

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

**Motor type:** FS: 254TC - 4p - 15 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]					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	15.00	-/-	1,770	19.00	15.20	11.80	8.50	116.0	92.4	92.8	92.3	80.0	74.7	64.5	44.0	184	234	
230		60	15.00	-/-	1,770	38.00					92.4	92.8	92.3	80.0	74.7	64.5	44.0	184	234	

Frame Type: 254TC	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:315		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) / 73.0 dB(A)		Thickener	Polyurea					
Octave Band Center Frequencies Hertz	250	500	1000	2000	4000	8000	Hz	Safe Stall Time Hot	21 s
SPL@3	dB(A)							Safe Stall Time Cold	33 s
Moment of inertia	1.7 Lb-ft <sup>2</sup>		Frame material	cast iron					
Ext Load Inertia Capability:	75.0 Lb ft <sup>2</sup>		Color, paint shade						
<b>Bearings</b>			Coating (paint finish)						
Bearing DE   NDE	6309 Z C3 S0		6309 Z C3 S0	<b>Ventilation Type</b>					
Bearing_Type	Ball Bearing		Ball Bearing	Method of cooling	TEFC				
AFBMA:	45BC03JP30		45BC03JP30	Direction of rotation	Bidirectional				
<b>Grease</b>			Fan Material	Polypropylen ESD					
Capacity	0.5 oz		VFD	CT: 4:1 VT: 20:1					
Grease Type:	Exxon Mobile EM		Space heaters	without					
			Brake:	-/-					

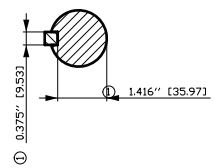
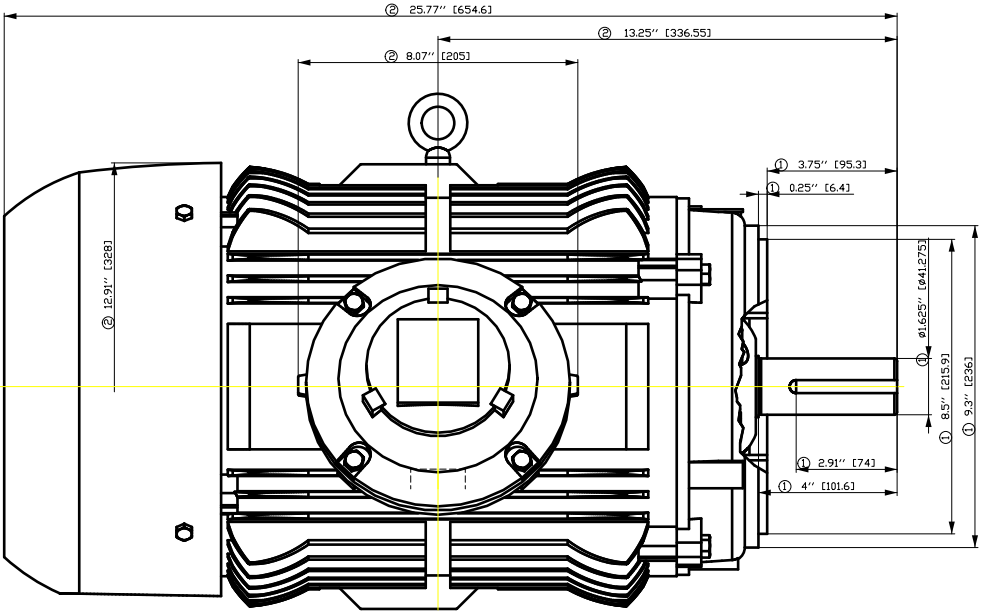
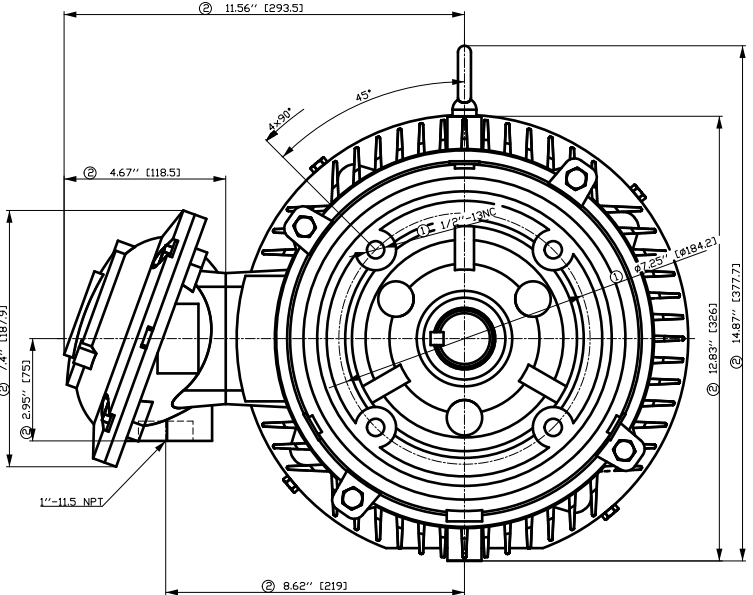
**Terminal box**

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<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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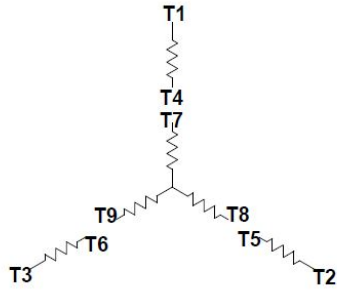


- ① Tolerances according to NEMA std.
- ② All these dimensions corresponding to assemblies and castings shall have a tolerance as per DIN standard 1686-GTB 19.
- ③ Not according to NEMA std.

Tolerance	Surface	Material	Weight E	Scale 1:1
FT ÖGGF-EÖÖFF-Ö CH E	Author Creator Approval Department Change Order	Öa ^)•q) xh/az q* T aè : ^z@`)*		
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Main terminal diagram



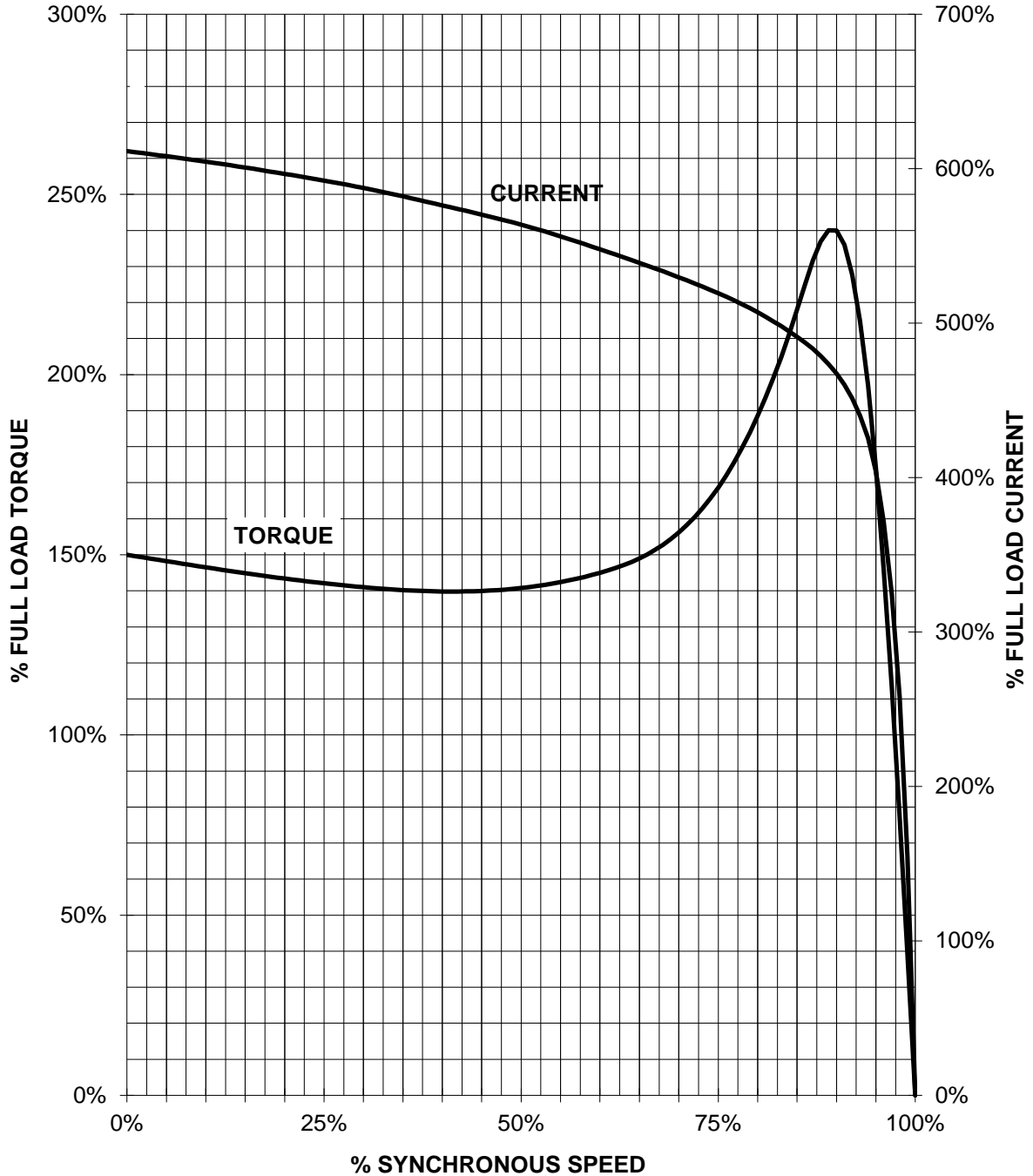
9 LEAD WYE						
Volts	LINES			CONNECTED TOGETHER	CONN.	
	L1	L2	L3			
LOW	T1 T7	T2 T6	T3 T9	T4 T5 T6	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

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

HP 15 VOLTS <600 RPM 1800 TYPE XP100 1D1  
HZ 60 PHASE 3 FRAME 254T NEMA B

## TORQUE & CURRENT VS. SPEED



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