

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

Motor type: FS: 405TS - 2p - 100 hp -

Client order no.	Item-No.	Offer no.
Order no.	Consignment no.	project

Remarks

Electrical data Class I Division 1 Groups D

U [V]	Δ/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	2/4	4/4	3/4	2/4			
460		60	100.00	-/-	3,570	108.00	80.60	55.00	19.00	725.0	94.1	94.7	94.6	92.0	92.0	90.0	147.0	120	200
230		60	100.00	-/-	3,570	216.00					94.1	94.7	94.6	92.0	92.0	90.0	147.0	120	200

Frame Type: 405TS	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: 1,020		Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: G	I.P.: IP65


Mechanical data

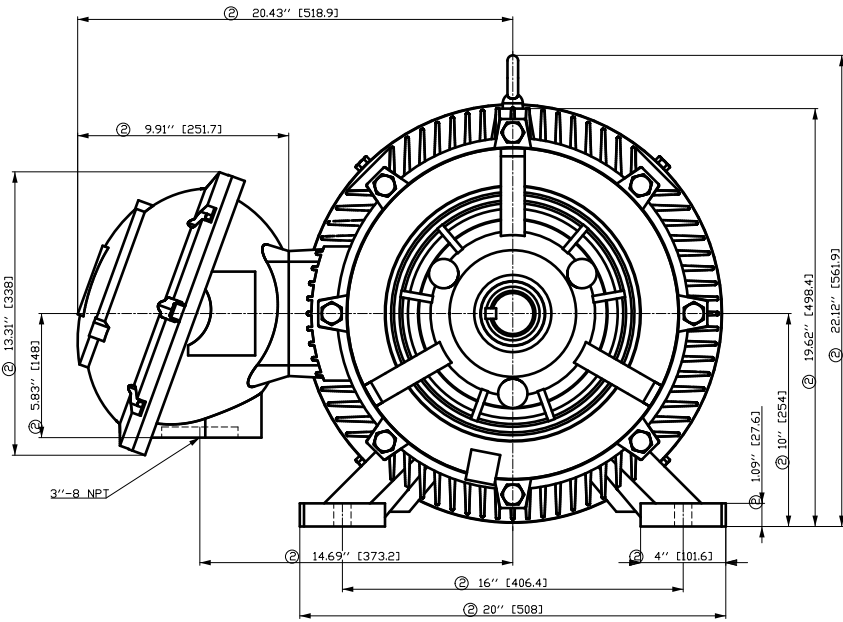
Sound level (SPL / SWL) at 60 Hz	80.0 dB(A) / 91.0 dB(A)	Thickener	Polyurea
Octave Band Center Frequencies Hertz	250 500 1000 2000 4000 8000 Hz	Safe Stall Time Hot	25 s
SPL@3		Safe Stall Time Cold	45 s
Moment of inertia	12.7 Lb-ft ²	Frame material	cast iron
Ext Load Inertia Capability:	92.0 Lb ft ²	Color, paint shade	
Bearings		Coating (paint finish)	
Bearing DE NDE	6316 Z C3 S0 6316 Z C3 S0	Ventilation Type	
Bearing_Type	Ball Bearing Ball Bearing	Method of cooling	TEFC
AFBMA:	80BC03JP30 80BC03JP30	Direction of rotation	Bidirectional
Grease		Fan Material	Polypropylen ESD
Capacity	7.50 oz 7.50 oz	VFD	CT: 4:1 VT: 20:1
Grease Type:	Exxon Mobile EM	Space heaters	without
		Brake:	-/-

Terminal box

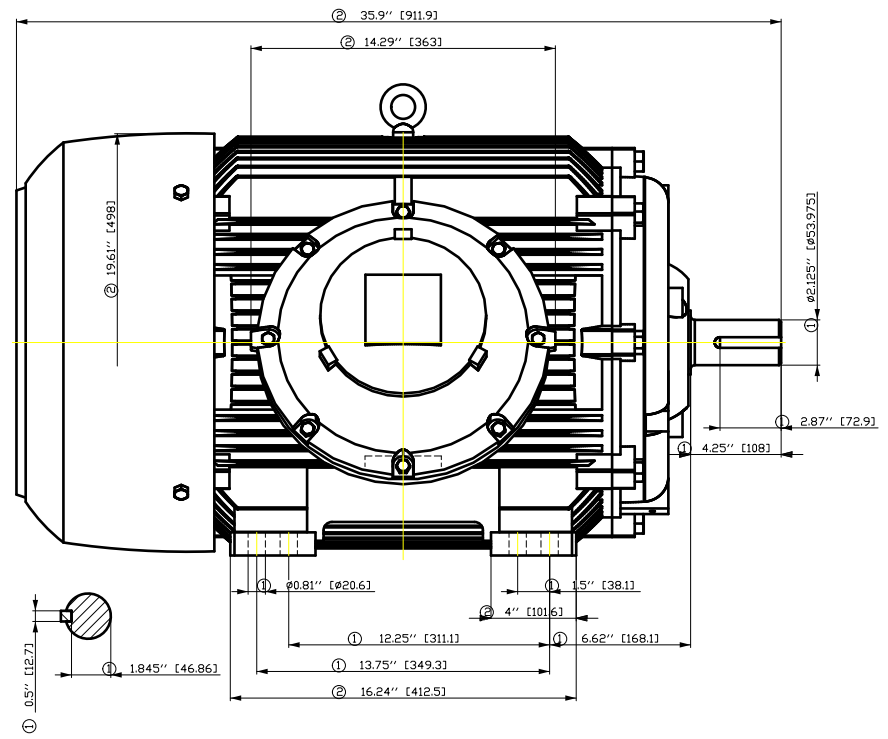
Lead Wire Connection	9 LEAD - DELTA	Terminal box position	(3) Mounting - F-1
Voltage	L1 L1 L1 Connected together	Material of terminal box	
LOW	T1 T7 T6 T2 T8 T4 T3 T9 T5	Cable entry	-/-
HIGH	T1 T2 T3 T4 T7-T5 T8-T6 T9		

Notes:
 I_r/I_N = locked rotor current / current nominal
 M_r/M_N = locked rotor torque / torque nominal
 M_d/M_N = break down torque / nominal torque
 3) Value is valid only for DOL operation with motor design IC411
 2) at rated power / at full load

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by	<i>Technical data are subject to change! There may be discrepancies between software and hardware versions</i>	
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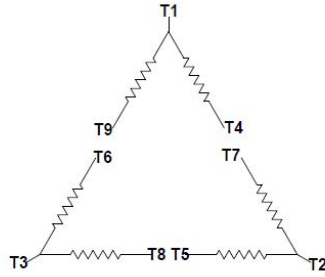


- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.



Tolerance	Surface	Material	Weight	Scale	
FT ÖGCGFÈ ÖGCGFÈ ÖGCH	Author	ÖS \} • 4 } 24/12 3 *	E		
E	Creator				ÖVS
	Approval				T æ : ^ 2 @ } *
	Department				
	Change Order	MLFB		Doc Type	
	Doc. State	FCGCGDE	Item No	Paper Size	
	Revision	Index RS	Doc No	1st Language	
				2nd Language	
© Siemens AG 2018	Project No	E	Ref No	E	
				Sheet F of F	

Main terminal diagram



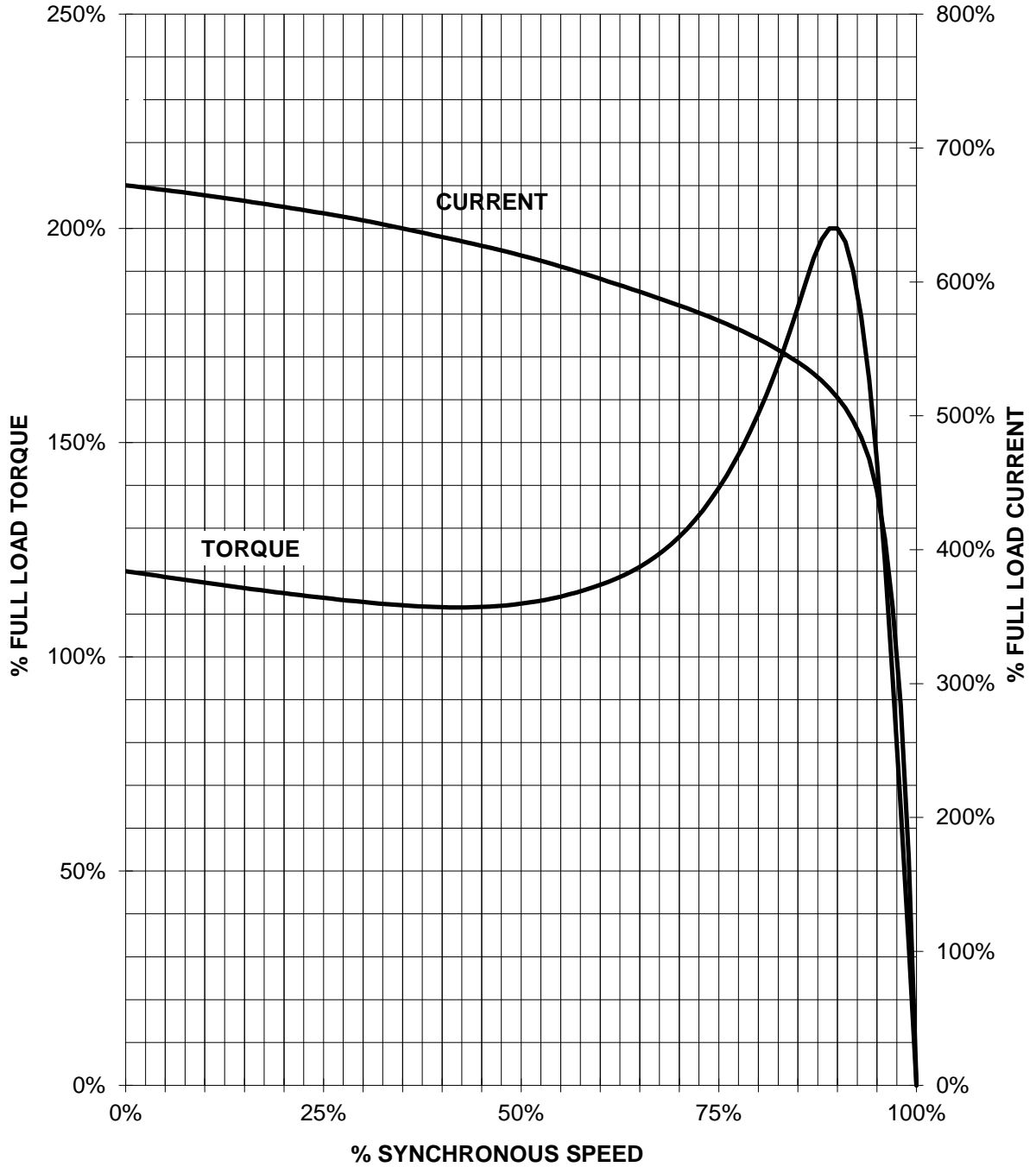
9 LEAD DELTA						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T6	T7 T4	T8 T5	T3 T9		Δ Δ
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9		Δ

responsible dep. DI MC LVM	technical reference	created by	approved by	project
SIEMENS	document type Wiring Diagram	document status free		customer
	title 1MB2221-4BA21-6AA3	document number		
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SIEMENS INDUSTRY, INC.

HP 100 VOLTS <600 RPM 3600 TYPE XP100 1D1
HZ 60 PHASE 3 FRAME 405TS NEMA B

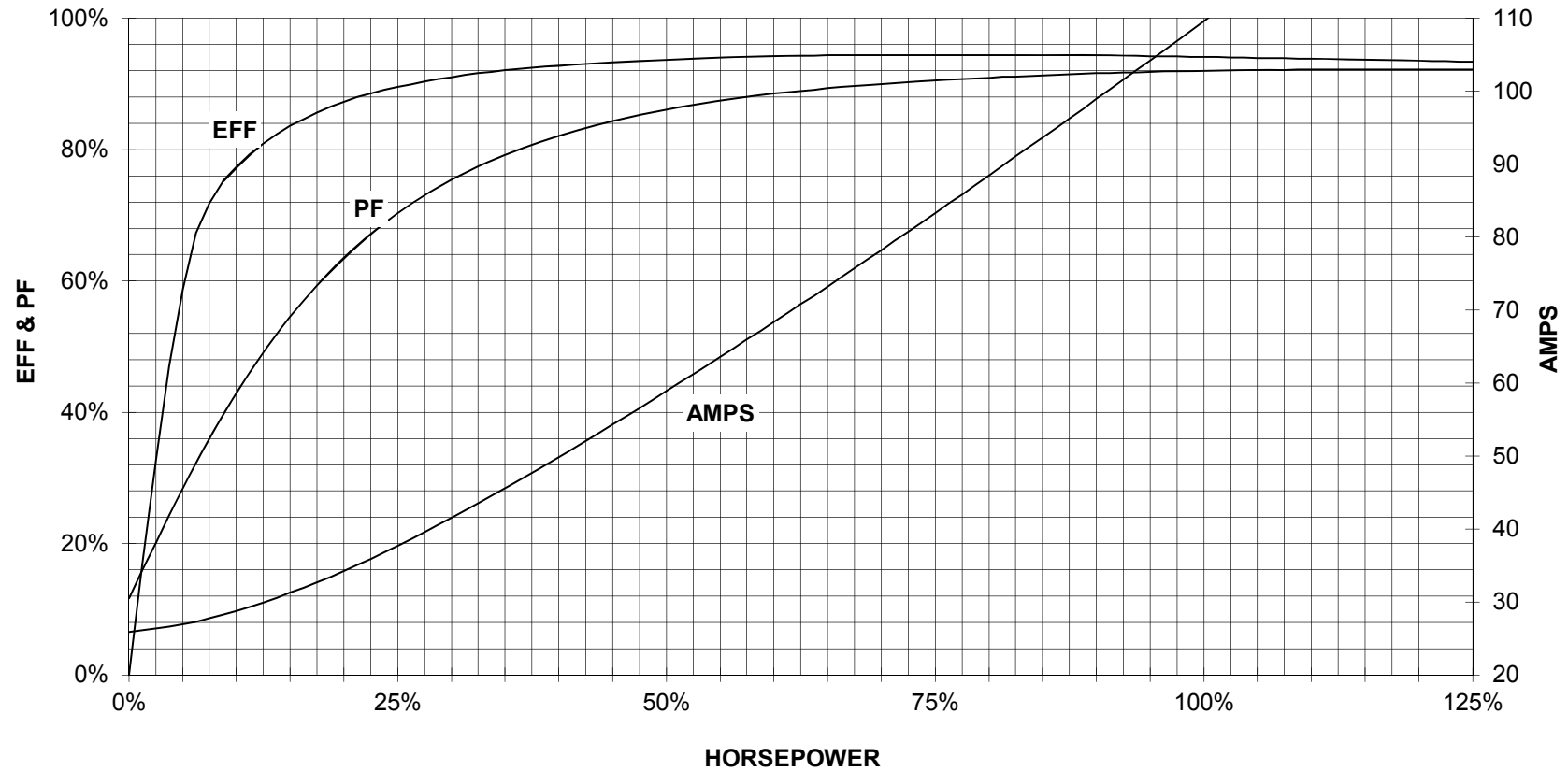
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

100 HP 3600 RPM 405TS FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
XP100 1D1



CUSTOMER: _____ ORDER #: _____

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

REV. 1