

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

**Motor type:** FS: 143T - 4p - 1 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				
460		60	1.00	-/-	1,760	1.40	1.20	1.00	0.70	13.7	85.5	85.4	83.4	78.2	71.5	58.4	3.0	300	383	
230		60	1.00	-/-	1,760	2.80					85.5	85.4	83.4	78.2	71.5	58.4	3.0	300	383	

Frame Type: 143T	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:77		Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: M	IP IP65

**Mechanical data**


Sound level (SPL / SWL) at 60 Hz	50.0 dB(A) / 62.0 dB(A)	Thickener	Polyurea
Octave Band Center Frequencies Hertz	250 500 1000 2000 4000 8000 Hz	Safe Stall Time Hot	18 s
SPL@3	dB(A)	Safe Stall Time Cold	26 s
Moment of inertia	0.2 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	6.0 Lb ft <sup>2</sup>	Color, paint shade	
<b>Bearings</b>		Coating (paint finish)	
Bearing DE   NDE	6205 Z C3 S0   6205 Z C3 S0	<b>Ventilation Type</b>	
Bearing_Type	Ball Bearing   Ball Bearing	Method of cooling	TEFC
AFBMA:	25BC02JP30   25BC02JP30	Direction of rotation	Bidirectional
<b>Grease</b>		Fan Material	Polypropylen ESD
Capacity	0.1 oz   0.1 oz	VFD	CT: 4:1 VT: 20:1
Grease Type:	Exxon Mobile EM	Space heaters	without
		Brake:	-/-

**Terminal box**

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

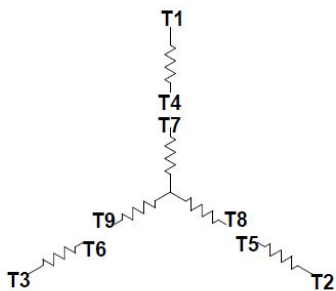
<b>Notes:</b>	
I <sub>r</sub> /I <sub>N</sub> = locked rotor current / current nominal M <sub>r</sub> /M <sub>N</sub> = locked rotor torque / torque nominal M <sub>d</sub> /M <sub>N</sub> = break down torque / nominal torque	3) Value is valid only for DOL operation with motor design IC411 2) at rated 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 customer interface</i>
DI MC LVM		DT Configurator		

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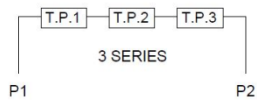
Main terminal diagram



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

Motor protection

THERMOSTATS



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Project

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document type  
Wiring Diagram

title  
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free

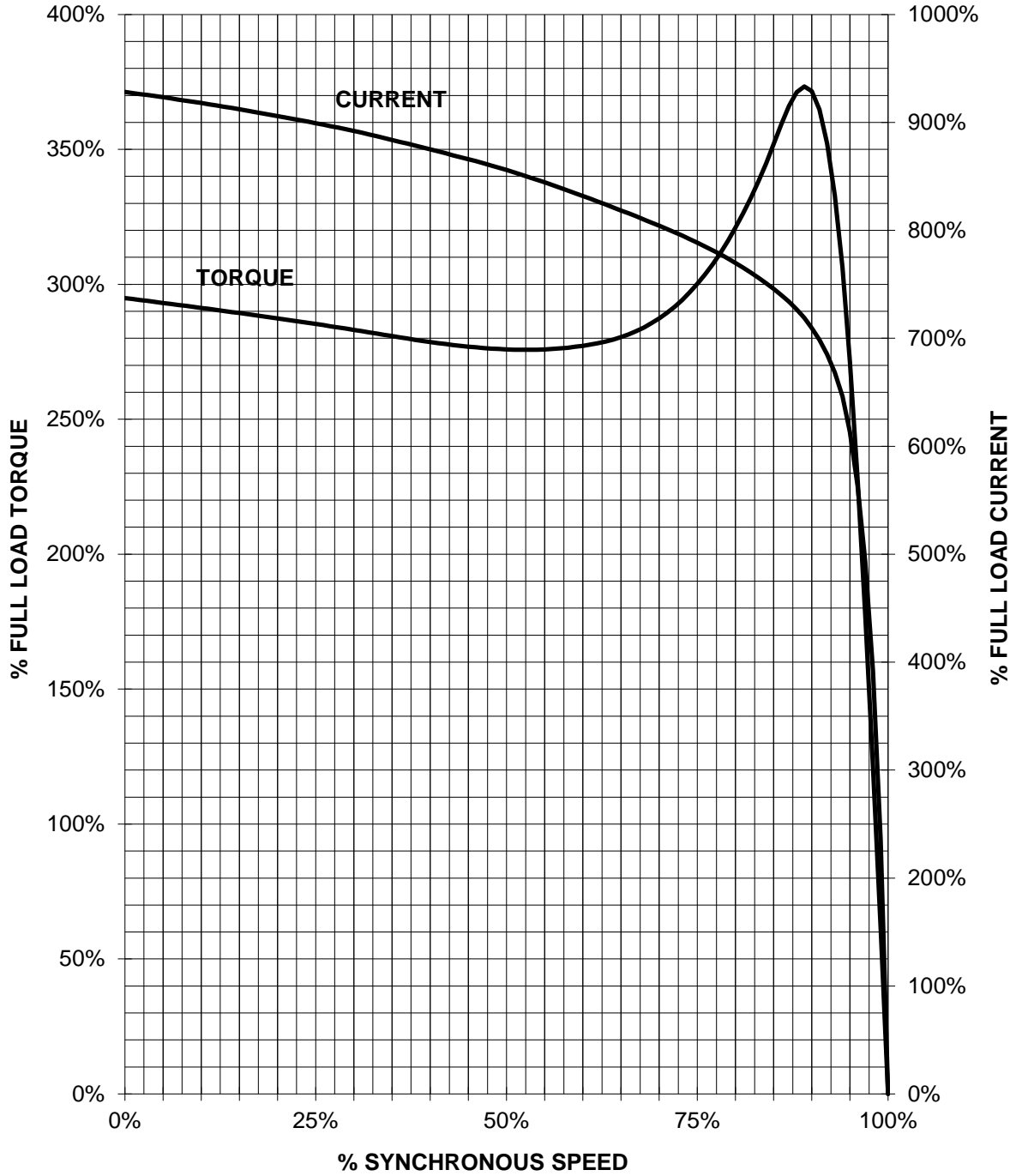
document number

customer

# SIEMENS INDUSTRY, INC.

HP 1 VOLTS <600 RPM 1800 TYPE XP100  
HZ 60 PHASE 3 FRAME 143T NEMA B

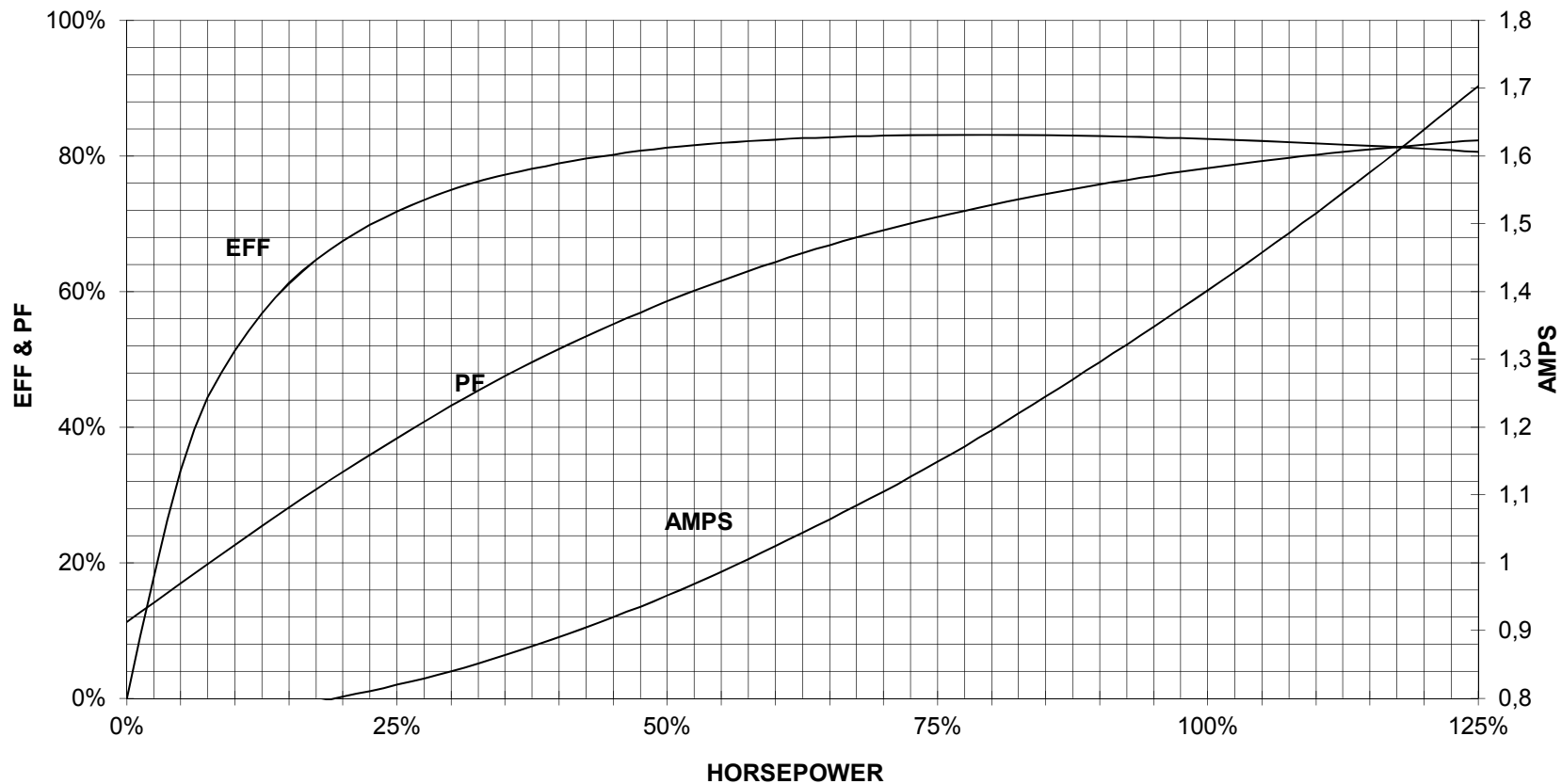
## TORQUE & CURRENT VS. SPEED



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

1 HP 1800 RPM 143T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

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



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

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

REV. 1