

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

Motor type: (822) HP100 VSS Normal Thrust FS: 184 HP - 4p - 5 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	T _k /T _N
						4/4	3/4	1/2	0	4/4		3/4	2/4	4/4	3/4	2/4	LRT [%]		BDT [%]	
460	Y	60	5.00		1,755	6.50	5.20	4.10	3.00	46.0	89.5	90.0	89.2	80.5	75.1	63.6	15.0	220	350	
230	Y Y	60	5.00		1,755	13.00	10.39	8.25	6.00	92.0	89.5	90.0	89.2	80.5	75.1	63.6	15.0	220	350	
400	Y	50	3.00		1,471	5.03	4.19	3.63	3.08	48.7	86.7	86.4	84.4	71.3	64.3	50.8	10.7	369	509	
200	Y Y	50	3.00		1,471	10.06	8.38	7.26	6.16	97.4	86.7	86.4	84.4	71.3	64.3	50.8	10.7	369	509	
Frame Type: 184 HP			Type of constr.: (T) Vertical P-Base										Motor Prot.: (A) No winding protection				NEMA Des.: B		S.F.: 1.15	
Mtr. WT:135 lbs			Insulation Class.:Class F Insulation							Temp. Rise Cl.: B			Amb. Temp.: + 40 to -20 °C @1000 m				kVA: K		IP IP55	

Mechanical data

Sound level (SPL / SWL) at 60 Hz								57.0 dB(A) / 67.0 dB(A)								Capacity								0.7 oz				1.3 oz																															
Octave Band Center Frequencies Hertz																Grease Type:																Exxon Mobile EM																											
250								500				1000				2000				4000				8000				Hz				Thickener																Polyurea											
SPL@3								42.0				46.0				54.0				49.0				43.0				32.0				dB(A)				Safe Stall Time Hot																14 s							
Moment of inertia																1.0 Lb-ft²																Safe Stall Time Cold																29 s											
Ext Load Inertia Capability:																28.4 Lb ft²																Frame material																Cast iron											
Bearings																Color, paint shade																Standard Paint - RAL7030																											
Bearing DE NDE										6206 C3 S0						6206 C3 S0 DB						Coating (paint finish)																Standard Alkyed + Epoxy (C2)																					
Bearing_Type										Ball Bearing						Ball Bearing (2)						Ventilation Type																																					
AFBMA:										30BC02J30						30BC02J30						Method of cooling																TEFC																					
Rated Thrust																Direction of rotation																Bi-Directional																											
Max Radial force										45 lbs						Fan Material																Plastic																											
Max Down thrust 3yr 1yr										754 lbs						1,116 lbs						VFD																CT: n/a VT: n/a																					
Max momentary up thrust 3yr 1yr										760 lbs						1,122 lbs						Space heaters																-/-																					
Grease																Brake:																-/-																											

Terminal box

Lead Wire Connection					9 LEAD - WYE	Terminal box position		(3) Mounting - F-1	
Voltage	L1	L2	L3	Connected together		Material of terminal box		?PMD_AAC368_001_000_1PC2VX CI?	
LOW	T1 T7	T2 T8	T3 T9	T4 T5 T6		Cable entry		.75" NPT	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9					

Notes:

I_L/I_N = locked rotor current / current nominal
M_L/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 department IN LVM		Technical reference	Created by SPC	Approved by	Technical data are subject to change! There may be discrepancies				
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		Document title 1PC2822-1DB21-6TA3			Document number				
		© ABB 2024					Revision 01	Creation date 2024-05-25 05:35	Language en

CERTIFIED PRINT/CERTIFICACION

CUSTOMER/CLIENTE:

#PO/#ORDEN COMPRA:	#SO/#ORDEN CLIENTE:
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HP:	RPM:	FRAME/ARM:	TYPE/TIPO:	VOLTS:	PH/FASES:	HZ:
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Tol. in mm. acc. to/Tol. en mm. según DIN-1686-GTB-19		
Over/desde	to/hasta	
--	18	± 4,5
18	30	± 4,7
30	50	± 5
50	80	± 5,5
80	120	± 6
120	180	± 6,5
180	250	± 7
250	315	± 7,5
315	400	± 8
400	500	± 8,5
500	630	± 9,5

Keyseat detail
Detalle Cuñero

Tolerance
DIN-1686-GTB-19

1PC28221D...TA3, 1PC28321D...TA3
AA) New design release, T-9042

SIEMENS

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2014 -

Surface			
Author		MARTINEZ	
Creator		2015-07-17 MARTINEZ	
Approval			
Department		PD LD P MF-GDL PLM 3	
Change Order			
Doc State			
Revision		Index	RS
001		AA	
Project No		VSS (Vertical Solid shaft)	

Material	Weight 0	Scale 1:1
NEMA Outline HP100 & LP100 F.S. 180 DIMENSIONES NEMA HP100 & LP100 Arm. 180		
MLFB	Doc Type	TB / Z
Item No	Paper Size	IEC-A3
Doc No	1st Language	en
	2nd Language	de
Ref No	Sheet	of

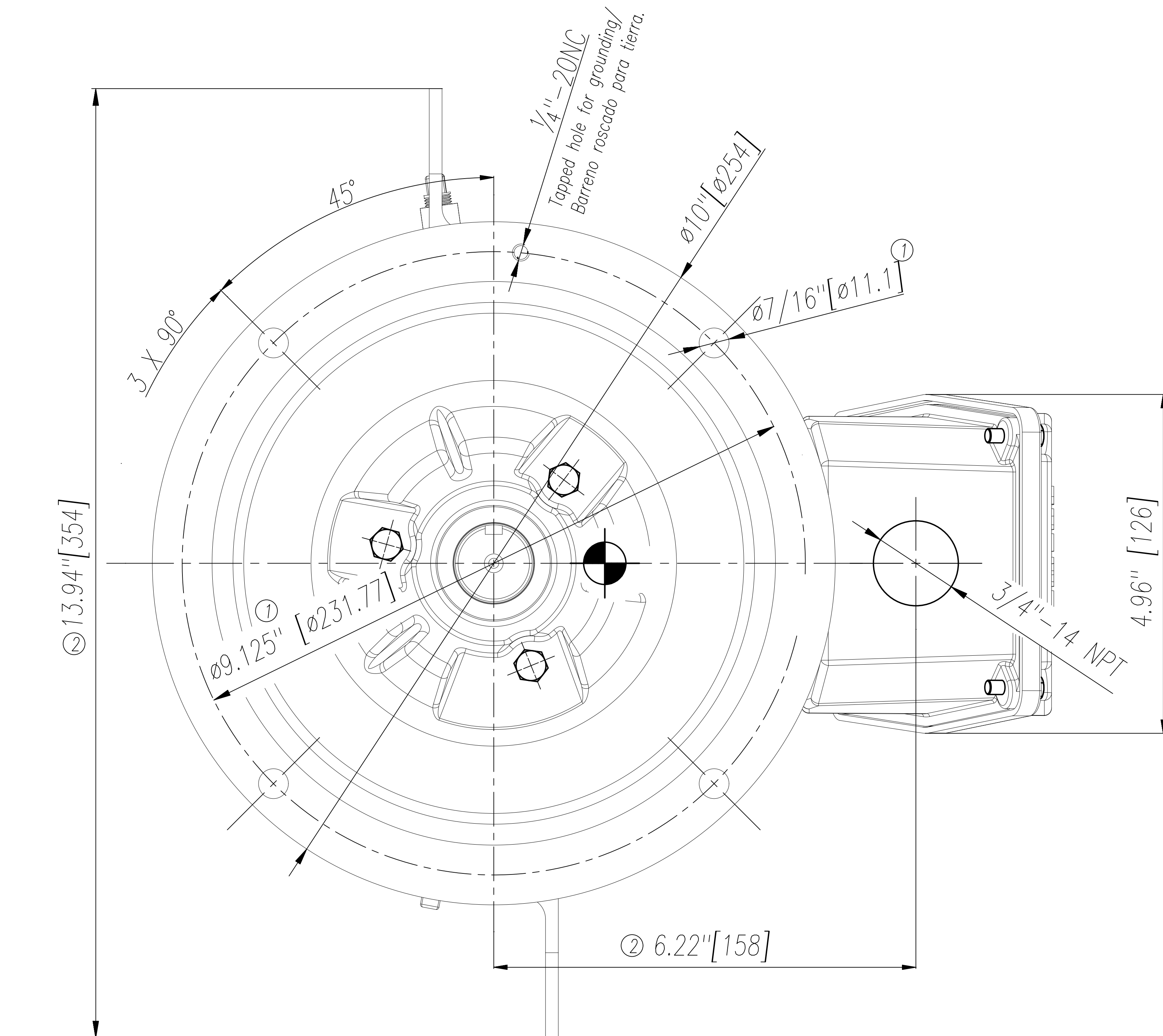
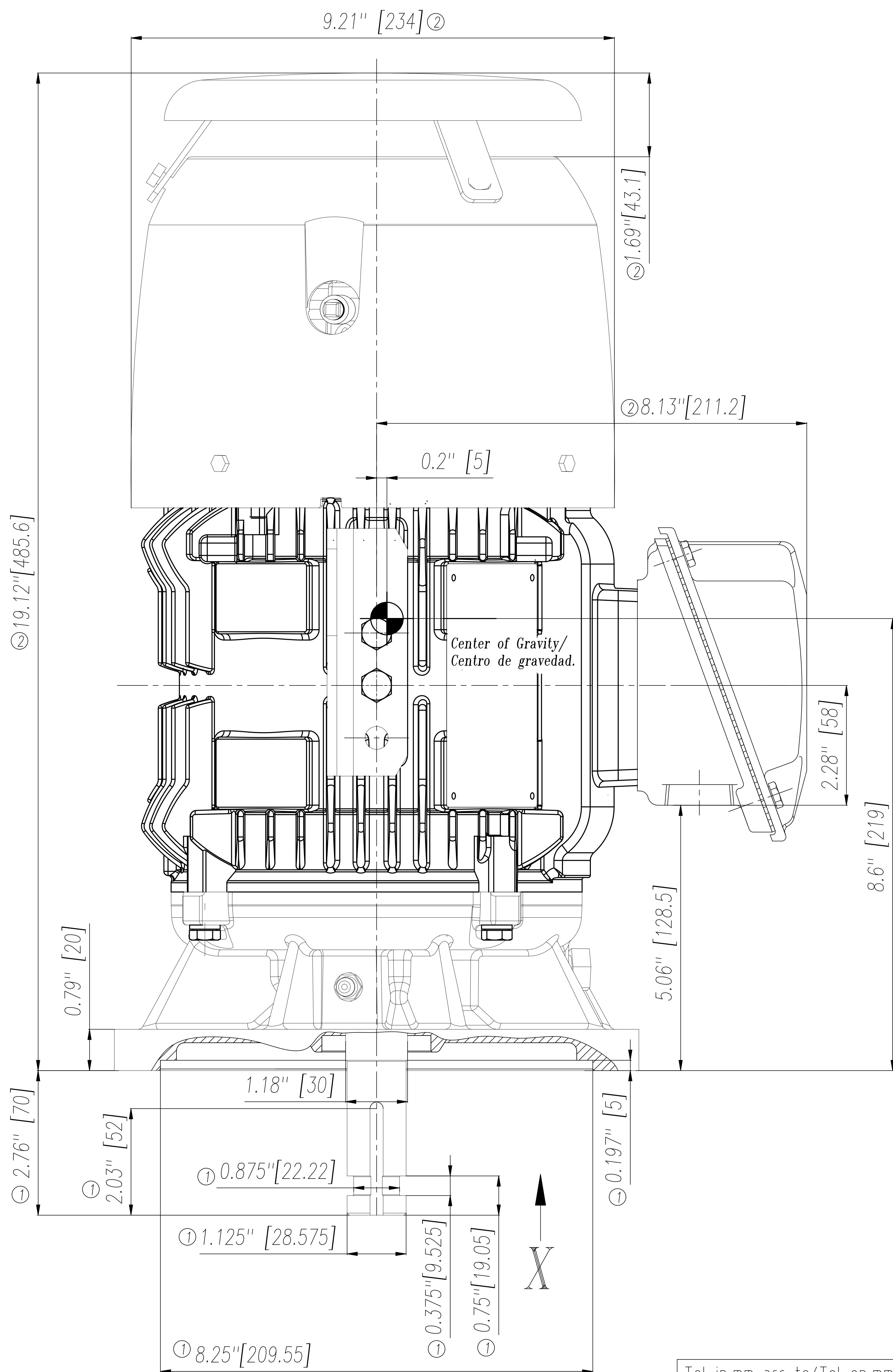
PERMISSIBLE INDICATOR READINGS
LECTURAS PERMISIBLES INDICADOR DE CARATULA

FACE RUNOUT OSCILACION BRIDA	MOUNTING RABBIT ECCENTRICITY EXCENTRICIDAD MONTAJE	SHAFT RUNOUT OSCILACION EJE	AXIAL END PLAY JUEGO AXIAL	TYPE TIPO
0.004"[0.10]	0.004"[0.10]	0.001"[0.025]	0.002"[0.05]	LP100
		0.002"[0.05]	0.015"[0.38]	HP100

Reed Critical Frequency (CPM) Static Deflection (in)

In Line with Box: 17700
90 Deg. from Box: 17727
±20% Tolerance

0.0001



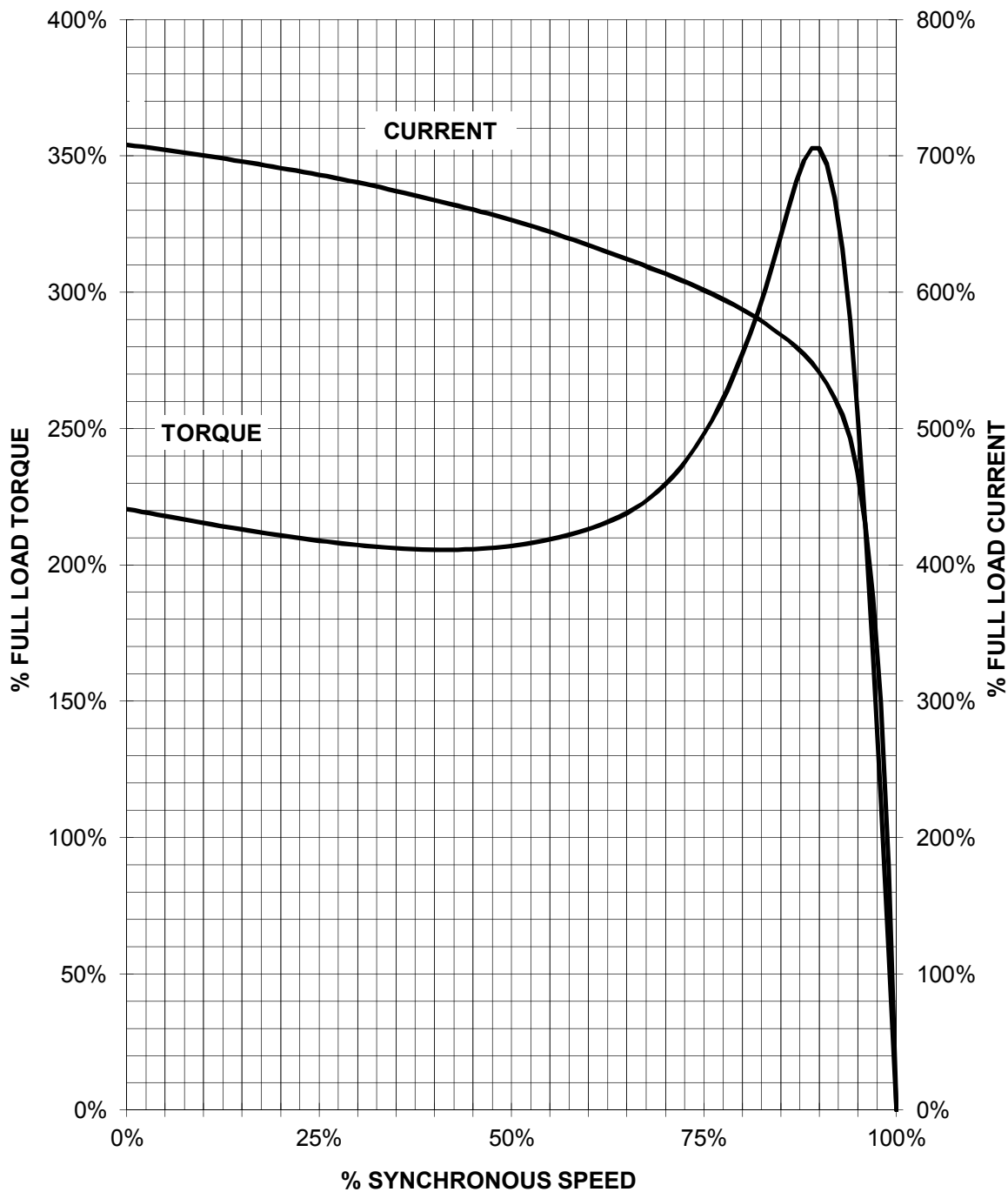
X View

Vista X

SIEMENS INDUSTRY, INC.

HP 5 VOLTS <600 1800 TYPE HP100
HZ 60 PHASE 3 FRAME 184HP NEMA B

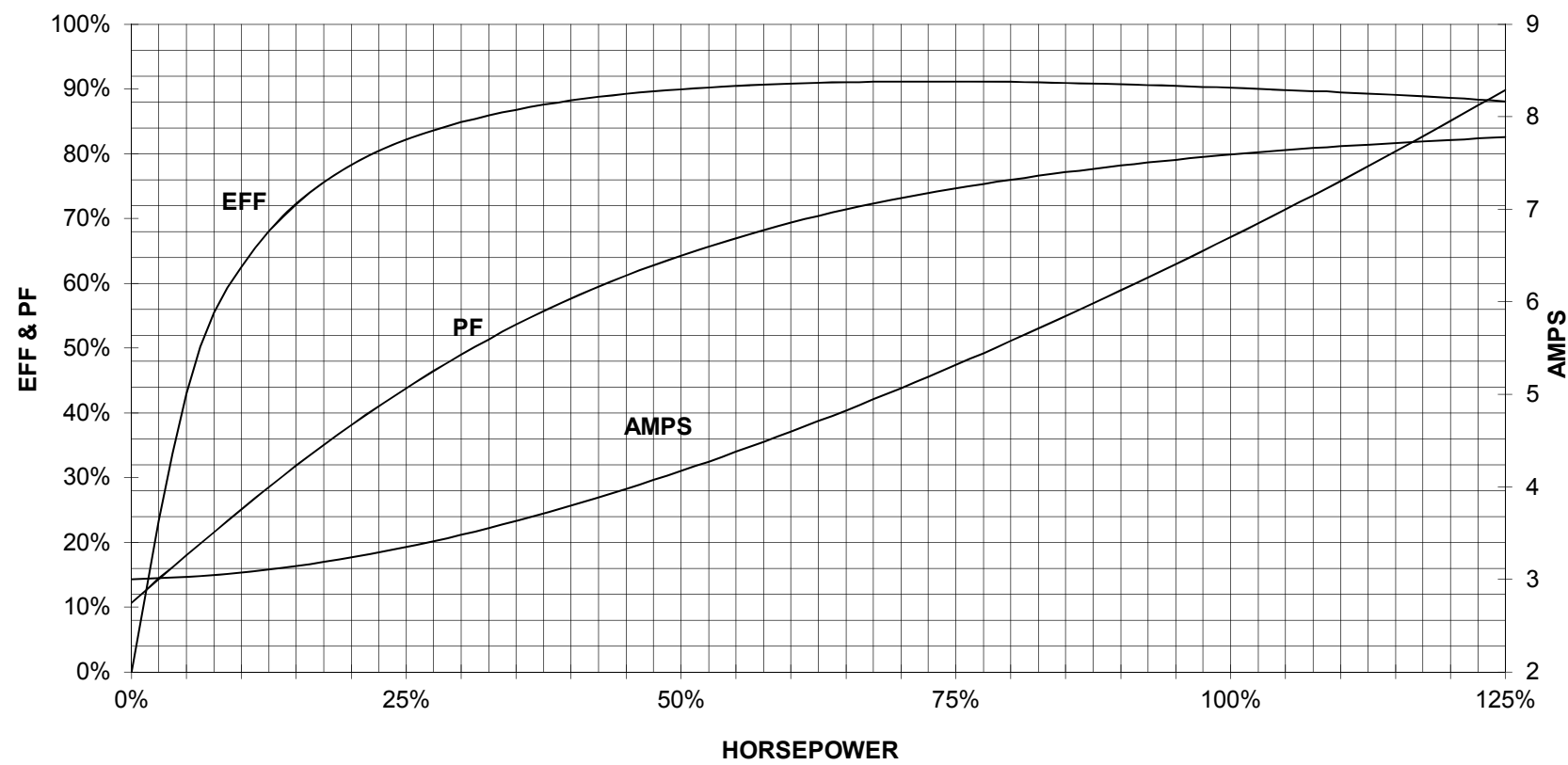
TORQUE & CURRENT VS. SPEED



CUSTOMER: _____ ORDER#: _____

5 HP 1800 RPM 184HP FRAME 230/460 VOLTS 3 PHASE NEMA DESIGN B

SIEMENS INDUSTRY, INC.
PERFORMANCE CURVE
HP100

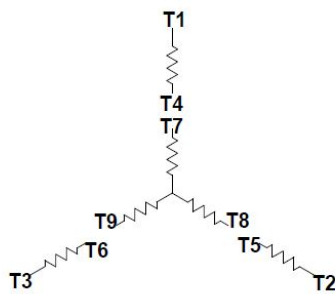


CUSTOMER _____ ORDER # _____ PO # _____

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	YY	
HIGH	T1	T2	T3	T4 T7-T5 T8-T6 T9	Y	

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Responsible department IN LVM	Technical reference	Created by	Approved by Created automatically	Technical data are subject to change! There may be discrepancies between calculated and rating plate values.		Link documents	
	Document type Wiring diagramm			Document status Released			
	Document title 1PC2822-1DB21-6TA3			Document number WDS-240525-053601			
	Revision AA		Creation date 2024-05-25				
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