

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

Motor type: SD100 FS: 256T - 4p - 20 hp -

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

Remarks

Electrical data

Class I Division 2 Gr. A, B, C or 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	Y	60	20.00	15.00	1,770	25.00	19.80	15.40	10.50	145.0		93.0	93.4	93.1	80.5	75.9	65.3	60.0	183	240
230	YY	60	20.00	15.00	1,770	50.00	39.62	30.80	21.00	290.0		93.0	93.4	93.1	80.5	75.9	65.3	60.0	183	240
Frame Type: 256T			Type of constr.: (A) Foot mounted - End shield							Ins. Cl.:Standard Class F Insulation		Motor Prot.:(A) Without Protection					NEMA Des.: B		S.F.: 1.15	
Mtr. WT:319										Temp. Rise Cl.: B		Amb. Temp.: + 40 to -20 °C @1000 m					kVA: G		I.P.: 55	

Mechanical data

Sound level (SPL / SWL) at 60 Hz				61.0 dB(A) / 73.0 dB(A)				Thickener				Polyurea											
Octave Band Center Frequencies Hertz								Safe Stall Time Hot								15 s							
250		500		1000		2000		4000		8000		Hz		Safe Stall Time Cold				33 s					
SPL@3		47.0		53.0		59.0		56.0		47.0		38.0		dB(A)		Frame material				cast iron			
Moment of inertia								2.1 Lb-ft²								Color, paint shade				Standard Paint - RAL7030			
Ext Load Inertia Capability:								99.0 Lb ft²								Coating (paint finish)				Standard Alkyed + Epoxy (C2)			
Bearings																Ventilation Type							
Bearing DE NDE				6309 Z C3 S0				6309 Z C3 S0				Method of cooling				TEFC							
Bearing_Type				Ball Bearing				Ball Bearing				Direction of rotation				Bidirectional							
AFBMA:				45BC03JP30				45BC03JP30				Fan Material				Polypropylen ESD							
Grease																VFD				CT: 20:1 VT: 20:1			
Capacity				0.50 oz				0.50 oz				Space heaters				without							
Grease Type:				Exxon Mobile EM												Brake:				without			

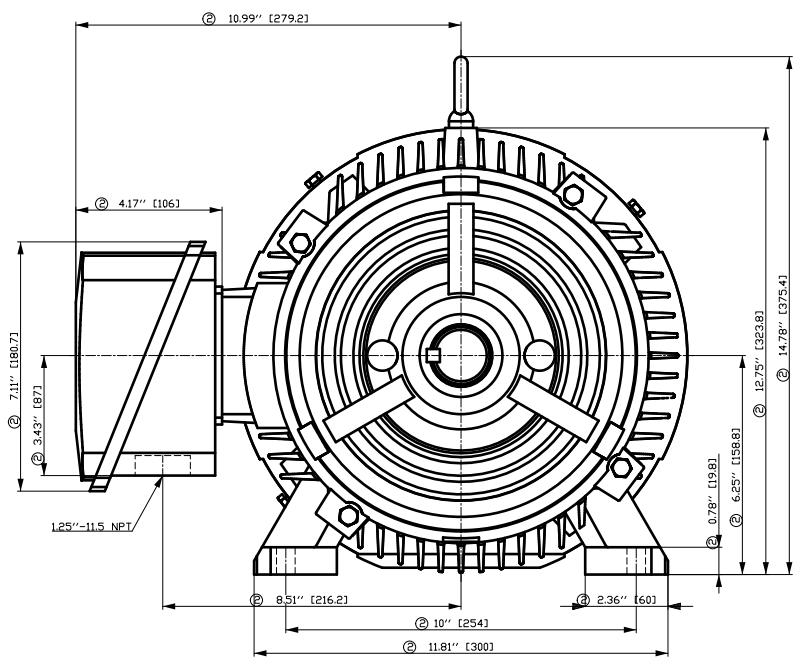
Terminal box

Lead Wire Connection					9 LEAD - WYE	Terminal box position		(3) F-1, Standard Floor Mount, T. Box LHS		
Voltage	L1	L1	L1	Connected together		Material of terminal box		Cast Iron		
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6		Cable entry		1.25" NPT		
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9						

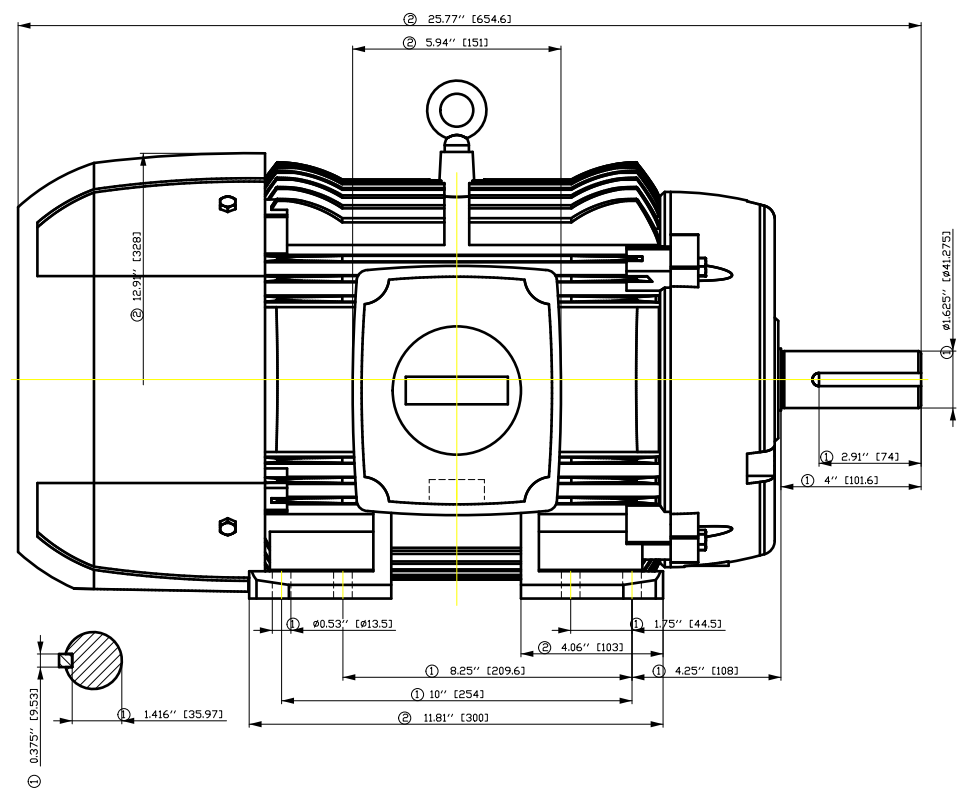
Notes:

I _L /I _N = locked rotor current / current nominal	3) Value is valid only for DOL operation with motor design IC411
M _L /M _N = locked rotor torque / torque nominal	2) at rated power / at full load
M _B /M _N = break down torque / nominal torque	

responsible dep. DI MC LVM	technical reference	created by DT Configurator	approved by		Technical data are subject to change! There may be discrepancies between calculated and actual data before			
	document type datasheet				document status released		customer	
	title 1LE2321-2BB21-4AA3				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.

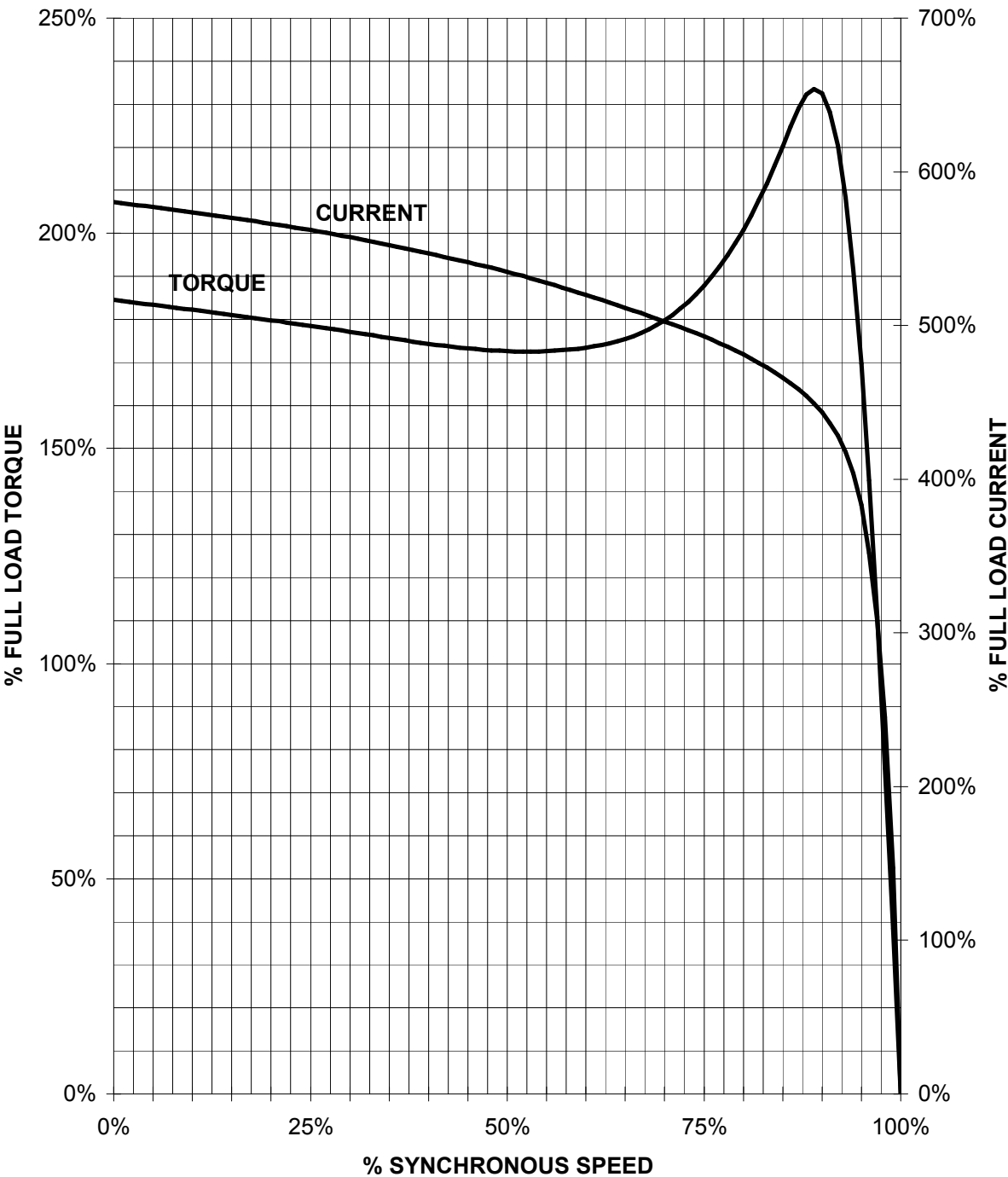


Tolerance	Surface	Material	Weight	Scale
1LE2321-2BB21-4AA3	Author	Dimensional drawing Maßezeichnung		
-	Creator DTK			
	Approval			
	Department			
	Change Order	MLFB	Doc. Type	
SIEMENS	Doc. Date 4/22/21	Item No	Paper Size A3	
	Revision Index RS	Doc No	1st Language en	
			2nd Language de	
	Project No -	Ref No -	Sheet 1 of 1	
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HP 20 VOLTS < 600V RPM 1800 TYPE SD100
HZ 60 PHASE 3 FRAME 256T NEMA B

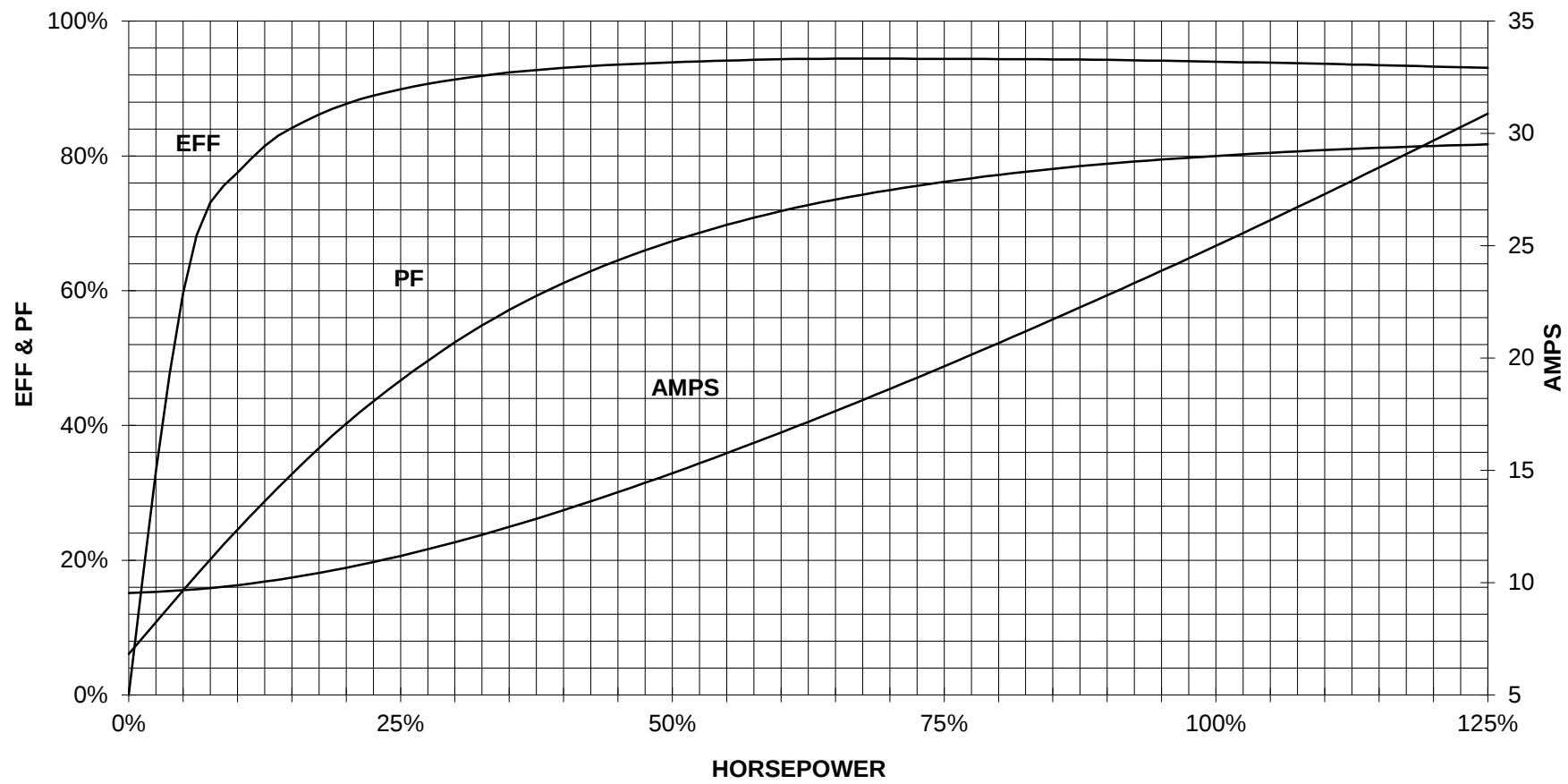
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

20 HP 1800 RPM 256T FRAME 460 VOLTS 3 PHASE NEMA DESIGN B

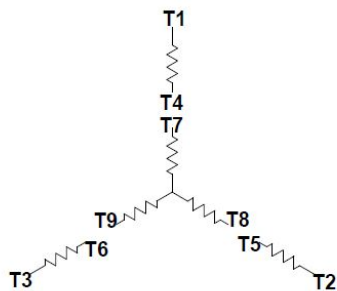
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PERFORMANCE CURVE
SD100



CUSTOMER _____ ORDER # _____ PO # _____

PERFORMANCE BASED ON DESIGN CALCULATIONS. SUBJECT TO CHANGE WITHOUT NOTICE.
REV. 1

Main terminal diagram



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

responsible dep. DI MC LVM	technical reference	created by	approved by	Project			
	document type Wiring Diagram	1LE2321-2BB21-4AA3		document status free		customer	
	title			document number			
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