

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

Totally Enclosed Fan Cooled (TEFC)



MLFB-Ordering data: 1MB2221-3CC21-6AA3

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]					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	LRC	4/4	3/4	1/2	4/4	3/4	1/2			
460	$\Delta$	60	50.00	-/-	1,185	62.00	49.00	37.20	24.00	363.0	94.1	94.3	94.0	80.0	76.0	67.0	222.0	190	220
230	$\Delta\Delta$	60	50.00	-/-	1,185	124.00	97.99	74.34	48.00	726.0	94.1	94.3	94.0	80.0	76.0	67.0	222.0	190	220

Frame Type	Type of constr.: ( A ) Foot mounted - End shield	Ins. Cl.: Insulation class F	Motor Prot.: (A) No winding protection	NEMA Des.: B	S.F.: 1.15
Mtr WT: 850 lbs	Mounting: (3) Mounting - F-1	Temp. Rise Cl.: B	Amb. Temp.: +55 °C @1000 m	kVA: G	IP65

### Mechanical data

#### WK2

Rotor Moment of Inertia: 16 Lb-ft<sup>2</sup>

Ext Load Inertia Capability: 620.0 Lb-ft<sup>2</sup>

#### Safe Stall Time

Hot: 29.0 s

Cold: 55.0 s

#### Typical Noise Data

A-weighted Sound

Sound Pressure: 71.0 dB(A)

Sound Power: 60.0 dB(A)

Octave Band Center Frequencies Hertz

	250	500	1000	2000	4000	8000	Hz
SPL@3 feet	48.0	53.0	54.0	53.0	52.0	50.0	dB(A)

#### Bearings

	DE	NDE
Bearing size:	6314 Z C3 S0	6314 Z C3 S0
Bearing Type:	Ball Bearing	Ball Bearing
AFBMA:	70BC03JP30	70BC03JP30

#### Grease

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

#### Frame

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

#### Terminal box

Terminal box position: (3) Mounting - F-1

#### 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

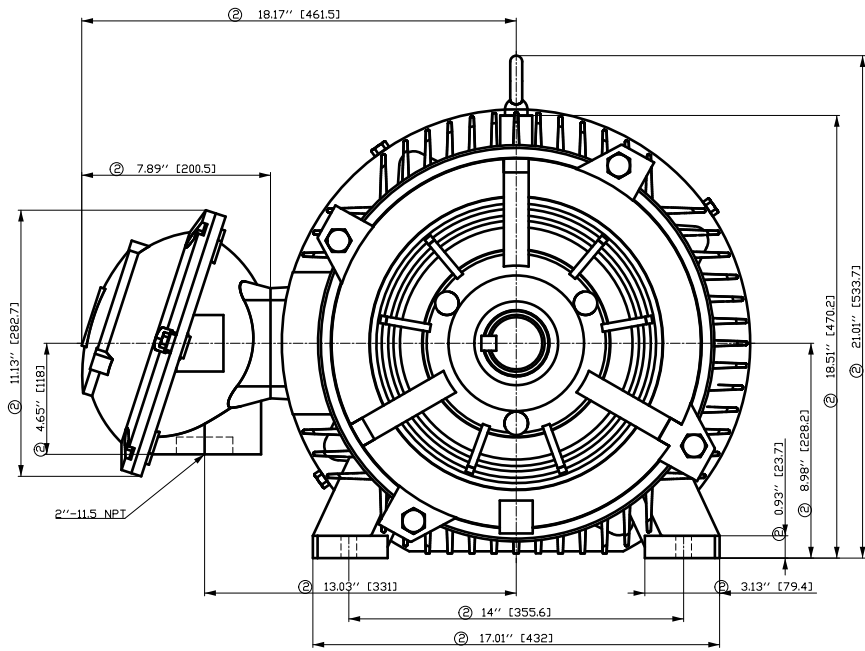
Type of Cooling:	TEFC
Fan Material:	Polypropylen ESD
Fan Rotation:	Bidirectional

#### Additional information

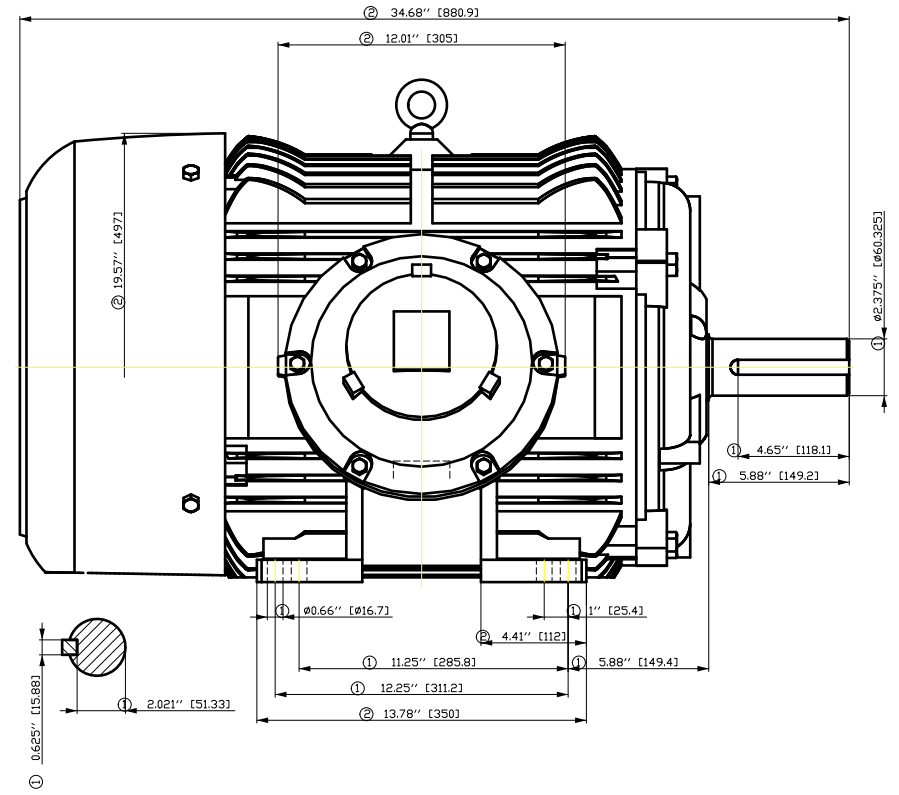
VFD Operation:	CT: 4:1	VT: 20:1
Area: classification:	Class I Division 1 Groups D	
Brake:		

#### 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 <sup>1)</sup> Value is valid only for DOL operation with motor design IC411

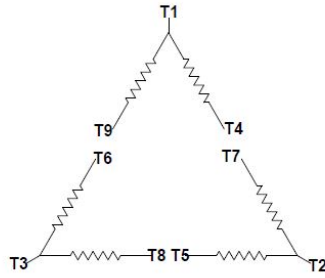


- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.



Tolerance	Surface	Material	Weight	Scale	
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E	Creator				ÖVS
	Approval				T ä : ^ä@` } *
	Department				
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	Revision	Index	RS	1st Language	
				2nd Language	
© Siemens AG	Project No	E	Ref No	E	
2018				Sheet F of F	

Main terminal diagram



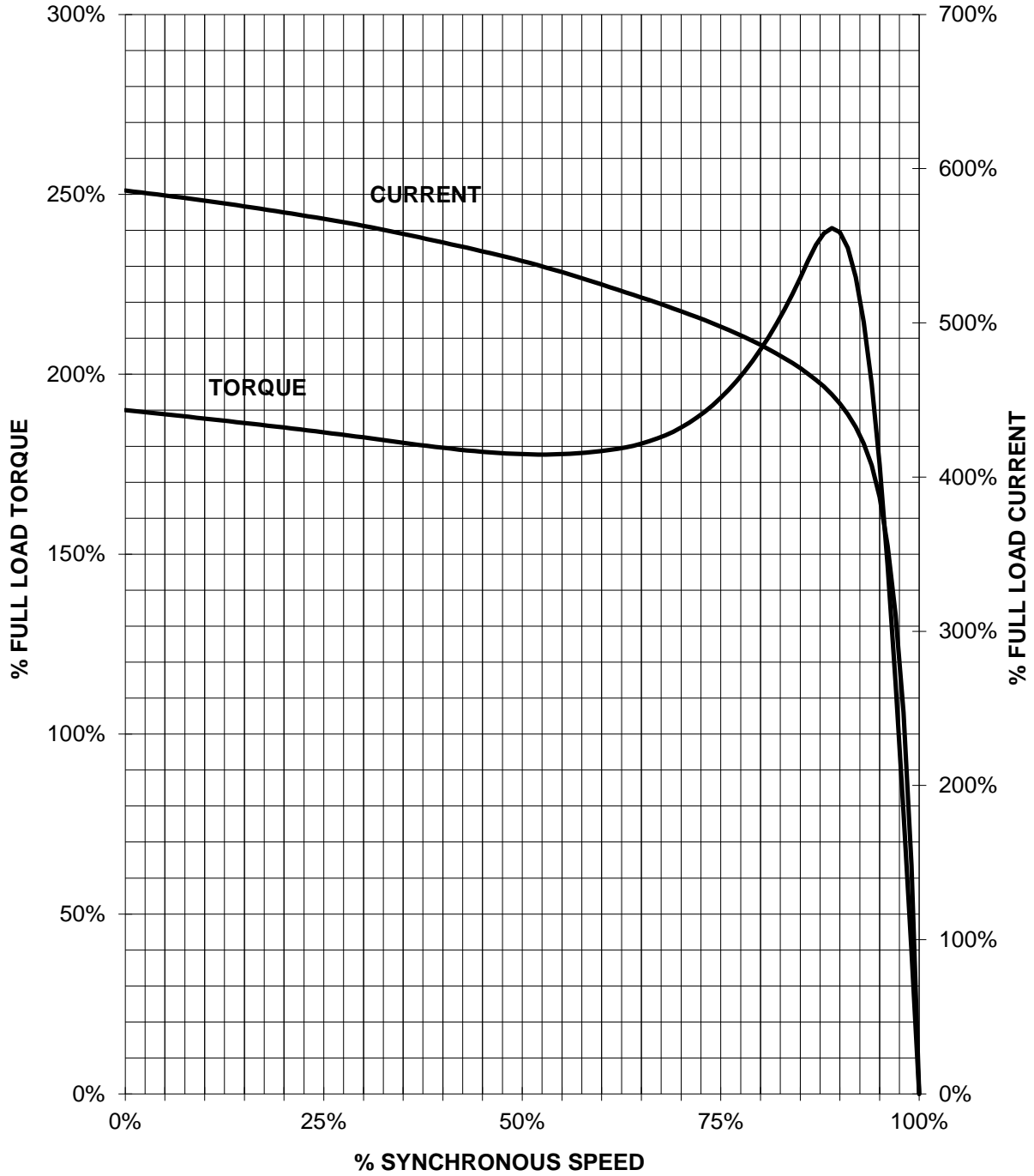
9 LEAD DELTA						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7 T6	T2 T8 T4	T3 T9 T5		Δ Δ	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Δ	

responsible dep. DI MC LVM	technical reference	created by	approved by	project
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# SIEMENS INDUSTRY, INC.

HP 50    VOLTS <600    RPM 1200    TYPE XP100 1D1  
HZ 60    PHASE 3    FRAME 365T    NEMA B

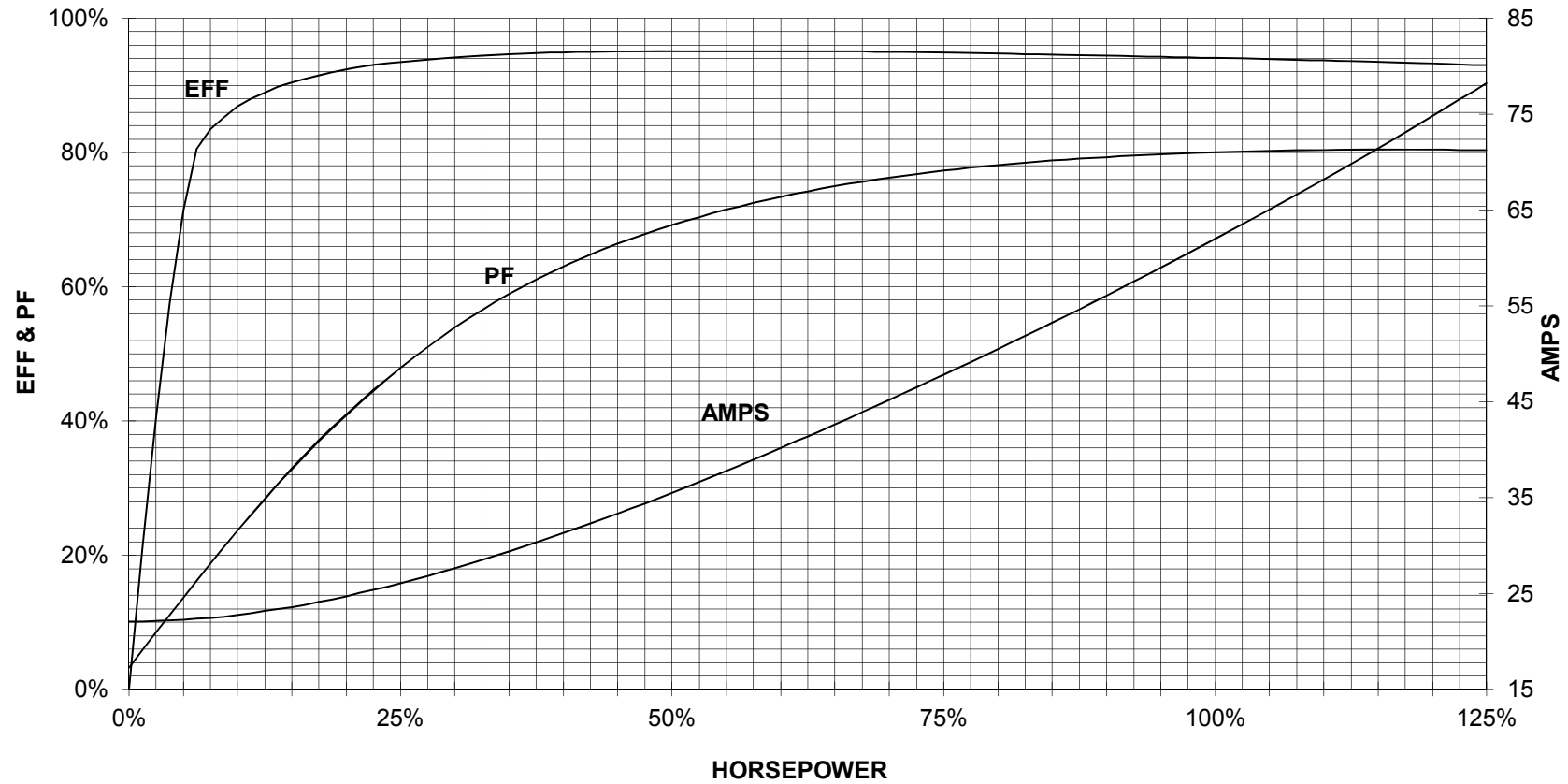
## TORQUE & CURRENT VS. SPEED



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

50 HP 1200 RPM 365T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**XP100 1D1**



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

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

REV. 1