

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

**Motor type:** FS: 445T - 8p - 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				
460		60	100.00	-/-	885	123.00	95.30	71.00	48.00	725.0	94.1	94.5	94.2	81.0	78.0	70.0	593.0	130	200	
230		60	100.00	-/-	885	246.00					94.1	94.5	94.2	81.0	78.0	70.0	593.0	130	200	

Frame Type: 445T	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:1,770		Temp. Rise Cl.: B	Amb. Temp.: + to -20 °C @1000 m	kVA: G	IP IP65

## Mechanical data


Sound level (SPL / SWL) at 60 Hz	66.0 dB(A) / 77.0 dB(A)	Thickener	Polyurea
Octave Band Center Frequencies Hertz	250 500 1000 2000 4000 8000 Hz	Safe Stall Time Hot	22 s
SPL@3		Safe Stall Time Cold	30 s
Moment of inertia	53.5 Lb-ft <sup>2</sup>	Frame material	cast iron
Ext Load Inertia Capability:	2370.0 Lb ft <sup>2</sup>	Color, paint shade	
<b>Bearings</b>		Coating (paint finish)	
Bearing DE   NDE	NU 318   6316 Z C3 S0	<b>Ventilation Type</b>	
Bearing_Type	Roller Bearing   Ball Bearing	Method of cooling	TEFC
AFBMA:	90RU03M0   80BC03JP30	Direction of rotation	Bidirectional
<b>Grease</b>		Fan Material	Polypropylen ESD
Capacity	14.5 oz   7.5 oz	VFD	CT: n/a VT: 20:1
Grease Type:	Exxon Mobile EM	Space heaters	without
		Brake:	-/-

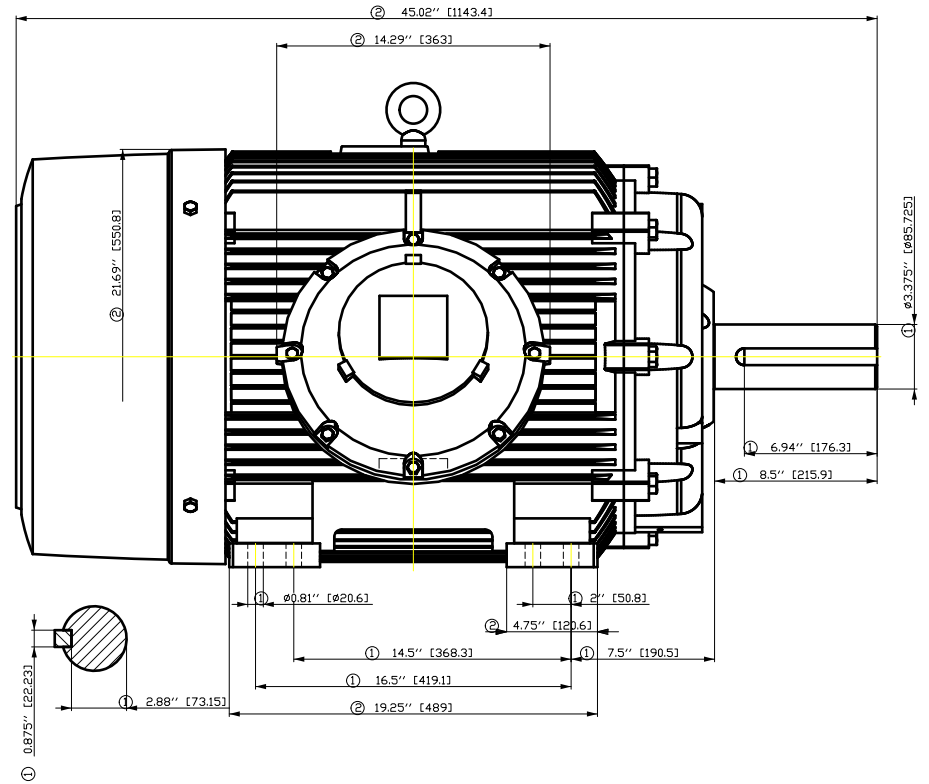
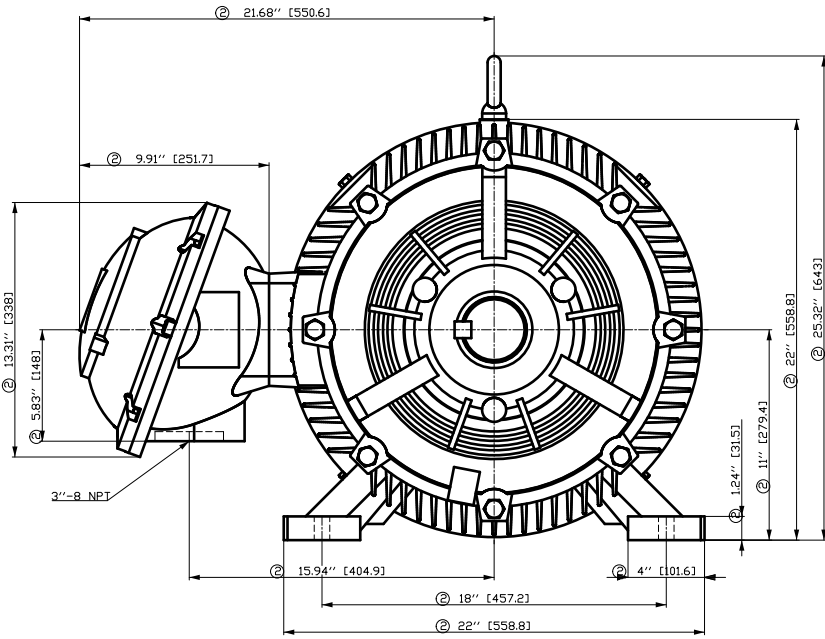
## Terminal box

Lead Wire Connection	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>L</sub>/I<sub>N</sub> = locked rotor current / current nominal  
 M<sub>L</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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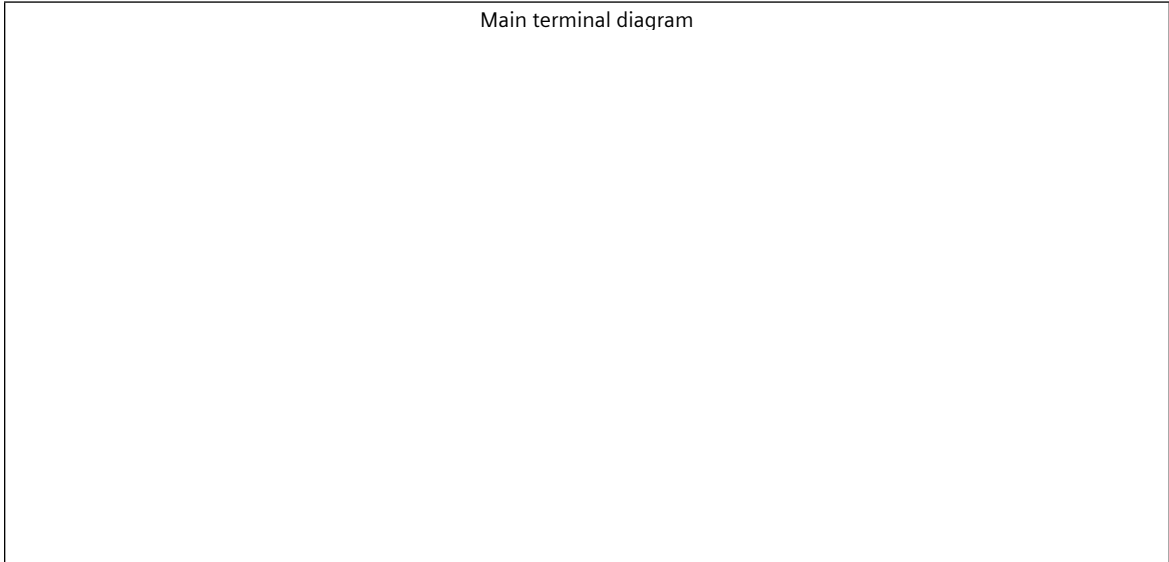
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	title 1MB2121-4CD21-6AG3	document number		
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- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.

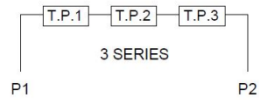
Tolerance	Surface	Material	Weight	Scale	
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				Sheet F of F	


Main terminal diagram



Motor protection

THERMOSTATS

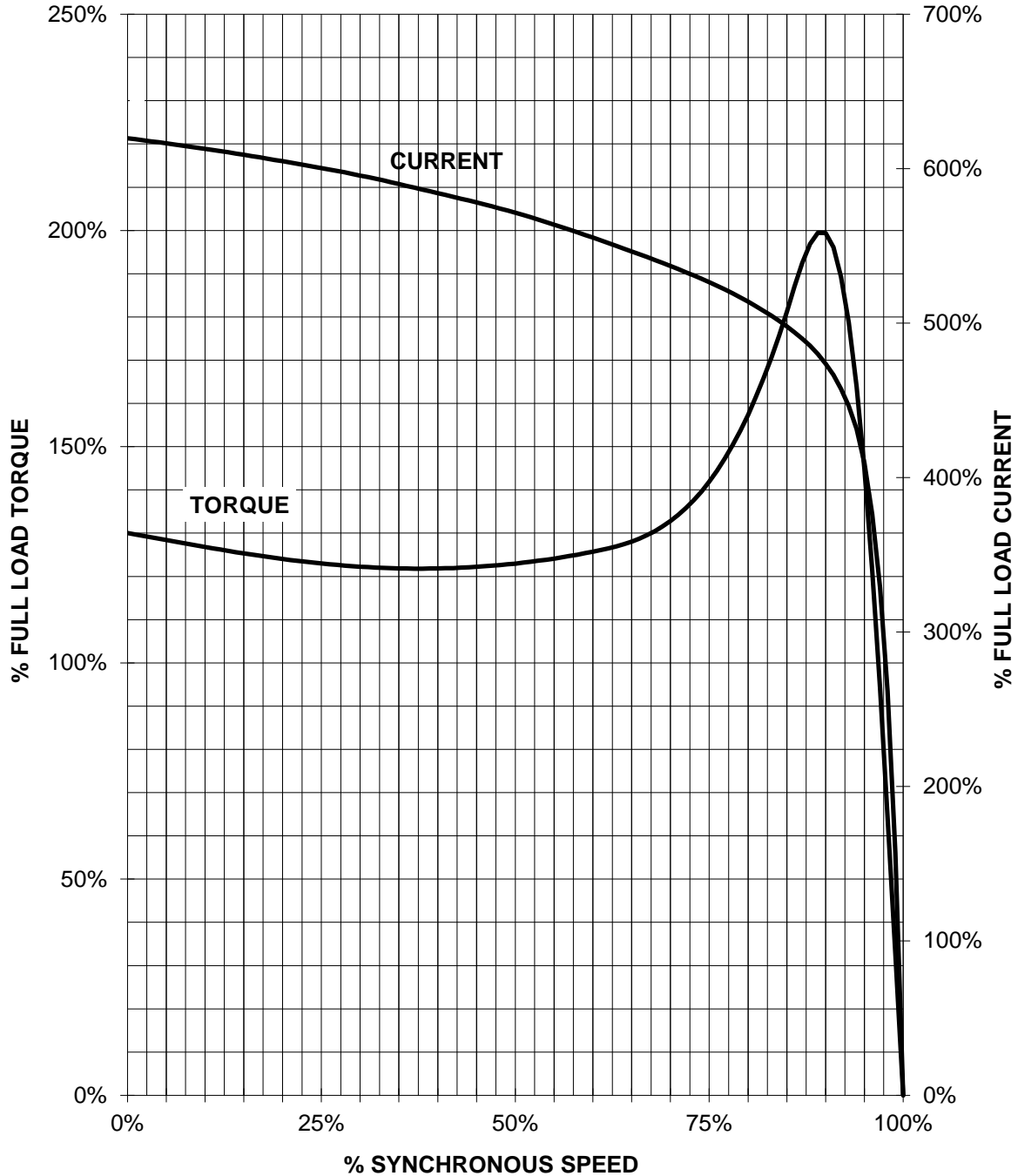


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# SIEMENS INDUSTRY, INC

HP 100 VOLTS <600 RPM 900 TYPE XP100  
HZ 60 PHASE 3 FRAME 445T NEMA B

## TORQUE & CURRENT VS. SPEED



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