

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

**Motor type:** FS: 284TC - 4p - 25 hp -

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

Remarks

**Electrical data** Class I Division 1 Groups D

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 <sub>A</sub> /T <sub>N</sub> LRT [%]	T <sub>k</sub> /T <sub>N</sub> BDT [%]
						4/4	3/4	1/2	0	LRC	4/4	3/4	2/4	4/4	3/4	2/4			
460		60	25.00	-/-	1,775	30.00	23.30	17.60	11.00	183.0	93.6	94.0	93.5	84.0	80.0	71.0	74.0	180	250
230		60	25.00	-/-	1,775	60.00					93.6	94.0	93.5	84.0	80.0	71.0	74.0	180	250

Frame Type: 284TC	Type of constr.: ( G ) Round body - C-Face	Ins. Cl.:Insulation class F	Motor Prot.:(A) No winding protection	NEMA Des.: B	S.F.: 1.15
Mtr. WT:460		Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: G	IP IP65

**Mechanical data**

Sound level (SPL / SWL) at 60 Hz	65.0 dB(A) / 76.0 dB(A)	Thickener	Polyurea
Octave Band Center Frequencies Hertz	250 500 1000 2000 4000 8000 Hz	Safe Stall Time Hot	24 s
SPL@3	dB(A)	Safe Stall Time Cold	44 s
Moment of inertia	4.4 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	122.0 Lb ft <sup>2</sup>	Color, paint shade	
<b>Bearings</b>		Coating (paint finish)	
Bearing DE   NDE	6310 Z C3 S0   6310 Z C3 S0	<b>Ventilation Type</b>	
Bearing_Type	Ball Bearing   Ball Bearing	Method of cooling	TEFC
AFBMA:	50BC03JP30   50BC03JP30	Direction of rotation	Bidirectional
<b>Grease</b>		Fan Material	Polypropylen ESD
Capacity	2.6 oz   2.6 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<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. 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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Main terminal diagram



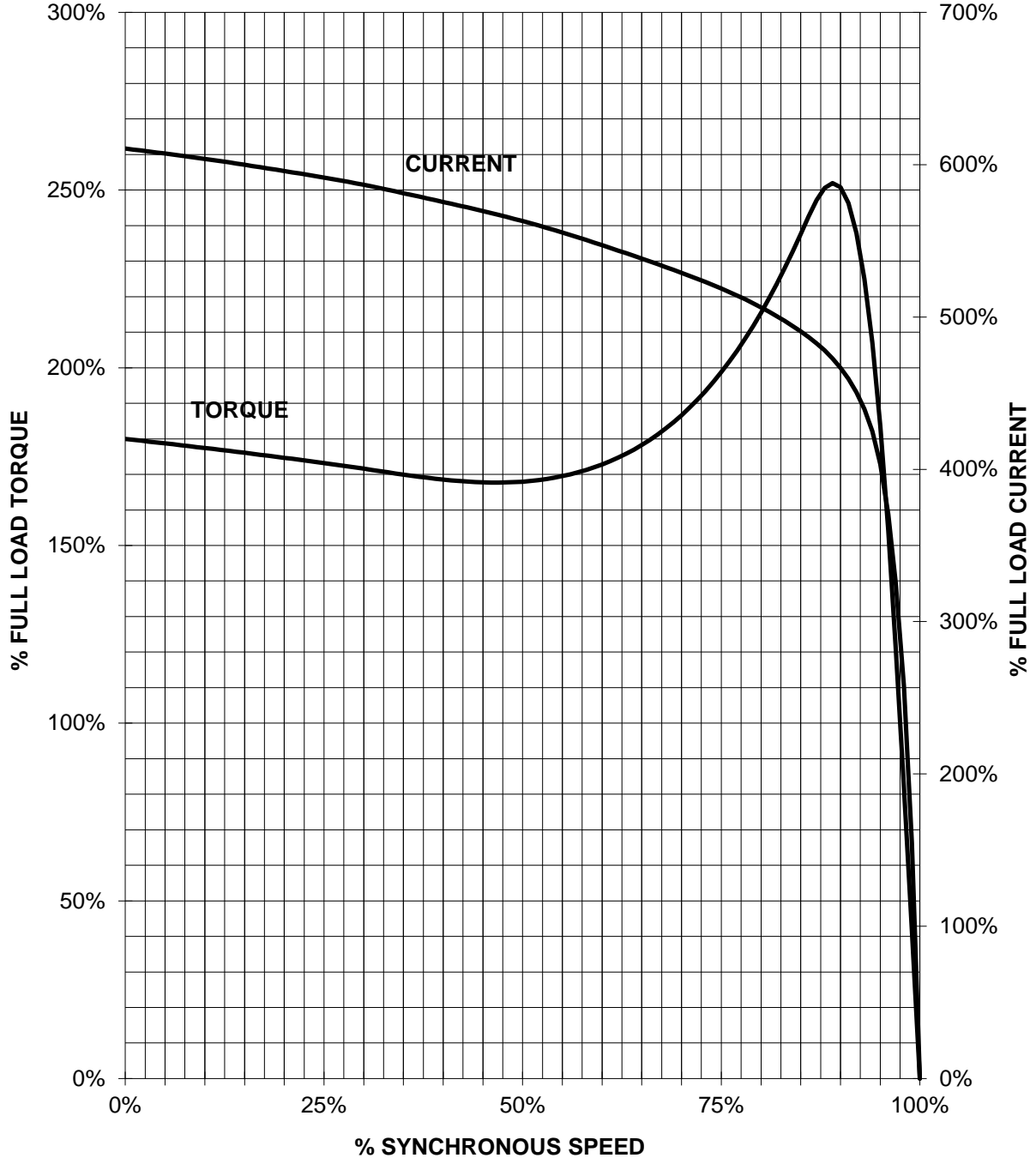
9 LEAD DELTA						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T6	T7 T4	T8 T5	T3 T9		Δ Δ
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9		Δ

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

HP 25    VOLTS <600    RPM 1800    TYPE XP100 1D1  
HZ 60    PHASE 3    FRAME 284T    NEMA B

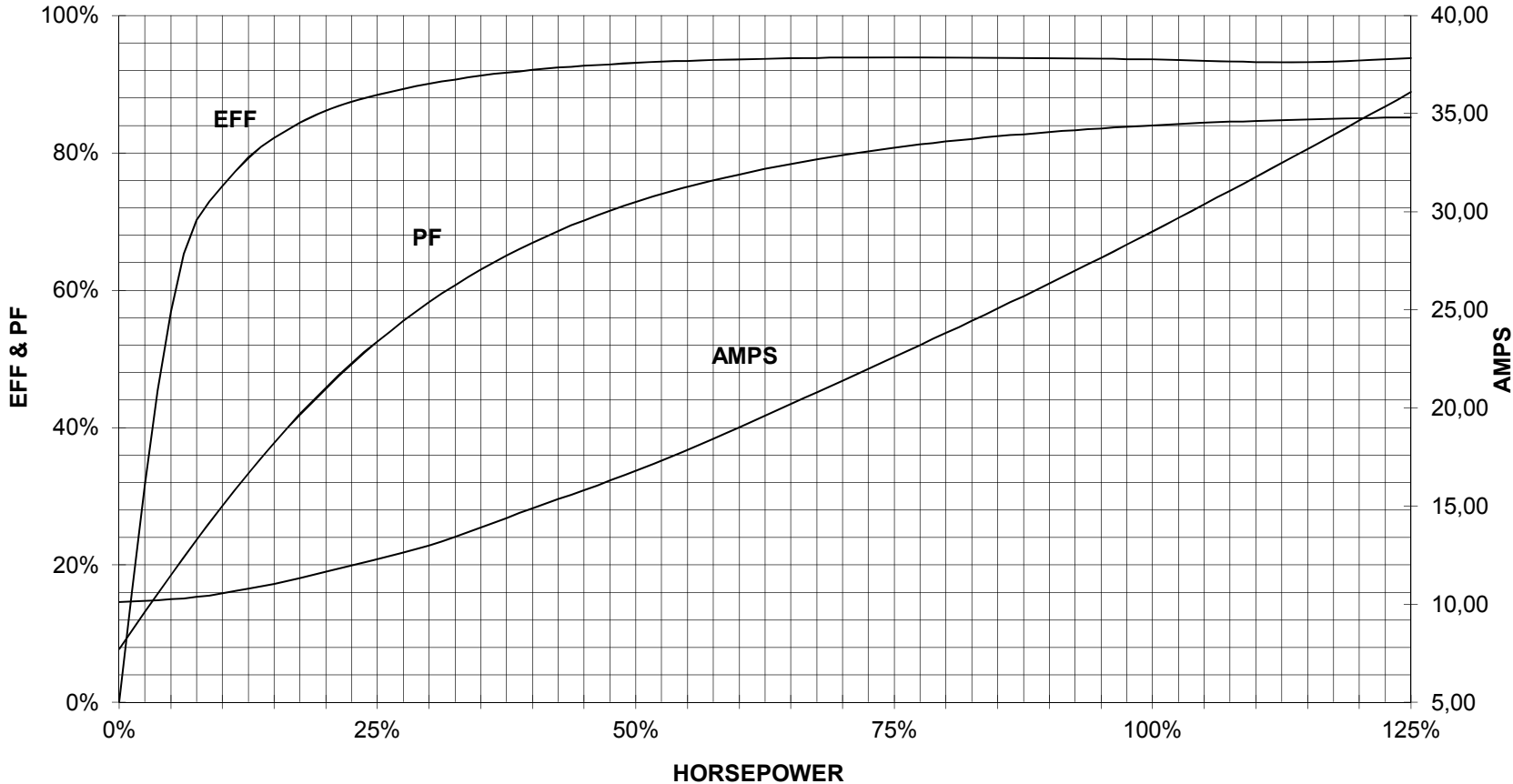
## TORQUE & CURRENT VS. SPEED



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

25 HP 1800 RPM 284T 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