

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

**Motor type:** FS: 284TCV - 6p - 15 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]					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	15.00	-/-	1,180	21.00	17.40	14.60	11.00	116.0	91.7	91.8	90.9	73.0	66.0	53.0	67.0	149	240
230		60	15.00	-/-	1,180	42.00					91.7	91.8	90.9	73.0	66.0	53.0	67.0	149	240

Frame Type: 284TCV	Type of constr.: ( L ) Round body - C-Face w/drip cover + hooks	Ins. Cl.:Insulation class F	Motor Prot.:(G) Thermostats, Klixon type, normally closed	NEMA Des.: B	S.F.: 1.15
Mtr. WT:484		Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: G	IP IP65

**Mechanical data**

Sound level (SPL / SWL) at 60 Hz	61.0 dB(A) / 72.0 dB(A)	Thickener	Polyurea
Octave Band Center Frequencies Hertz	250 500 1000 2000 4000 8000 Hz	Safe Stall Time Hot	22 s
SPL@3	dB(A)	Safe Stall Time Cold	48 s
Moment of inertia	3.4 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	200.0 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**

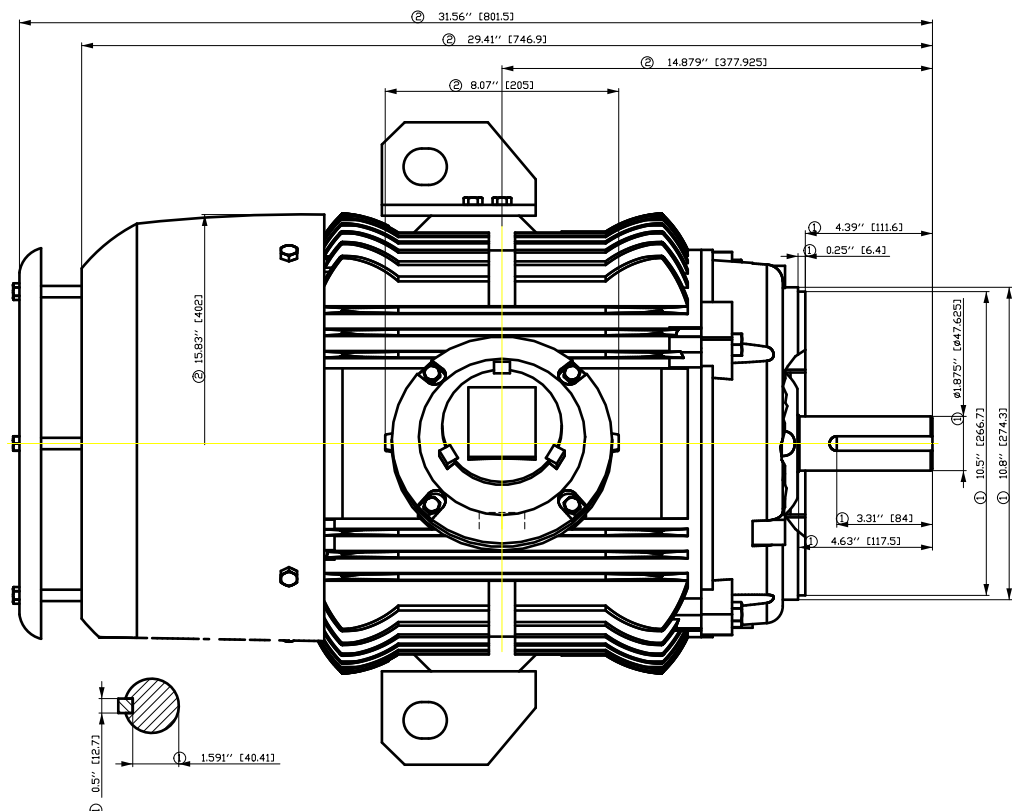
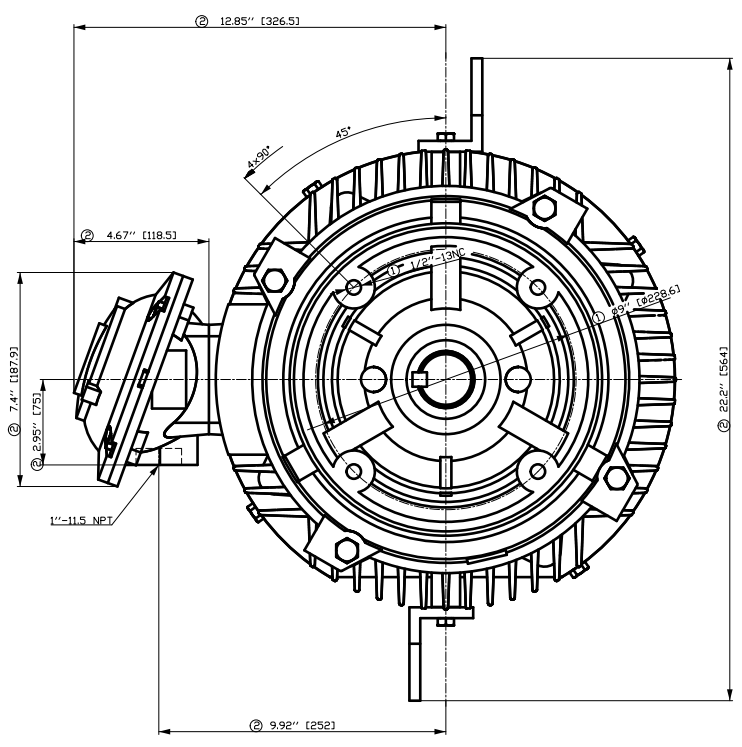
Lead Wire Connection	9 LEAD - DELTA	Terminal box position	(3) Mounting - F-1
Voltage	L1 L1 L1 Connected together	Material of terminal box	
LOW	T1 T7 T6 T2 T8 T4 T3 T9 T5 - - - -	Cable entry	-/-
HIGH	T1 T2 T3 T4 T7-T5 T8-T6 T9		

Notes:

1) I<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 2) M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
 3) Value is valid only for DOL operation with motor design IC411  
 4) M<sub>b</sub>/M<sub>N</sub> = break down torque / nominal torque  
 5) 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		

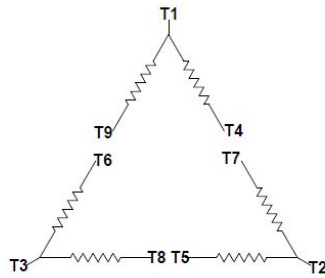
	document type	document status	customer	
	datasheet	released		
	title	document number		
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		01	2022-04-08 20:58	en 1/1



- 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 ÖGFC ESÖÖFFS SÖH	Author	ÖS	Weight	Scale
É	Creator	ÖVS	É	{ }
	Approval	T æ : ^ æ @ } *		
	Department			
	Change Order	MLFB		
	Doc. State	I ð BGG	Doc. Type	/
<b>SIEMENS</b>	Revision	Index RS	Item No	Paper Size CH
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			Ref No	2nd Language â
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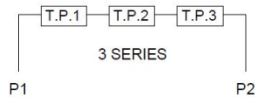
Main terminal diagram



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

Motor protection

THERMOSTATS



responsible dep.  
DI MC LVM

technical reference

created by

approved by

Project

**SIEMENS**

document type  
Wiring Diagram

title  
1MB2121-2CC11-6LG3

document status  
free

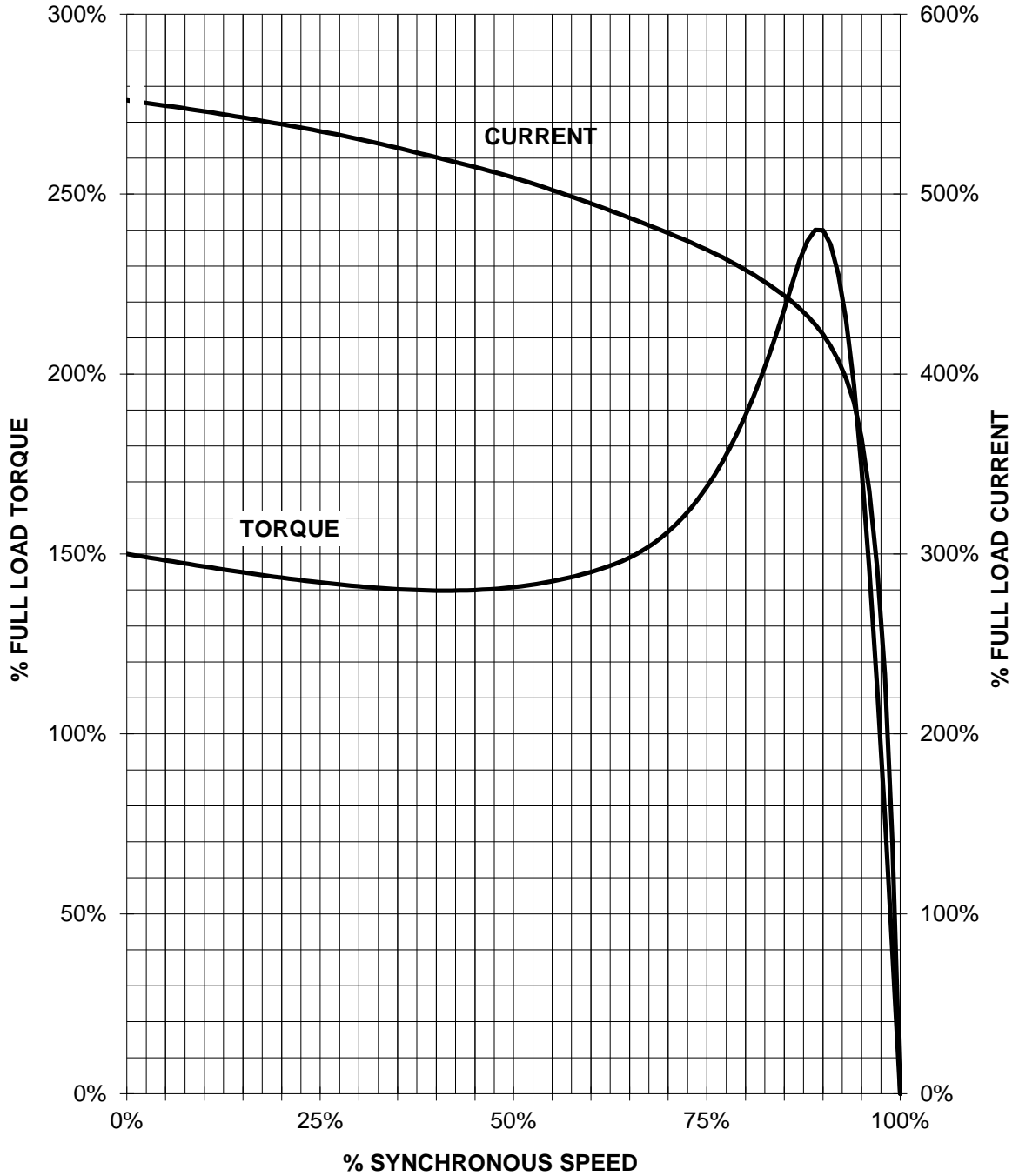
document number

customer

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HP 15    VOLTS <600    RPM 1200    TYPE XP100  
HZ 60    PHASE 3    FRAME 284T    NEMA B

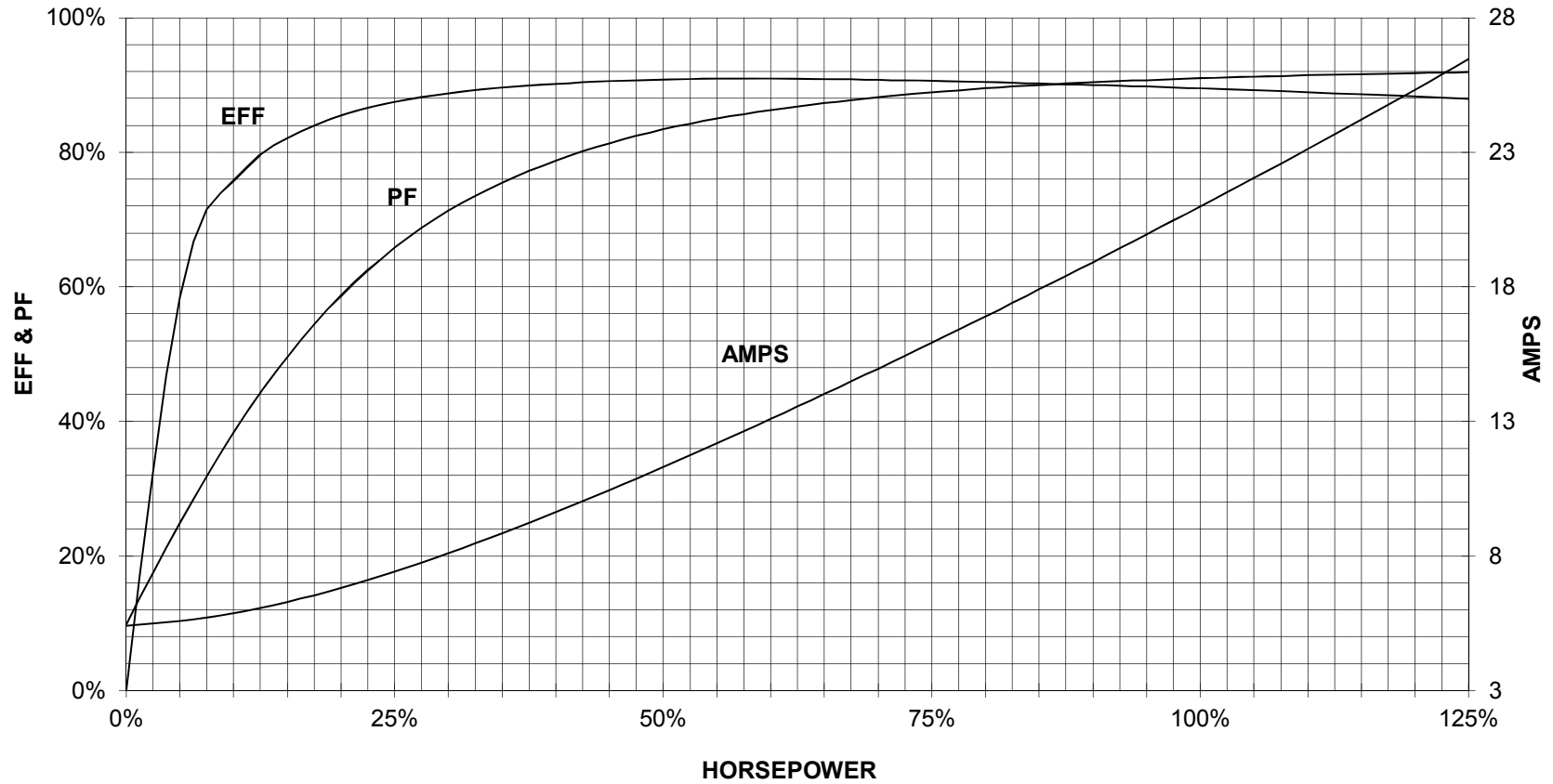
## TORQUE & CURRENT VS. SPEED



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

15 HP 1200 RPM 284T 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