

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

Motor type: FS: 143TC - 4p - 1 hp -

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

Remarks

Electrical data Class I Division 1 Groups D

U [V]	Δ/Y	f [Hz]	P [HP]	P [kW]	n [rpm]	I Load [Amps]					LRC	Nom. Eff Load [%]			Pwr. Factor Load [%]			Torque [lb-ft]	T _A /T _N LRT [%]	T _k /T _N BDT [%]
						4/4	3/4	1/2	0	4/4		3/4	2/4	4/4	3/4	2/4				
460		60	1.00	-/-	1,755	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	-/-	1,755	2.80					85.5	85.4	83.4	78.2	71.5	58.4	3.0	300	383	

Frame Type: 143TC	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:82		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 ²	Frame material	cast iron
Ext Load Inertia Capability:	6.0 Lb ft ²	Color, paint shade	
Bearings		Coating (paint finish)	
Bearing DE NDE	6205 Z C3 S0 6205 Z C3 S0	Ventilation Type	
Bearing_Type	Ball Bearing Ball Bearing	Method of cooling	TEFC
AFBMA:	25BC02JP30 25BC02JP30	Direction of rotation	Bidirectional
Grease		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		

Notes:
 I_r/I_N = locked rotor current / current nominal
 M_r/M_N = locked rotor torque / torque nominal
 M_b/M_N = 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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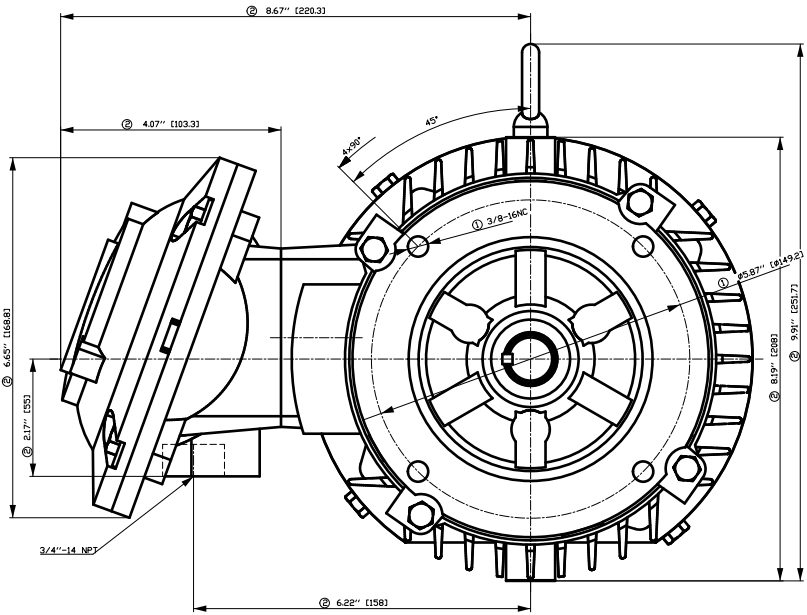
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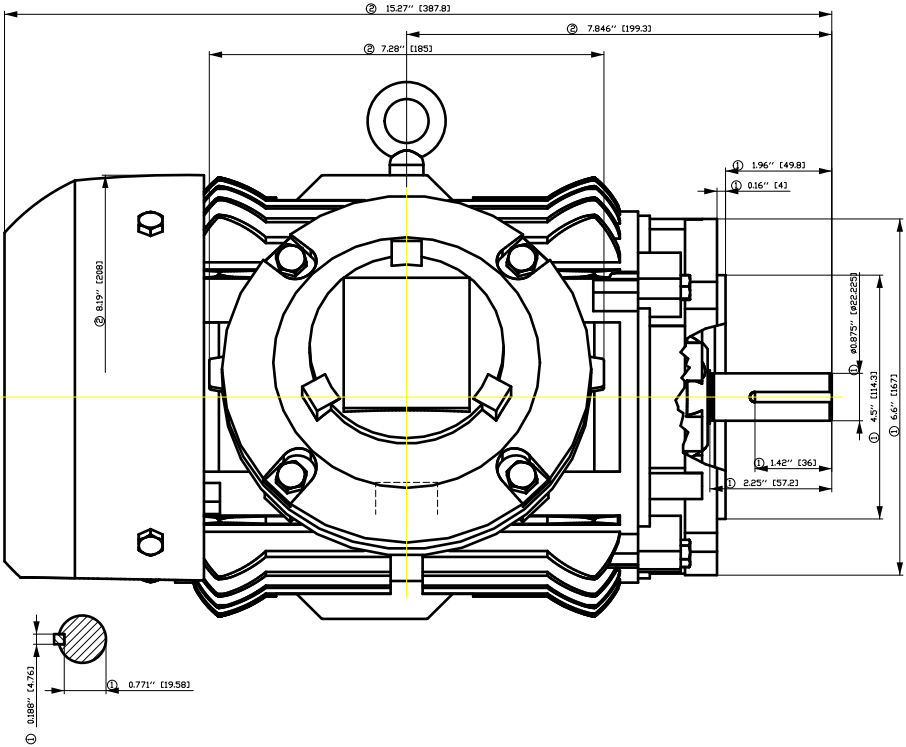
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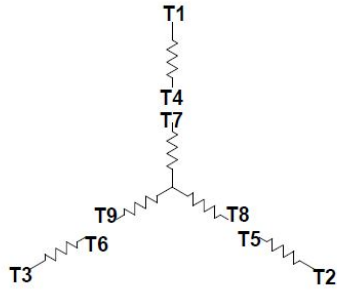


- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.



Tolerance	Surface	Material	Weight	Scale
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SIEMENS	Doc State Revision	I B EGG Index	Item No Doc No	Paper Size 1st Language 2nd Language
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				Sheet F of F

Main terminal diagram



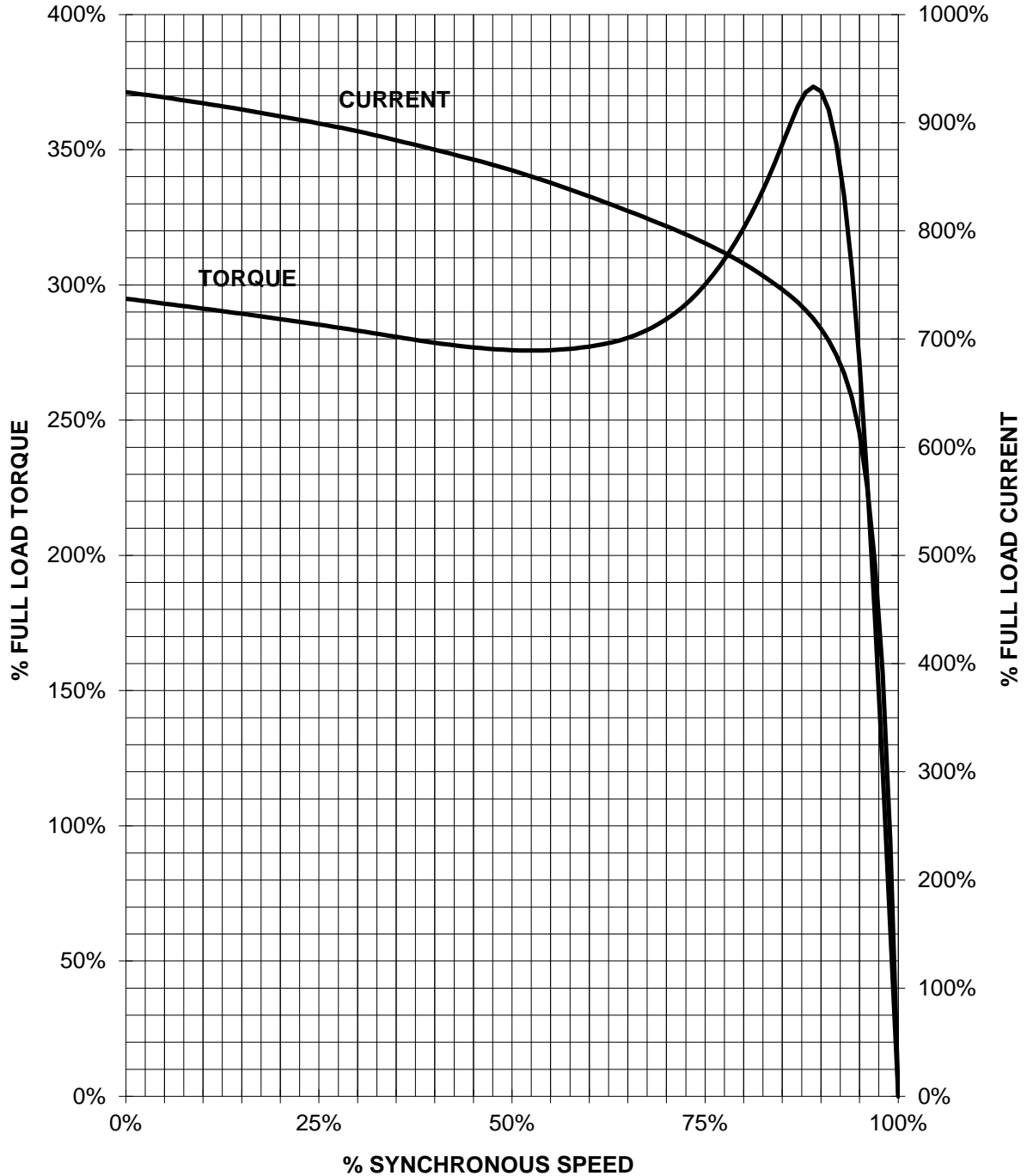
9 LEAD WYE						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7	T2 T6	T3 T9	T4 T5 T6	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

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HP 1 VOLTS <600 RPM 1800 TYPE XP100 1D1
HZ 60 PHASE 3 FRAME 143T NEMA B

TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____