

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

**Motor type:** FS: 286TC - 4p - 30 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	30.00	-/-	1,775	35.00	27.30	20.50	12.00	227.0	93.6	94.1	93.9	85.0	82.0	73.0	89.0	180	251
230		60	30.00	-/-	1,775	70.00					93.6	94.1	93.9	85.0	82.0	73.0	89.0	180	251

Frame Type: 286TC	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:493		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		Safe Stall Time Cold	44 s
Moment of inertia	4.9 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	144.0 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**

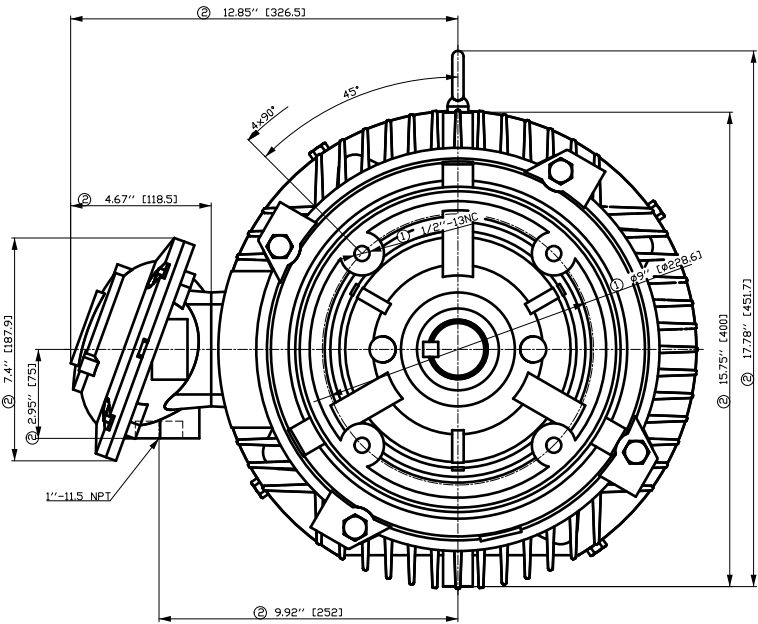
Lead Wire Connection	9 LEAD - DELTA	Terminal box position	(3) Mounting - F-1
Voltage	L1 L1 L1 Connected together	Material of terminal box	
LOW	T1 T7 T6 T2 T8 T4 T3 T9 T5 ---	Cable entry	-/-
HIGH	T1 T2 T3 T4 T7-T5 T8-T6 T9		

Notes:

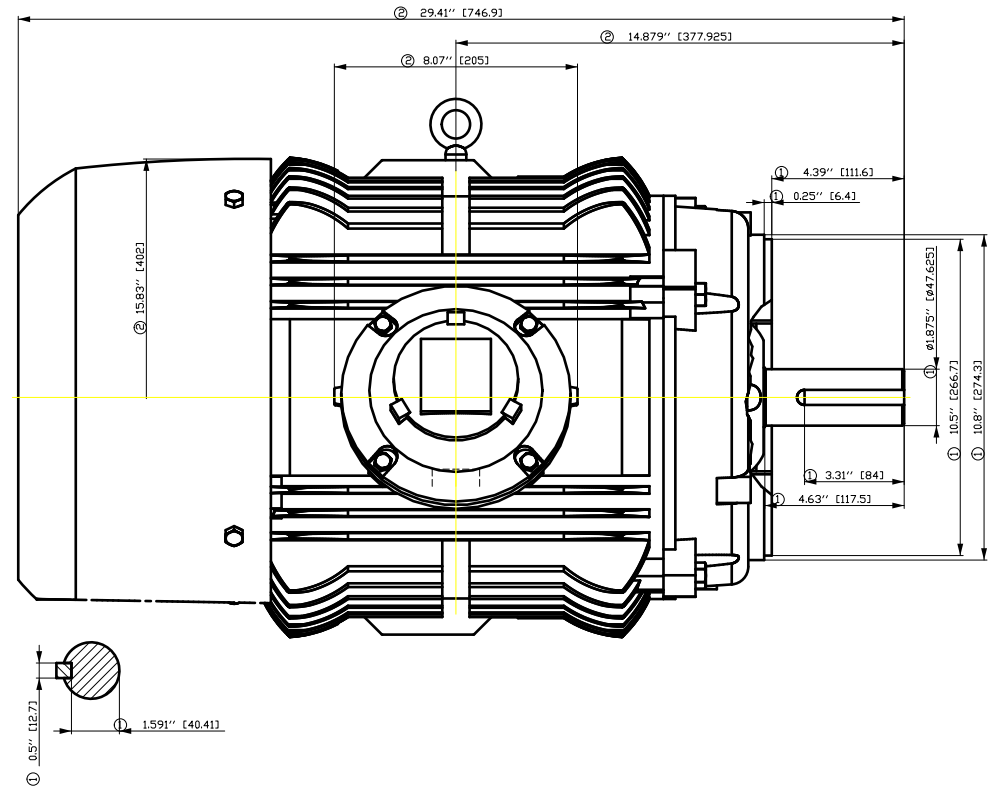
1) I<sub>r</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 2) M<sub>r</sub>/M<sub>N</sub> = locked rotor torque / torque nominal  
 3) Value is valid only for DOL operation with motor design IC411  
 4) M<sub>b</sub>/M<sub>N</sub> = break down torque / nominal torque  
 5) 2) at rated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



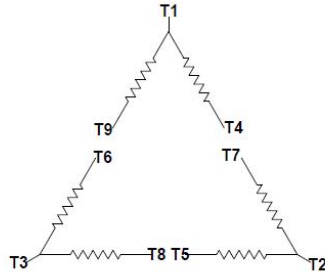
- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.



Tolerance	Surface	Material	Weight E	Scale 
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SIEMENS	Doc State Revision	I ð ÖGG Index RS		
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Main terminal diagram



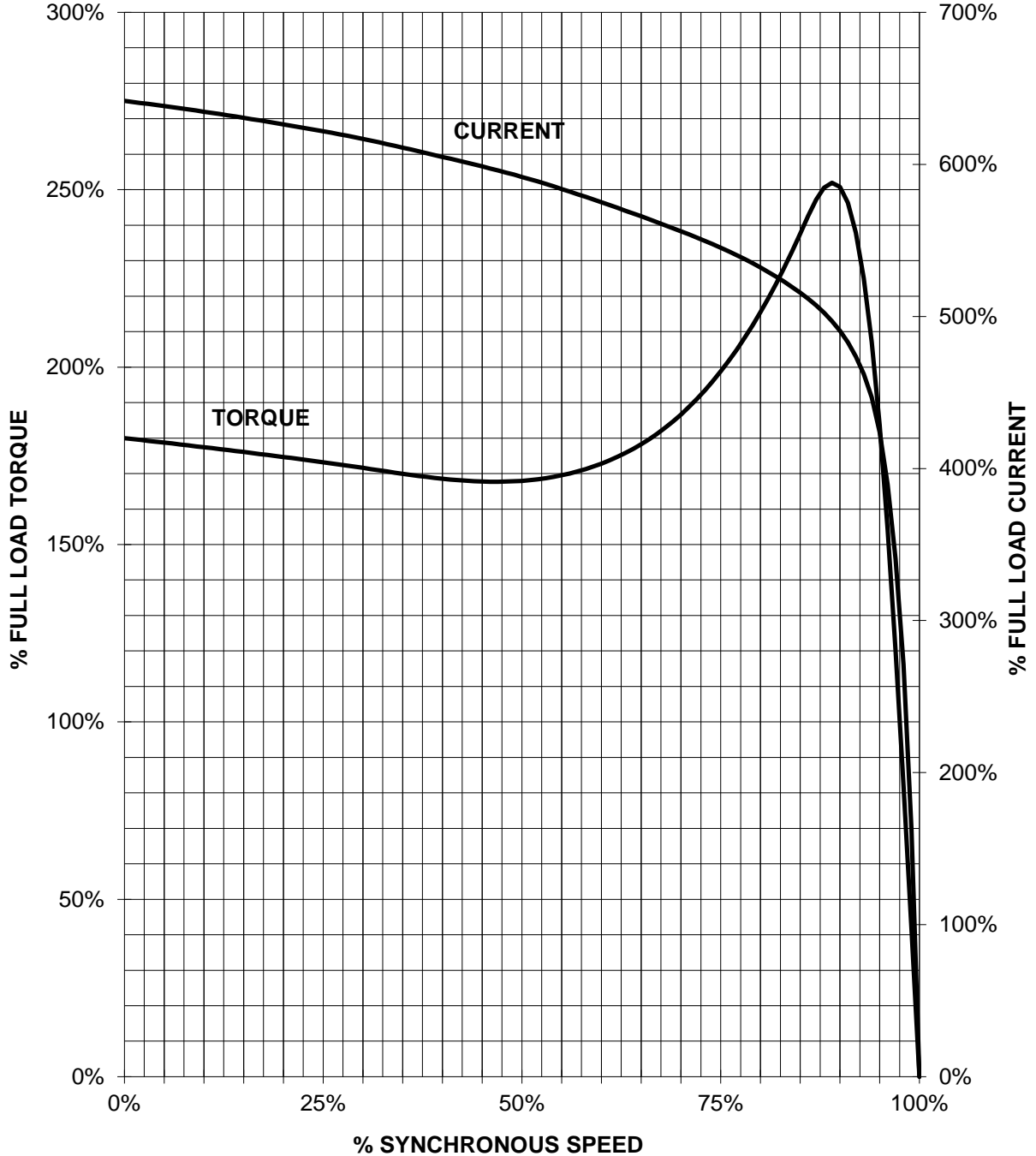
| 9 LEAD DELTA |          |          |          |                    |       |     |
|--------------|----------|----------|----------|--------------------|-------|-----|
| Volts        | LINES    |          |          | CONNECTED TOGETHER | CONN. |     |
|              | L1       | L2       | L3    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

|                               |                                 |                             |                |             |
|-------------------------------|---------------------------------|-----------------------------|----------------|-------------|
| responsible dep.<br>DI MC LVM | technical reference             | created by                  | approved by    | Project     |
| <b>SIEMENS</b>                | document type<br>Wiring Diagram | document status<br>free     |                | customer    |
|                               | title<br>1MB2221-2CB21-6GA3     | document number             |                |             |
| © Siemens AG 2019             | rev.<br>01                      | creation date<br>12/03/2019 | language<br>en | Page<br>1/1 |

# SIEMENS INDUSTRY, INC.

HP 30    VOLTS <600    RPM 1800    TYPE XP100 1D1  
HZ 60    PHASE 3    FRAME 286T    NEMA B

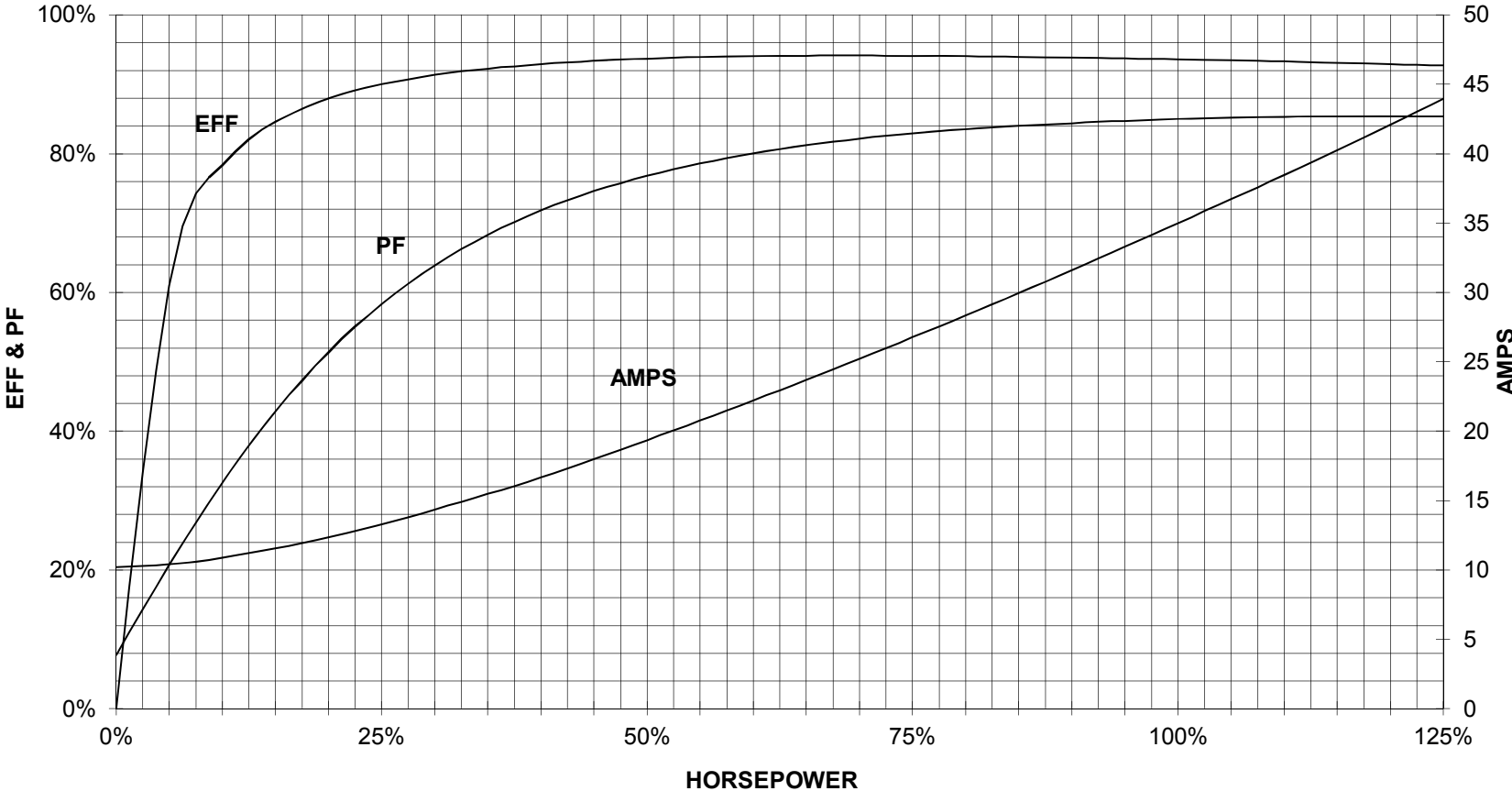
## TORQUE & CURRENT VS. SPEED



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

30 HP 1800 RPM 286T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

**SIEMENS INDUSTRY, INC.**  
**PERFORMANCE CURVE**  
**XP100 1D1**



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

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