

Data sheet for three-phase Squirrel-Cage-Motors

Totally Enclosed Fan Cooled (TEFC)



MLFB-Ordering data: 1LE2221-1AC31-4AA3

Motor type: GP100 - NEMA Premium Efficiency

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]					Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque	T _A /T _N	T _k /T _N
						4/4	3/4	1/2	0	LRC	4/4	3/4	1/2	4/4	3/4	1/2	[lb-ft]	LRT [%]	BDT [%]
460	Y	60	1.00	0.75	1,165	1.60	1.30	1.20	1.00	11.0	82.5	82.5	80.2	70.9	63.3	50.2	4.5	256	344
230	YY	60	1.00	0.75	1,165	3.20	2.69	2.33	2.00	22.0	82.5	82.5	80.2	70.9	63.3	50.2	4.5	256	344

Frame Type 145T	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: K	IP55

Mechanical data

WK2

Rotor Moment of Inertia: 0 Lb-ft²

Ext Load Inertia Capability: 15.0 Lb-ft²

Safe Stall Time

Hot: 18.0 s

Cold: 31.0 s

Typical Noise Data

A-weighted Sound

Sound Pressure: 58.0 dB(A)

Sound Power: 50.0 dB(A)

Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3 feet	31.0	43.0	47.0	40.0	36.0	31.0	dB(A)

Bearings

	DE	NDE
Bearing size:	6205 ZZ C3 S0	6205 ZZ C3 S0
Bearing Type:	Ball Bearing	Ball Bearing
AFBMA:	25BC02JPP30	25BC02JPP30

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	Y Y	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

Ventilation Type

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

Additional information

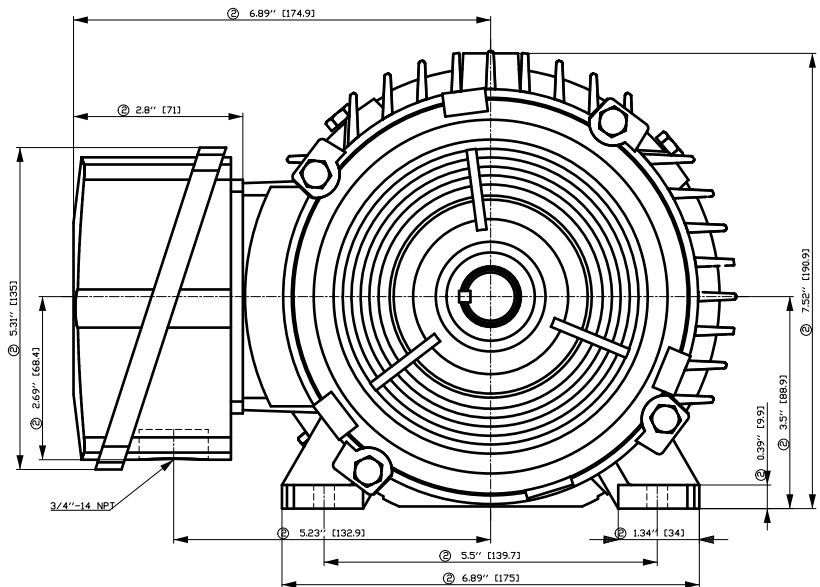
VFD Operation:	CT: 4:1	VT: 20:1
Area: classification:	without	

Notes

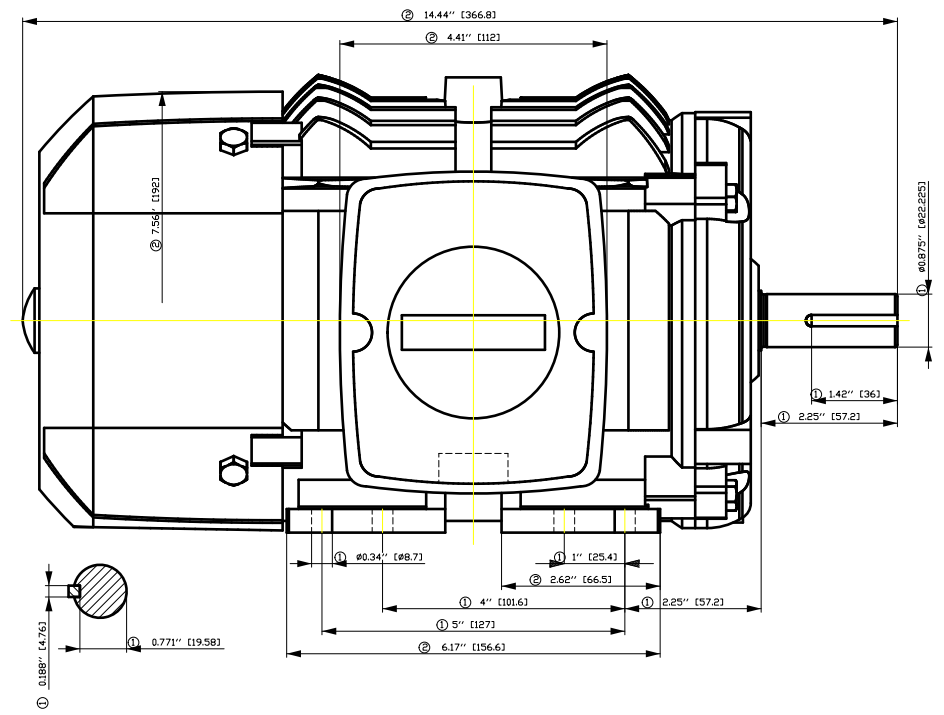
I_L/I_N = locked rotor current / current nominal T_k/T_N = break down torque / nominal torque
 T_A/T_N = locked rotor torque / torque nominal ¹⁾ Value is valid only for DOL operation with motor design IC411

Technical data are subject to change! There may be discrepancies between calculated and rating plate values.

Generated:
2020-09-17 01:18



- 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.

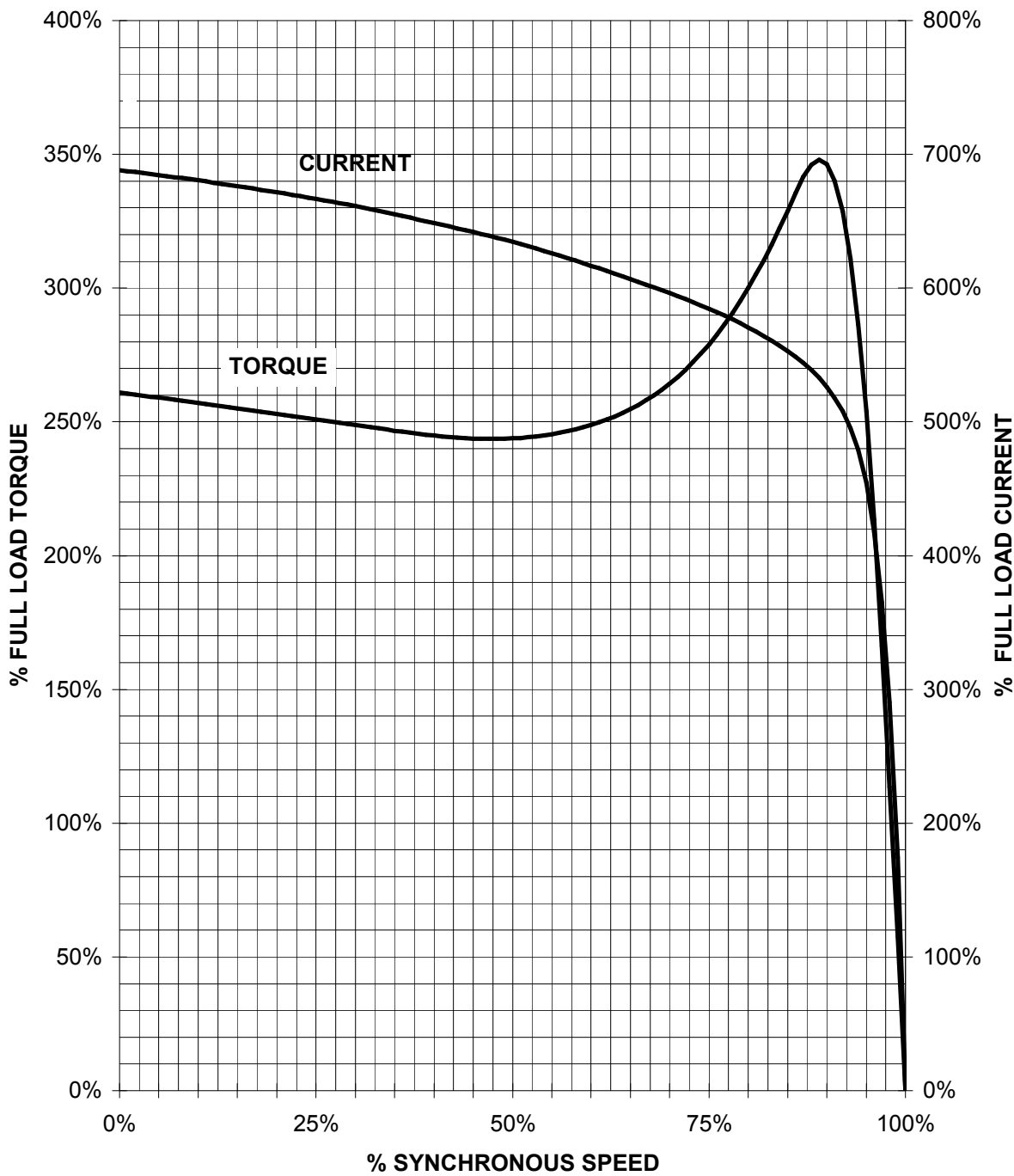


Tolerance	Surface	Material	Weight -	Scale  mm
1LE2221-1AC31-4AA3 -	Author	Dimensional drawing Maßzeichnung		
	Creator DTK			
	Approval			
	Department			
	Change Order			
	Doc State 9/17/20	MLFB	Doc Type /	
	Revision Index RS	Item No	Paper Size A3	
		Doc No	1st Language en	
			2nd Language de	
© Siemens AG 2018	Project No -	Ref No -	Sheet 1 of 1	

SIEMENS INDUSTRY, INC.

HP 1 VOLTS < 600V RPM 1200 TYPE GP100
HZ 60 PHASE 3 FRAME 145T NEMA B

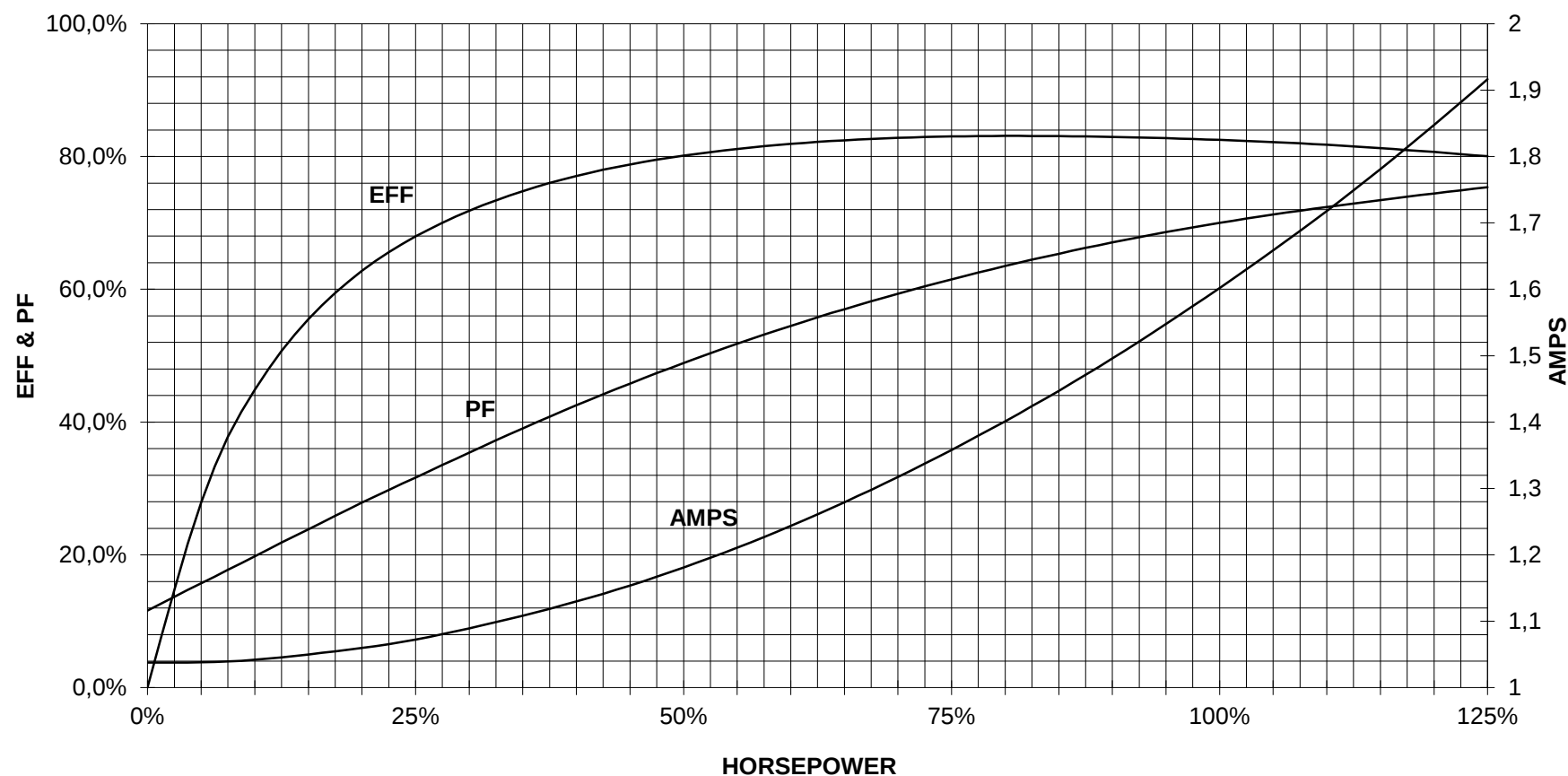
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

1 HP 1200 RPM 145T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
GP100



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	Y Y	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

responsible dep.
DI MC LVM

technical reference

created by

approved by

project

SIEMENS

document type
Wiring Diagram

title
1LE2221-1AC31-4AA3

document status

free

document number

customer