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# Customer information packet

## CTM1766T

50HP, 1775RPM, 3PH, 60HZ, 326T, TEFC, FOOT,  
Class - None  
Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	326T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	12.500 HP @ 60 HZ 50.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	63.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	28.0 a
Insulation Class	F

## Part detail

Revision	V
Type	AC
Mech. spec.	12F707
Base	
Status	PRD/A
Elec. spec.	12WGX198
Layout	12LYF707
Eff. date	09-08-2023
CD Diagram	CD0032
Poles	04/08
Leads	6#8
Proprietary	False
Created date	10-29-2009

Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 8 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1272M
Mounting Arrangement	F1
Number of Poles	4 8
Overall Length	30.28 IN
Product Family	Super-E Chemical Processing
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	2.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1760 rpm 870 rpm
Speed Code	2S-1W-VT
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

**Nameplate**

<b>NP2178</b>							
<b>CAT.NO.</b>	CTM1766T						
<b>SPEC.</b>	12F707X198G1						
<b>HP</b>	50/12.5						
<b>VOLTS</b>	460						
<b>AMP</b>	63/28						
<b>RPM</b>	1760/870						
<b>FRAME</b>	326T	<b>HZ</b>	60	<b>PH</b>	3		
<b>SER.F.</b>	1.15	<b>CODE</b>	K	<b>DES</b>	A	<b>CL</b>	F
<b>NEMA-NOM-EFF</b>		<b>PF</b>					
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>							
<b>DE</b>	6312	<b>ODE</b>	6312				
<b>ENCL</b>	TEFC	<b>SN</b>					

**AC Induction Motor Performance Data**

Record # 35494

Typical performance - not guaranteed values

Winding: 12WGX198-R005		Type: 1272M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Speed Connection</b>	
Rated Output (HP)	50/12.5	Full Load Torque	146 LB-FT	
Volts	460	Start Configuration	direct on line	
Full Load Amps	63/28	Breakdown Torque	633 LB-FT	
R.P.M.	1760/870	Pull-up Torque	211 LB-FT	
Hz	60 Phase	Locked-rotor Torque	321 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	522 A	
Service Factor (S.F.)	1.15	No-load Current	32.2 A	
NEMA Nom. Eff.	0 Power Factor	Line-line Res. @ 25°C	0.115 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	70°C	
S.F. Amps		Temp. Rise @ S.F. Load	81°C	
		Locked-rotor Power Factor	34.1	

**Load Characteristics 460 V, 60 Hz, 50 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	61	73	79	83	85	81
Efficiency	86.3	91.5	93.1	93.4	93.4	93	93.4
Speed	1794	1790	1786	1781	1777	1772	1779
Line amperes	34.9	41.9	51.6	63	75.7	88.7	70.6

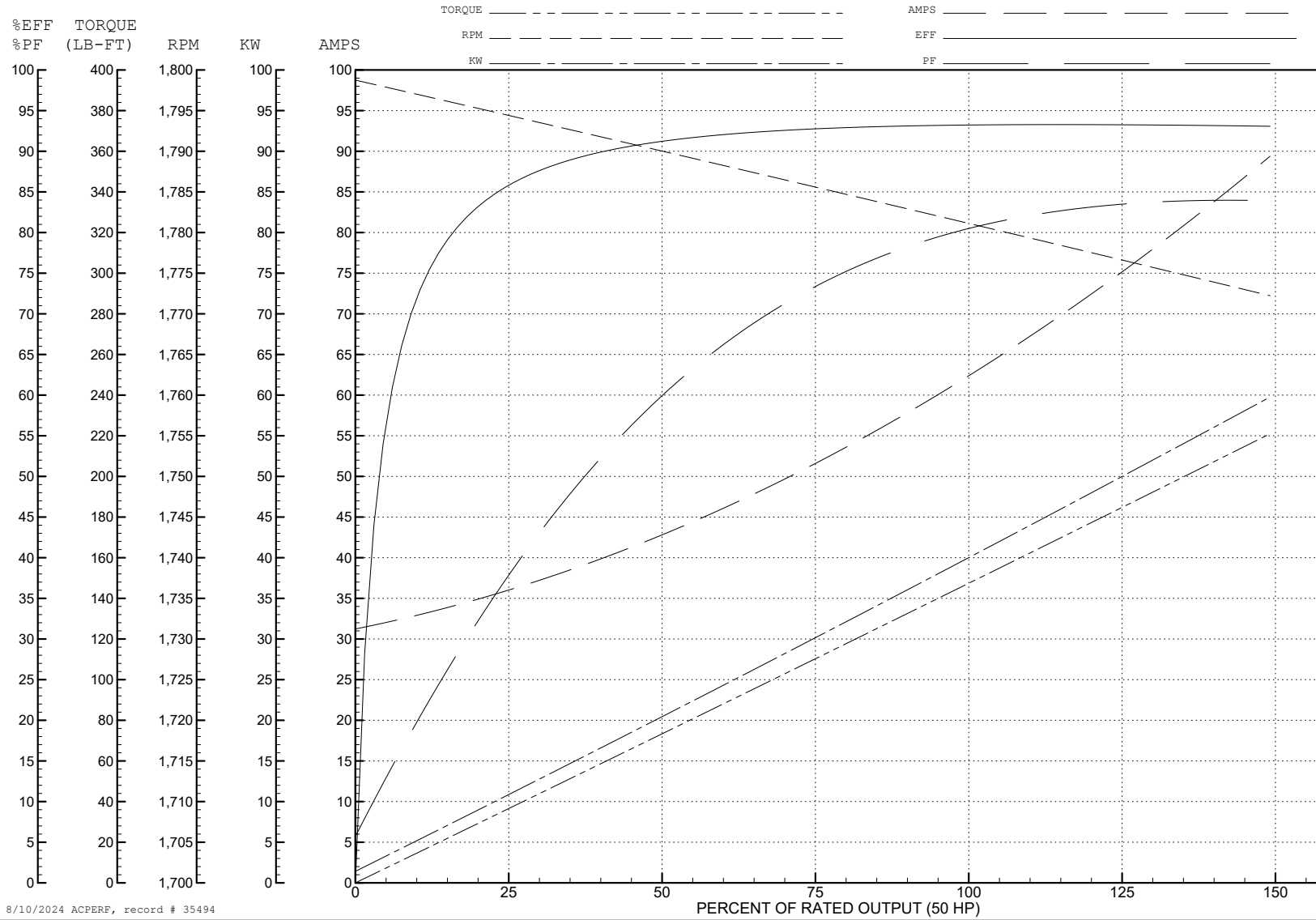
ABB Motors and Mechanical Inc.

WINDING # 12WGx198

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1781 RPM 460 V 1272M

TORQUES (LB-FT): PO=633 PU=211 LR=321 LRA=522



8/10/2024 ACPERF, record # 35494

**AC Induction Motor Performance Data**

Record # 35495

Typical performance - not guaranteed values

Winding: 12WGX198-R005		Type: 1272M		Enclosure: TEFC			
<b>Nameplate Data</b>			<b>460 V, 60 Hz: Low Speed Connection</b>				
Rated Output (HP)	50/12.5	Full Load Torque	76.7 LB-FT				
Volts	460	Start Configuration	direct on line				
Full Load Amps	63/28	Breakdown Torque	235 LB-FT				
R.P.M.	1760/870	Pull-up Torque	92.5 LB-FT				
Hz	60 Phase	3	Locked-rotor Torque	113 LB-FT			
NEMA Design Code	A	KVA Code	K	Starting Current	120 A		
Service Factor (S.F.)	1.15	No-load Current	23 A				
NEMA Nom. Eff.	0	Power Factor	0	Line-line Res. @ 25°C	0.444 Ω		
Rating - Duty	40C	AMB-CONT	Temp. Rise @ Rated Load	53°C			
S.F. Amps			Temp. Rise @ S.F. Load	59°C			
		Locked-rotor Power Factor	32.5				

**Load Characteristics 460 V, 60 Hz, 13 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	18	30	40	48	54	59	52
Efficiency	74	83.4	86.9	88.3	88.8	88.7	88.6
Speed	896	894	892	889	886	883	887
Line amperes	23.2	24.3	26.2	28.5	31.4	34.9	30.2

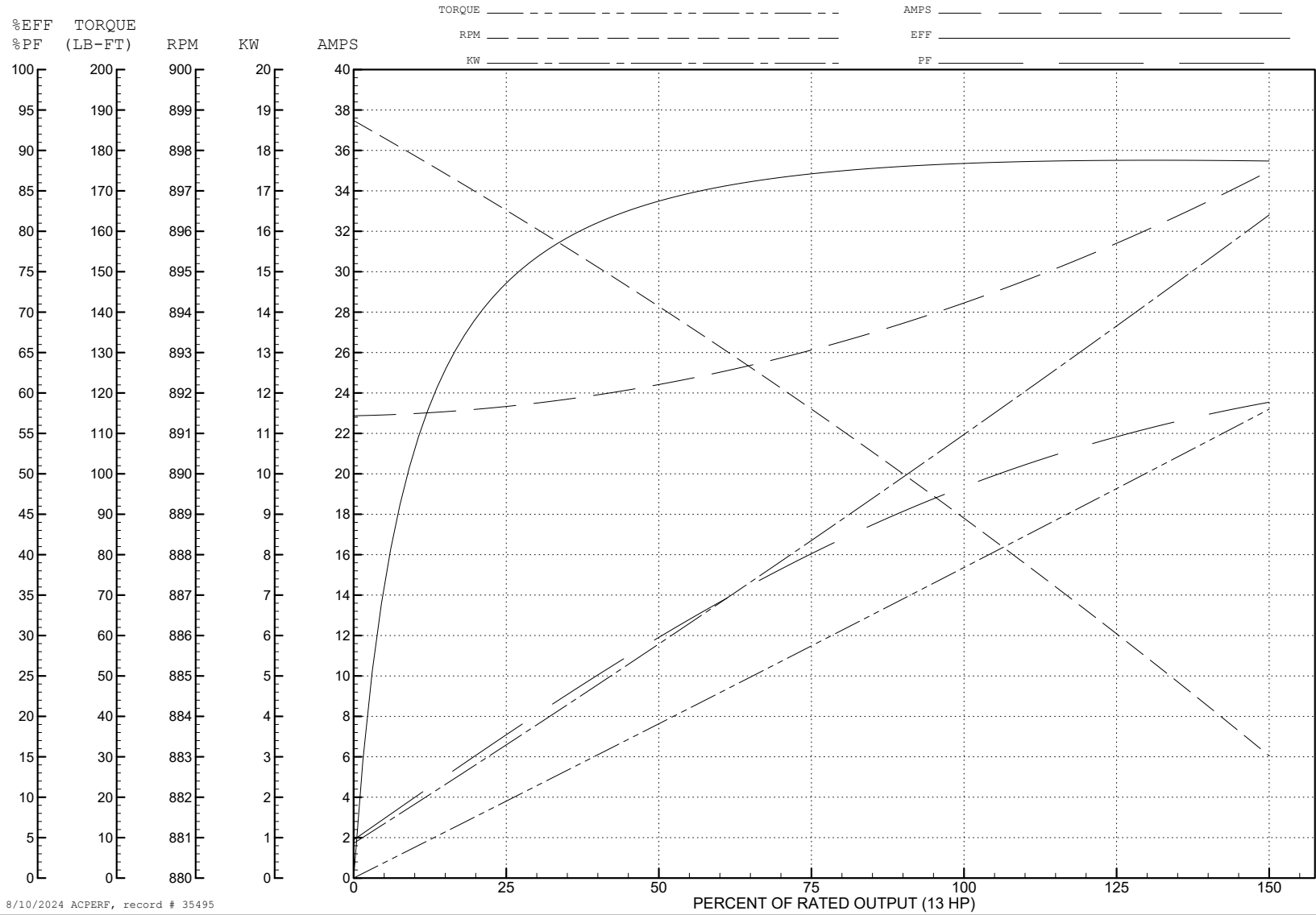
ABB Motors and Mechanical Inc.

WINDING # 12WGX198

13 HP 3 PH 60 HZ 889 RPM 460 V 1272M

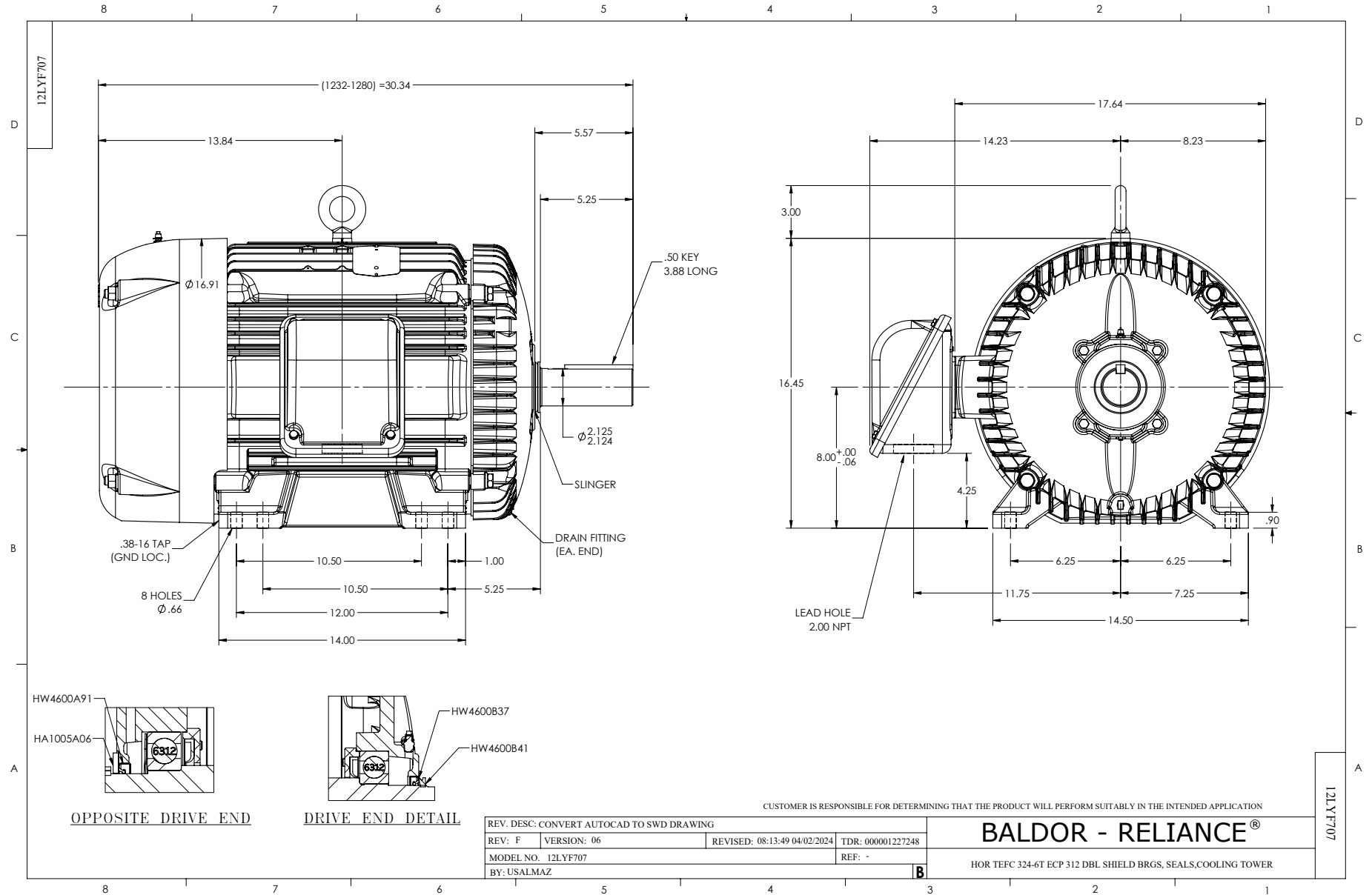
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=235 PU=92.5 LR=113 LRA=120

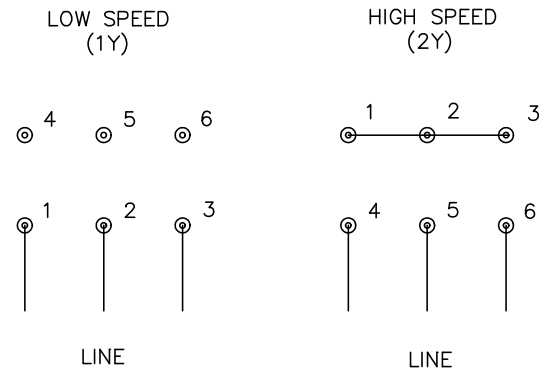
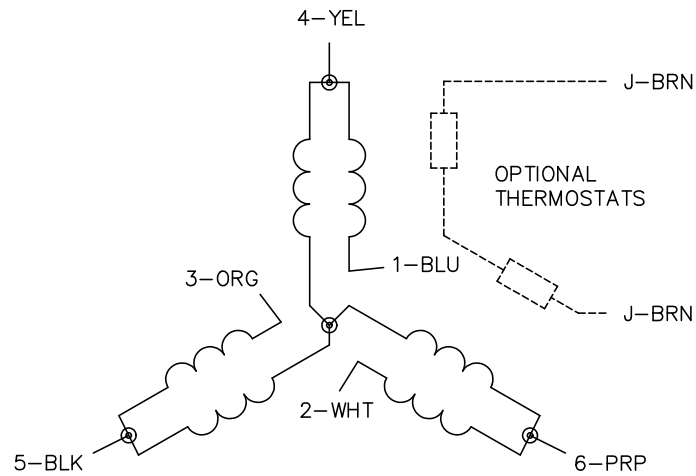


8/10/2024 ACPERF, record # 35495





CD0032



**NOTES:**

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/22/99 8:27	TDR: 0171435
CD0032		FILE: AAA00005145	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, SV, 6 LEADS, 2-SPEED 1-WINDING VARIABLE TORQUE

CD0032