

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

Totally Enclosed Fan Cooled (TEFC)



MLFB-Ordering data: **1LE2221-4AC21-6AA3**

Motor type: **GP100 - 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 <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	1/2	4/4	3/4	1/2				
460	$\Delta$	60	75.00	55.00	1,185	93.00	72.10	54.50	34.00	543.0	94.5	94.9	94.7	80.0	77.0	68.0	332.0	180	220	
230	$\Delta \Delta$	60	75.00	55.00	1,185	186.00	144.15	109.05	68.00	1086.0	94.5	94.9	94.7	80.0	77.0	68.0	332.0	180	220	

Frame Type 405T	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: 1,257 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	IP54

### Mechanical data

#### WK2

Rotor Moment of Inertia:	24	Lb-ft <sup>2</sup>
Ext Load Inertia Capability:	904.0	Lb-ft <sup>2</sup>

#### Safe Stall Time

Hot:	33.0	s
Cold:	45.0	s

#### Typical Noise Data

A-weighted Sound		
Sound Pressure:	77.0	dB(A)
Sound Power:	66.0	dB(A)

#### Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3 feet	58.0	61.0	62.0	57.0	48.0	39.0	dB(A)

#### Bearings

	DE	NDE
Bearing size:	6316 Z C3 S0	6214 ZZ C3 S0
Bearing Type:	Ball Bearing	Ball Bearing
AFBMA:	80BC03JP30	70BC02JPP30

#### Grease

Capacity:	7.50	oz	6.70	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 - DELTA				
Voltage	L1	L2	L3	Connected together	
LOW	T1 T7 T6	T2 T8 T4	T3 T9 T5	---	$\Delta \Delta$
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	$\Delta$

#### Ventilation Type

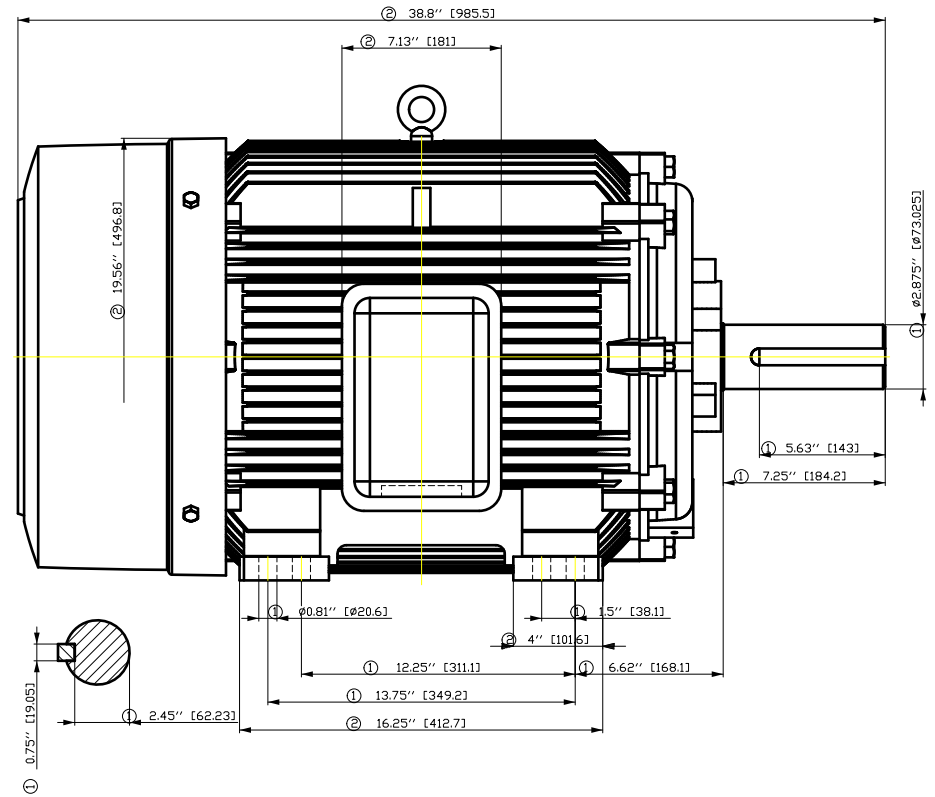
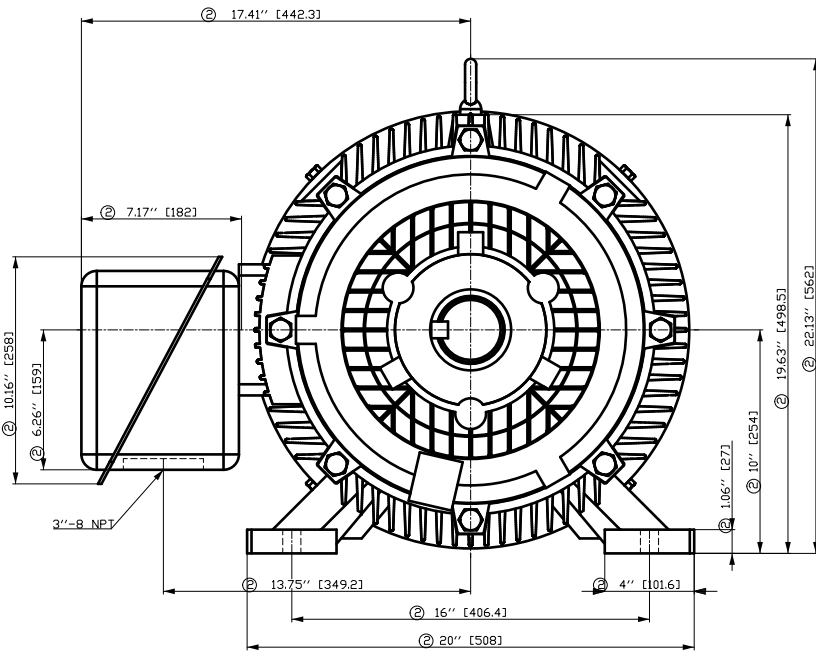
Type of Cooling:	TEFC
Fan Material:	Polypropylen ESD
Fan Rotation:	Bidirectional

#### Additional information

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

#### Notes

I<sub>A</sub>/I<sub>N</sub> = locked rotor current / current nominal T<sub>k</sub>/T<sub>N</sub> = break down torque / nominal torque  
 T<sub>A</sub>/T<sub>N</sub> = locked rotor torque / torque nominal <sup>1)</sup> Value is valid only for DOL operation with motor design IC411



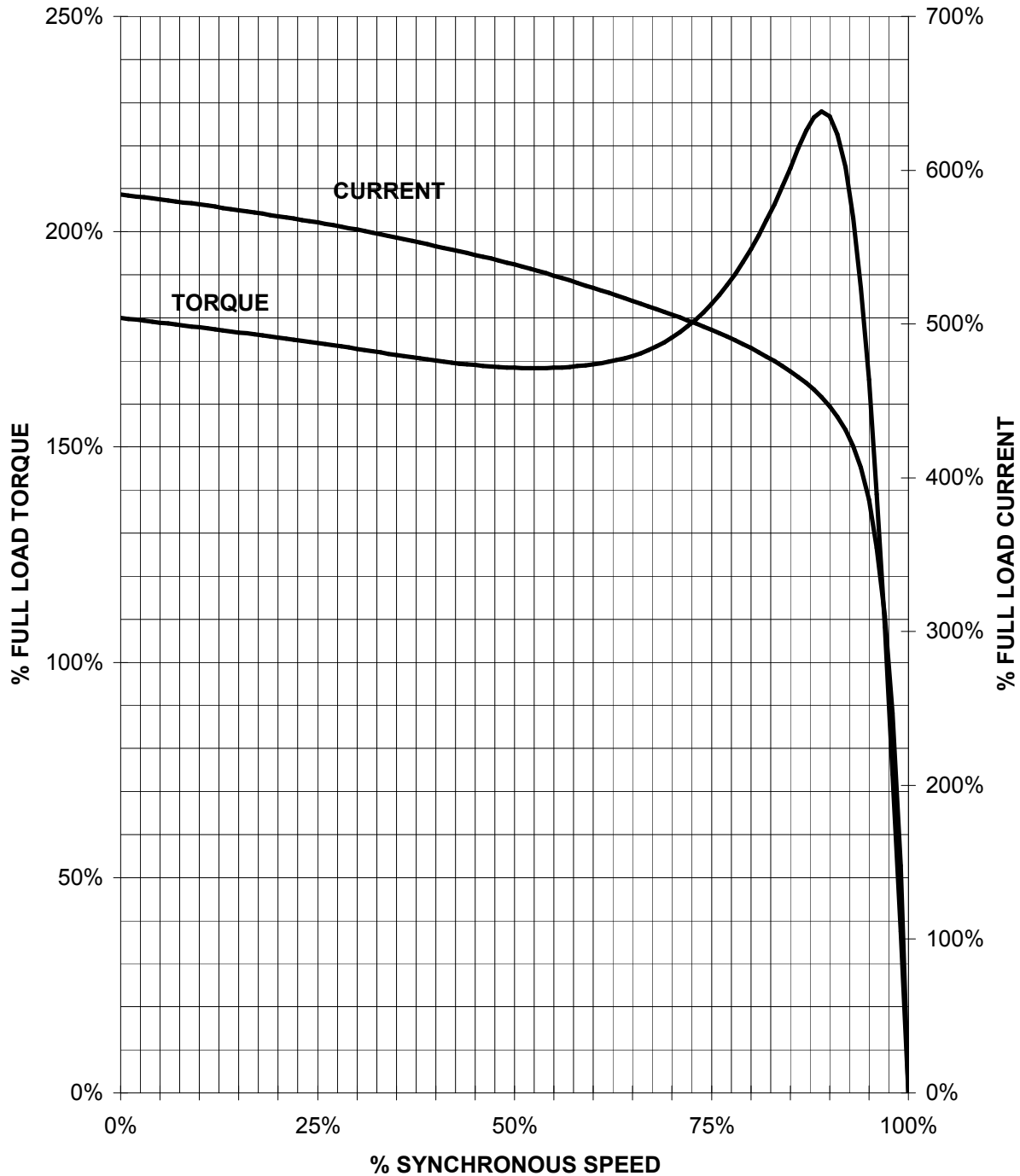
- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.

Tolerance	Surface	Material	Weight	Scale
F50GGGF E	Author Creator Approval Department Change Order	ÖVS T a : ^ @ } *	E	{ {
SIEMENS	Doc. State	Item No	Doc Type	Paper Size
	Revision	Index	Doc No	1st Language
	Project No	RS	Ref No	2nd Language
	© Siemens AG 2018	E	E	F of F

# SIEMENS INDUSTRY, INC.

HP 75    VOLTS < 600V    RPM 1200    TYPE GP100  
HZ 60    PHASE 3    FRAME 405T    NEMA B

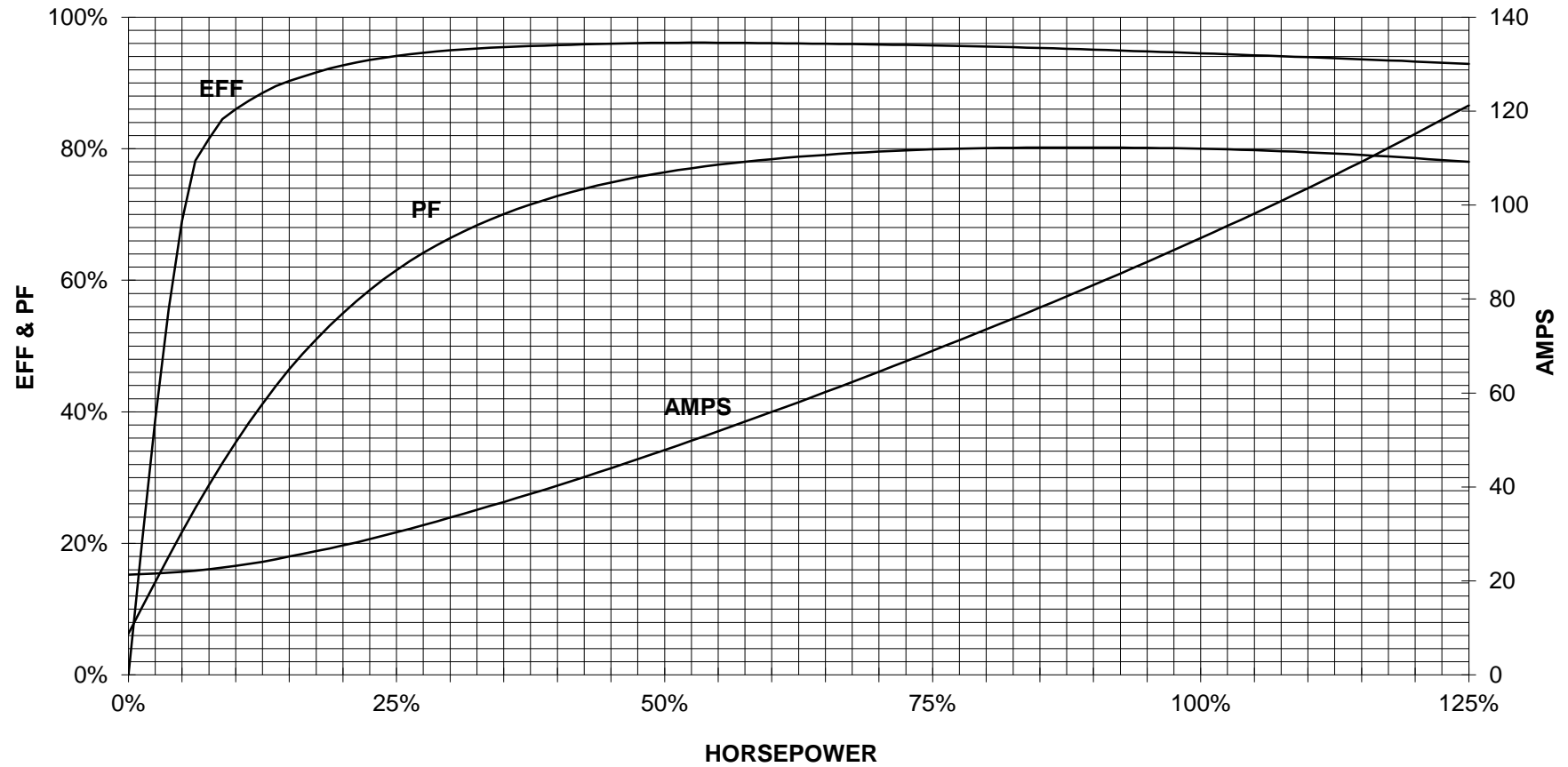
## TORQUE & CURRENT VS. SPEED



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

75 HP 1200 RPM 405T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**GP100**

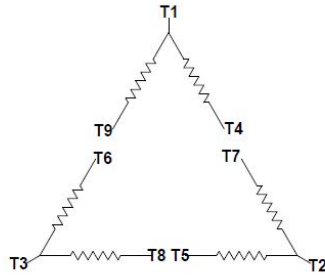


CUSTOMER \_\_\_\_\_ ORDER # \_\_\_\_\_ PO # \_\_\_\_\_

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

REV. 1

Main terminal diagram



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

responsible dep. DI MC LVM	technical reference	created by	approved by	project
<b>SIEMENS</b>	document type Wiring Diagram	document status free		customer
	title 1LE2221-4AC21-6AA3	document number		
© Siemens AG 2019	rev. 01	creation date 12/03/2019	language en/en	Page 1/1