

# 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, Div 1 Gr. C&D; Class II, Div1, Gr. F&G

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	2/4	4/4	3/4	2/4			
575		60	100.00	-/-	3,570	86.40	64.50	44.00	15.20	580.0	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.:(G) Thermostats, Klixon type, normally closed	NEMA Des.: B	S.F.: 1.15
Mtr. WT:1,020		Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: G	IP 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	dB(A)	Safe Stall Time Cold	45 s
Moment of inertia	12.7 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	92.0 Lb ft <sup>2</sup>	Color, paint shade	
<b>Bearings</b>		Coating (paint finish)	
Bearing DE   NDE	6316 Z C3 S0   6316 Z C3 S0	<b>Ventilation Type</b>	
Bearing_Type	Ball Bearing   Ball Bearing	Method of cooling	TEFC
AFBMA:	80BC03JP30   80BC03JP30	Direction of rotation	Bidirectional
<b>Grease</b>		Fan Material	Polypropylen ESD
Capacity	7.5 oz   7.5 oz	VFD	CT: n/a VT: 20:1
Grease Type:	Exxon Mobile EM	Space heaters	without
		Brake:	-/-

**Terminal box**


Lead Wire Connection	3 LEAD - DELTA	Terminal box position	(3) Mounting - F-1
Voltage	L1 L1 L1 Connected together	Material of terminal box	
----	----	Cable entry	-/-
----	T1 T2 T3		

**Notes:**

I<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
M<sub>b</sub>/M<sub>N</sub> = break down torque / nominal torque

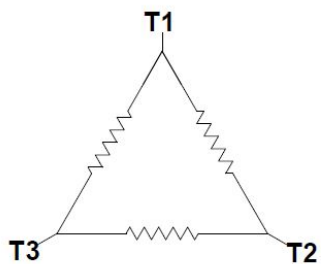
3) Value is valid only for DOL operation with motor design IC411  
2) at rated power / at full load

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

	document type	document status	customer	
	datasheet	released		
	title	document number		
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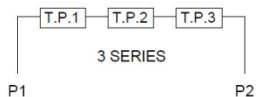
Main terminal diagram



3 LEAD DELTA			
LINES			CONN.
L1	L2	L3	
T1	T2	T3	Δ

Motor protection

THERMOSTATS



responsible dep.  
DI MC LVM

technical reference

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Project

**SIEMENS**

document type  
Wiring Diagram

title  
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document status  
free

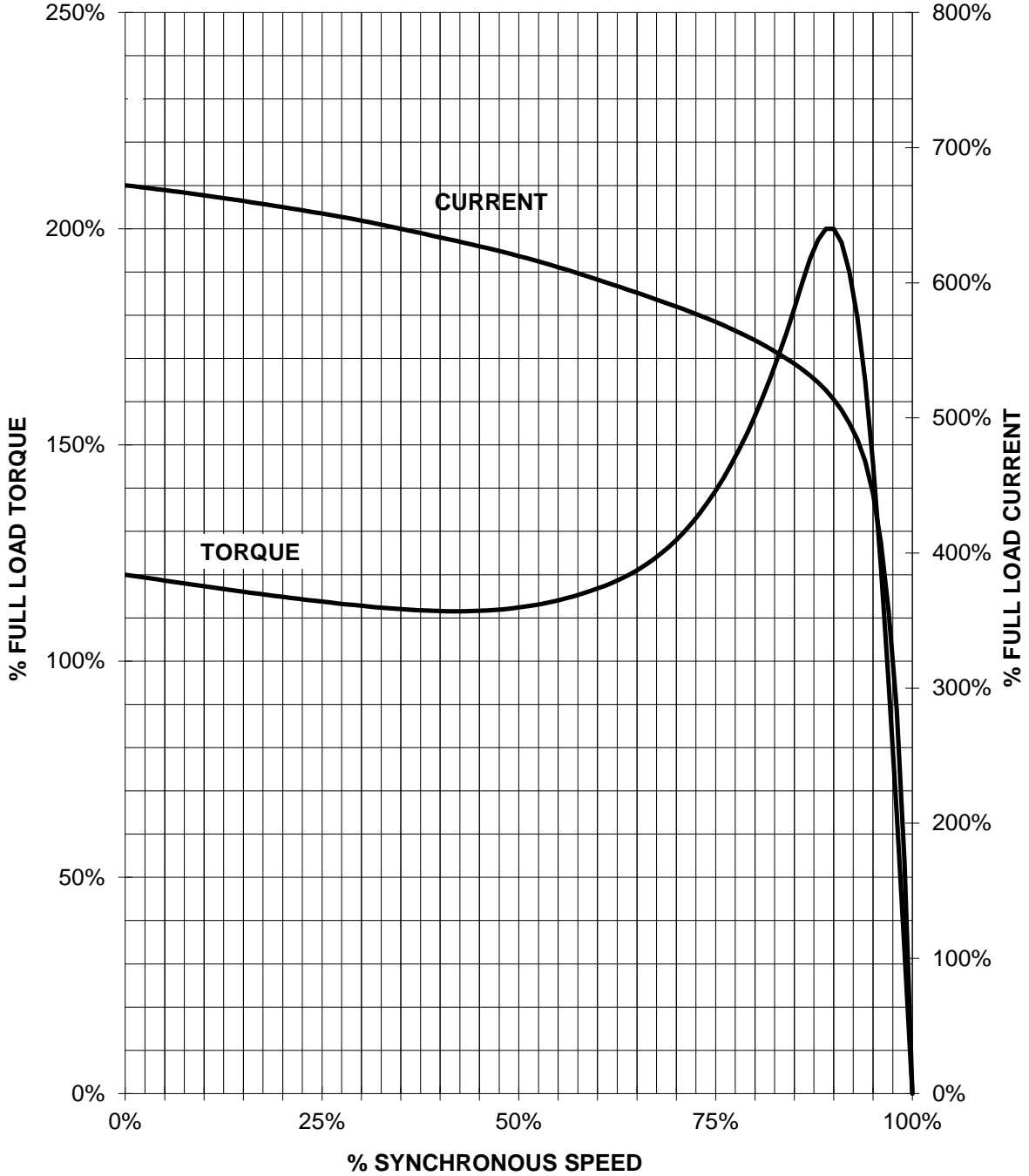
document number

customer

# SIEMENS INDUSTRY, INC.

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

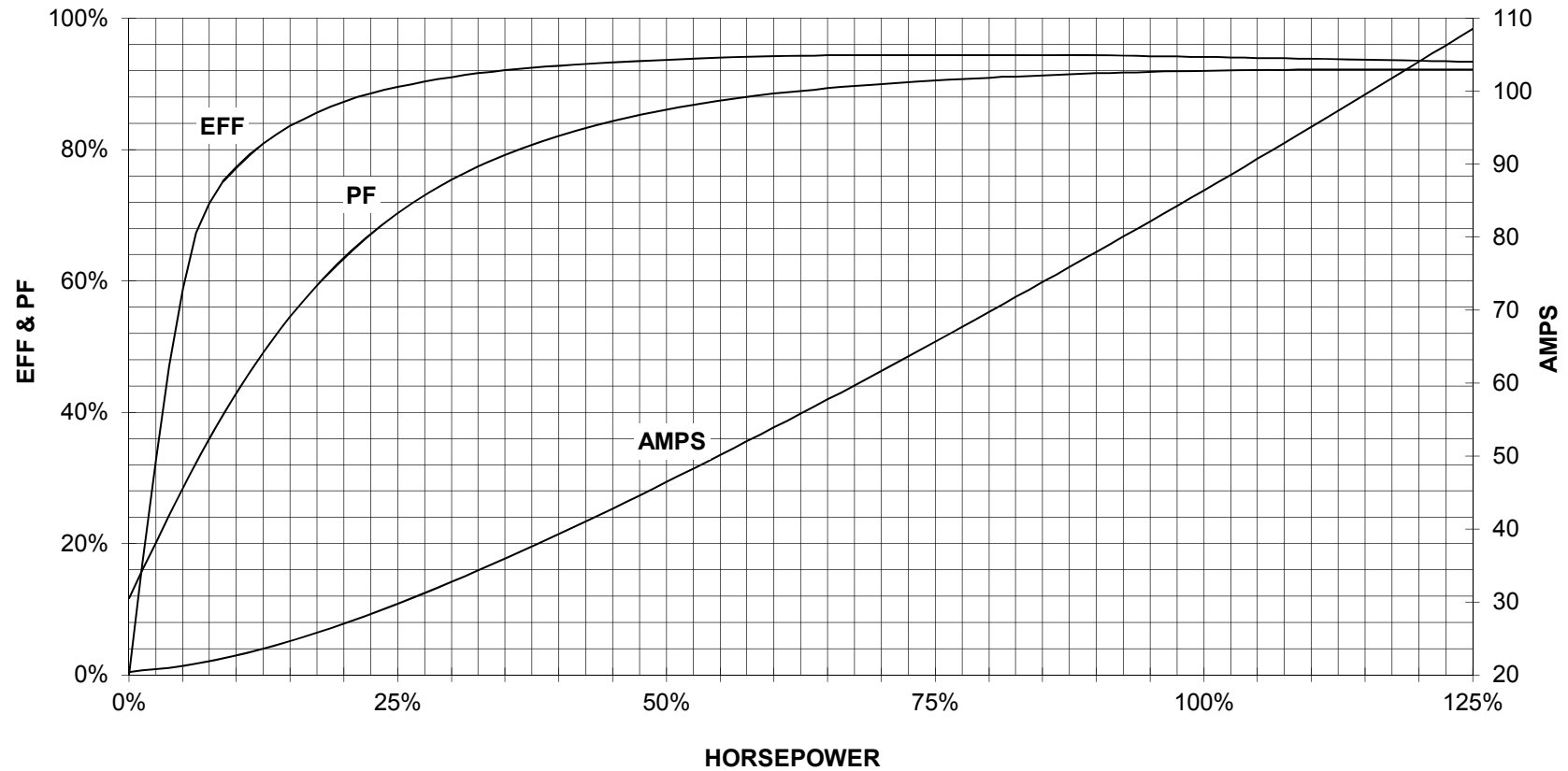
## TORQUE & CURRENT VS. SPEED



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

100 HP 3600 RPM 405TS FRAME 575 VOLTS 3 PHASE NEMA DESIGN B

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



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

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

REV. 1