

ABB BALDOR RELIANCE III

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
Auxiliary Box	NO AUXILLARY BOX
Auxiliary 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	X
Type	AC
Mech. spec.	12F707
Base	
Status	PRD/A
Elec. spec.	12WGX198
Layout	12LYF707
Eff. date	10-16-2025
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

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

AC Induction Motor Performance Data

Record # 35494

Typical performance - not guaranteed values

Winding: 12WGX198-R005			Type: 1272M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: High Speed Connection		
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	3	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

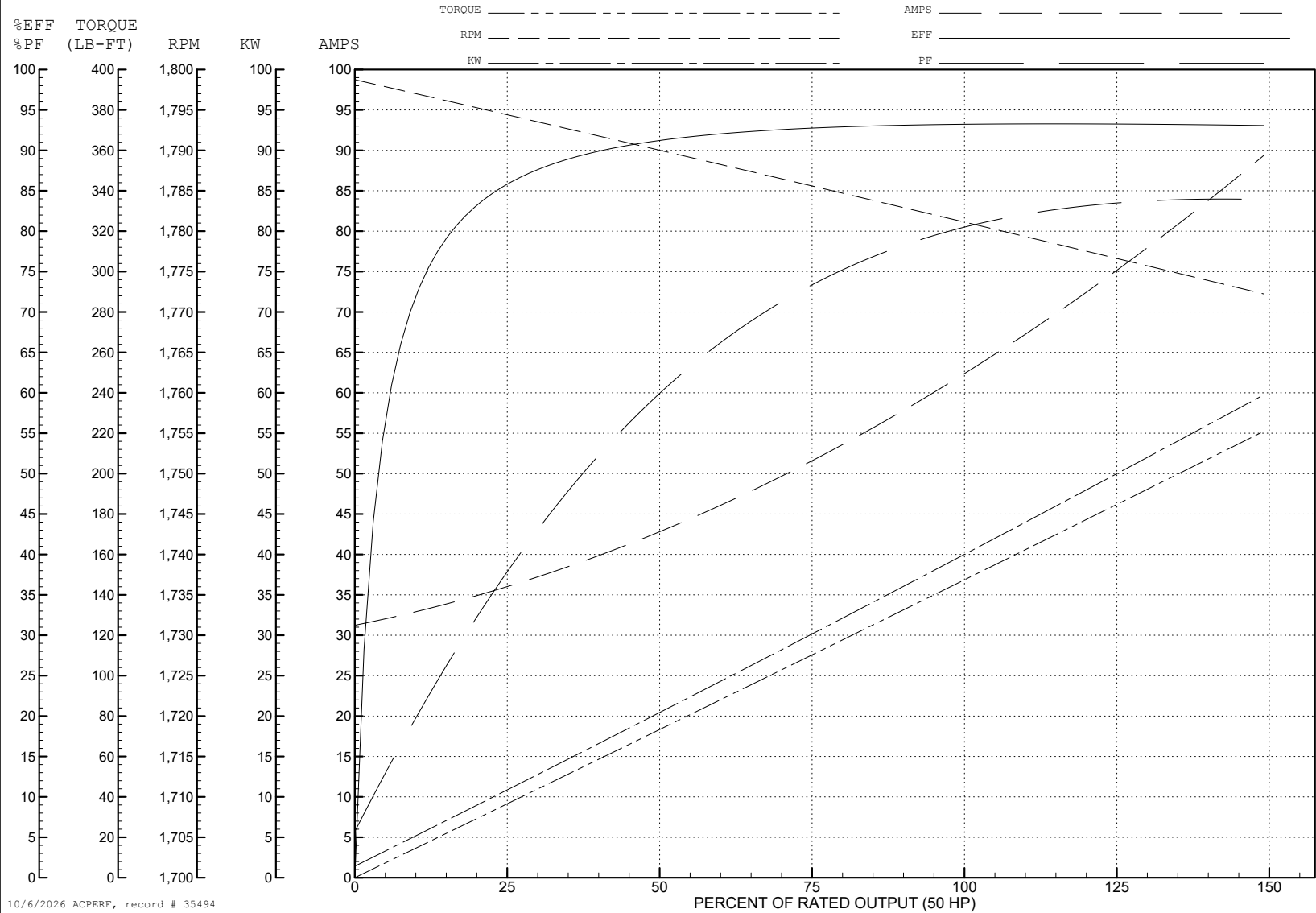
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WINDING # 12WGX198

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



AC Induction Motor Performance Data

Record # 35495

Typical performance - not guaranteed values

Winding: 12WGX198-R005			Type: 1272M		Enclosure: TEFC	
Nameplate Data				460 V, 60 Hz: Low Speed Connection		
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	Starting Current		120 A
Service Factor (S.F.)		1.15		No-load Current		23 A
NEMA Nom. Eff.		0	Power Factor	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

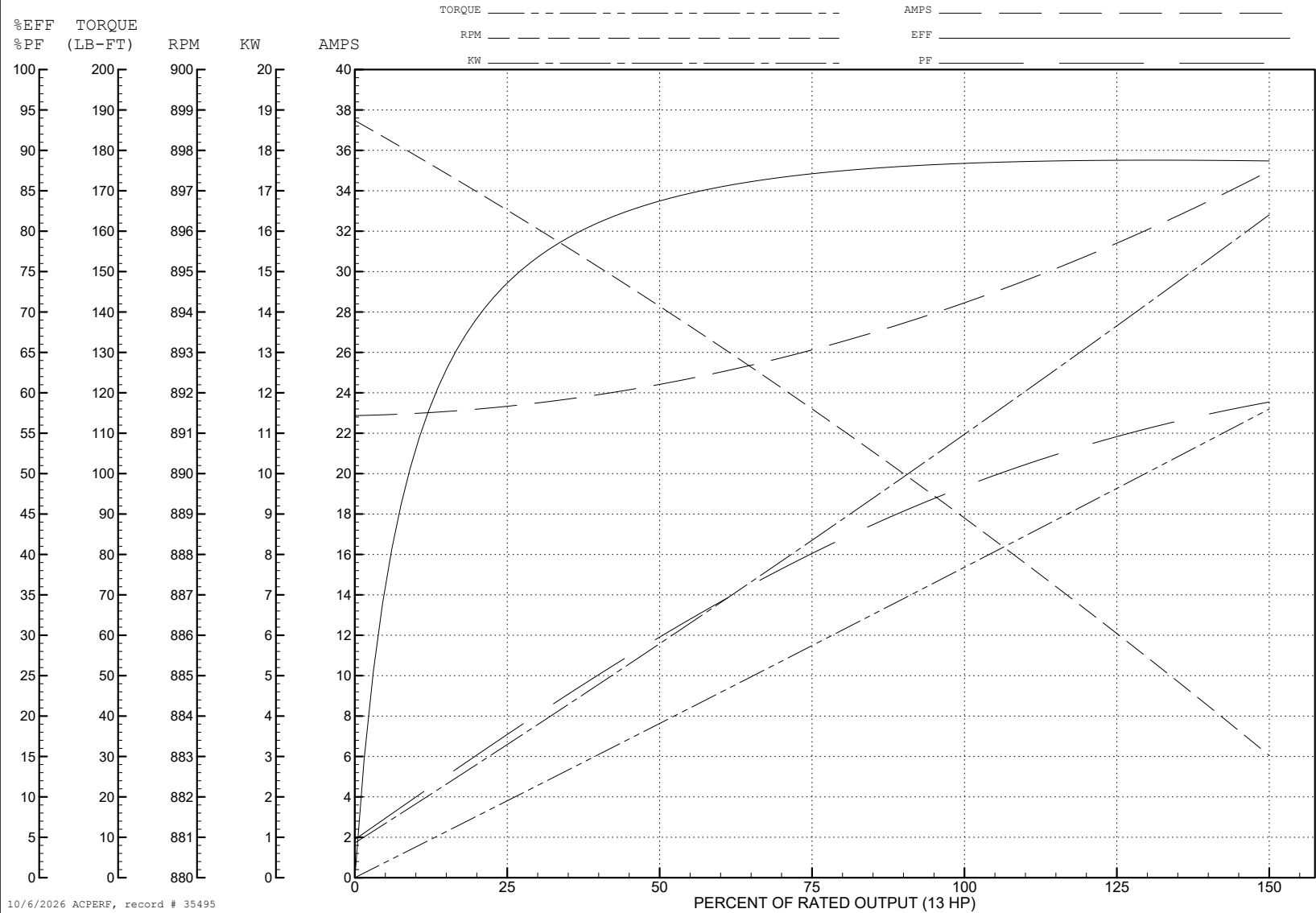
ABB Motors and Mechanical Inc.

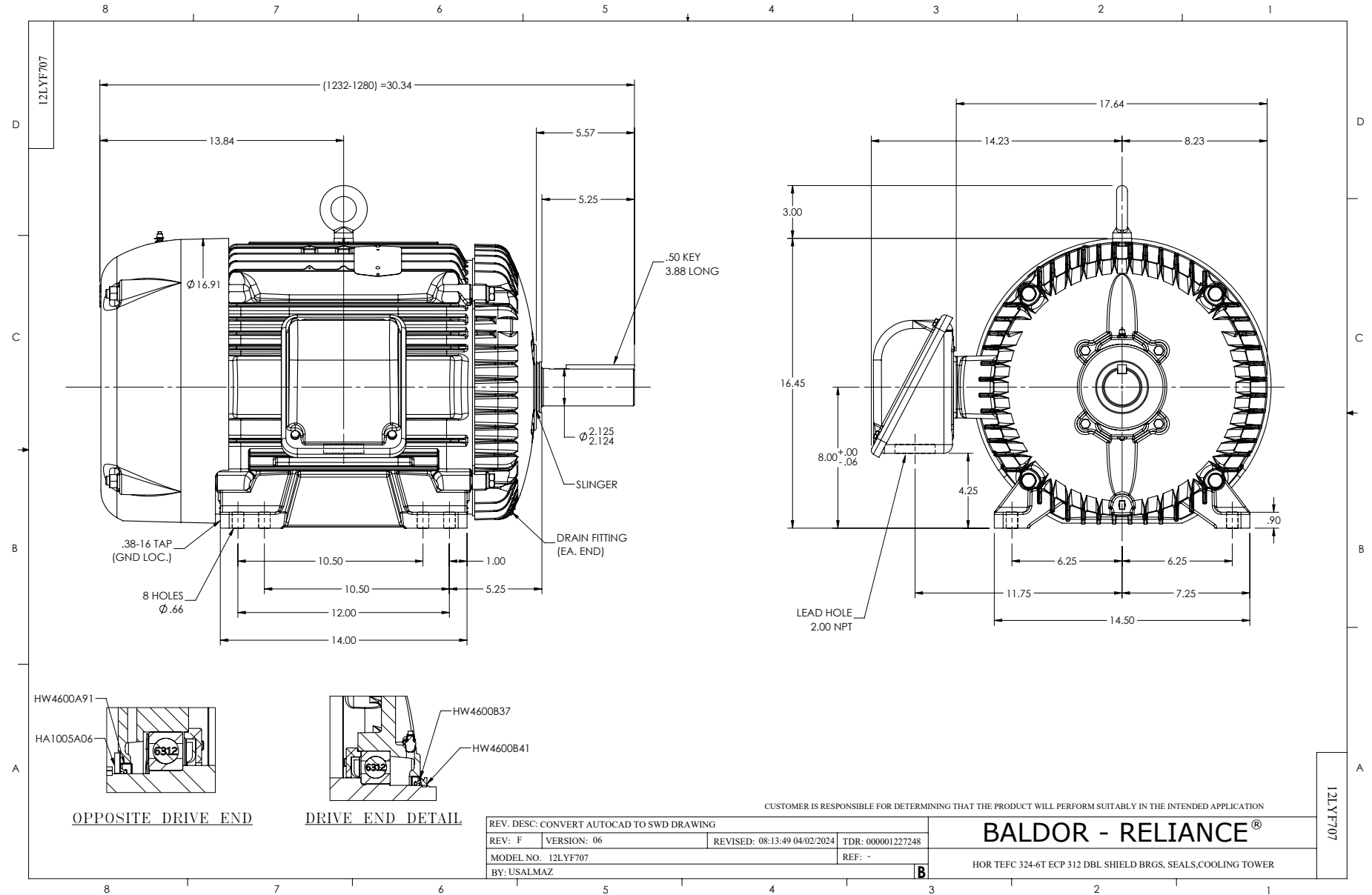
WINDING # 12WGX198

Typical performance - not guaranteed values.

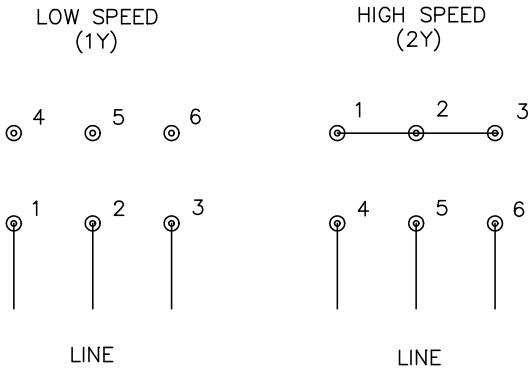
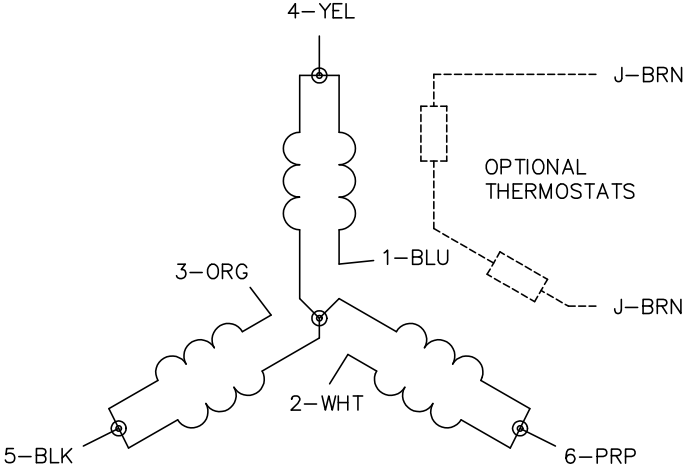
13 HP 3 PH 60 HZ 889 RPM 460 V 1272M

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





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