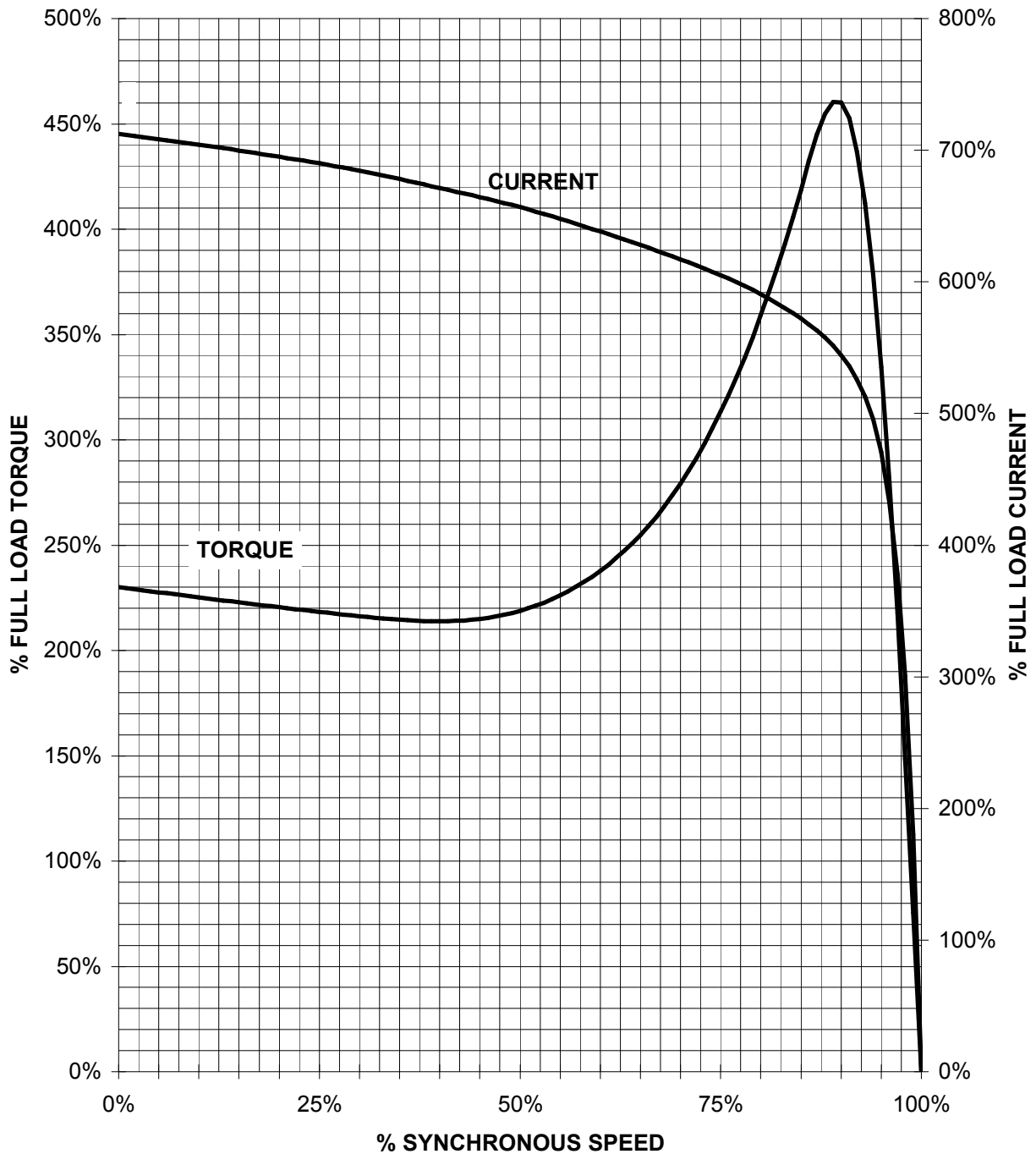


Tolerance	Surface	Material	Weight	Scale
F50G-FF0-00G-F0-00H E	Author Creator Approval Department Change Order	ÖVS T a e : ^ & @ } * MLFB	E	{ {
SIEMENS	Doc. State Revision	FEP1 00E Index RS	Item No Doc No	Paper Size 1st Language 2nd Language
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			Doc Type	/
			Sheet	F of F

SIEMENS INDUSTRY, INC.

HP 1,5 VOLTS < 600V RPM 3600 TYPE SD100 NPP
HZ 60 PHASE 3 FRAME 143T NEMA B

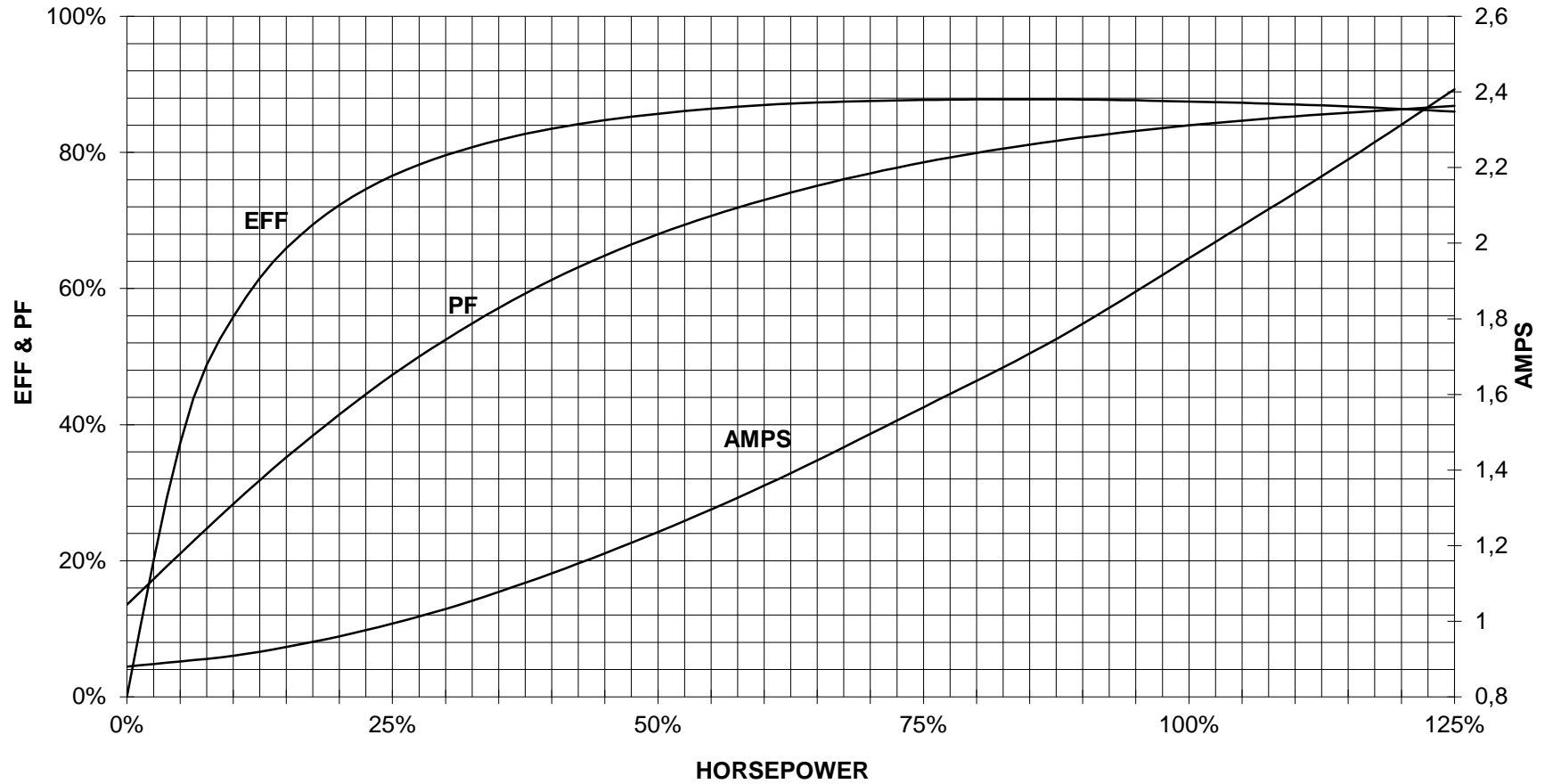
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

1.5 HP 3600 RPM 143T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
SD100 NPP



CUSTOMER _____ ORDER # _____ PO # _____

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

REV. 1

Main terminal diagram



9 LEAD WYE						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7	T2 T6	T3 T9	T4 T5 T6	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

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