

BALDOR® • RELIANCE 

Product Information Packet

CTM1766T

50HP, 1775RPM, 3PH, 60HZ, 326T, TEFC, FOOT,

Part Detail							
Revision:	R	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	12WGX198	CD Diagram:	CD0032	Mfg Plant:	
Mech. Spec:	12F707	Layout:	12LYF707	Poles:	04/08	Created Date:	10-29-2009
Base:	RG	Eff. Date:	08-31-2020	Leads:	6#8		

Specs			
Catalog Number:	CTM1766T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Not Inverter
Frame:	326T	KVA Code:	K
Frame Material:	Iron	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	12.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
	50.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	6 @ 8 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	1272M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Product Family:	Super-E Chemical Processing
	CSA EEV	Pulley End Bearing Type:	Ball
	UR	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	Shaft Extension Location:	Pulley End
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Ground Indicator:	No Shaft Grounding
Blower:	None	Shaft Rotation:	Reversible

Current @ Voltage:	63.000 A @ 460.0 V	Shaft Slinger Indicator:	Shaft Slinger
Design Code:	A	Speed Code:	2S-1W-VT
Drip Cover:	No Drip Cover	Motor Standards:	NEMA
Duty Rating:	CONT	Starting Method:	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Bearing:	None
Feedback Device:	NO FEEDBACK	Thermal Device - Winding:	None
Front Face Code:	Standard	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
Heater Indicator:	No Heater	Winding Thermal 2:	None

Nameplate NP2178E										
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									USABLE AT 208V	
DE	6312				ODE	6312				
ENCL	TEFC			SN						

Parts List		
Part Number	Description	Quantity
SA187246	SA 12F707X198G1	1.000 EA
RA175014	RA 12F707X198G1	1.000 EA
10CB1000A04P	KO BOX, MACH W/2.00 NPT W/EPOXY PRIMER	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
10XN2520K08	1/4-20 X .50 GRADE #5, STL, ZINC PLATE	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 EA
HA4017A10	1/8X1.25 GREASE EXT (F/S)	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
HA4017A01	1/8 X 4 GREASE EXT (F/S)	1.000 EA
HA3400A13	STUD, 1/2-13 X 7" WELKER	4.000 EA
HA1005A06	SLINGER, OD 3.62, ID 2.15	1.000 EA
HW5100A15	W4997-050 WVY WSHR (WB)	1.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA
12EP1106A40P	PUEP, MACH FOR OIL SEAL W/EPOXY PRIMER	1.000 EA
12FH1002A33P	FAN COVER, MACH ,EPOXY PRIMER	1.000 EA
10XN5013K28	1/2-13 X 1.75 HEX HEAD MACH SCREW,GRAD	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW4600A91	SEAL 2.125 X 2.875 X 0.438 SINGLE LIP	1.000 EA
HW4600B37	SEAL 2.250 X 3.000 X .375 SINGLE LIP	1.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
XY5013A12	NUT,1/2-13,HEX,STEEL,ZINCPLATED	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I	4.000 EA
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 EA
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 EA
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.030 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA
12EP1111A17GP6	FR ENDPLATE, MACH W/EPOXY PRIMER & PAINT	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 1/21	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 EA
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.200 LB
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA

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HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
MG1025N19	WILKOFEST, 778.50, RELIANCE BLUE-GREEN	0.080 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0032	CONNECTION LABEL	1.000 EA
NP2178E	SS CP SUPER-E UL CSA CC	1.000 EA
12PA1000	PACKAGING GROUP PRINT PK1024A07	1.000 EA

AC Induction Motor Performance Data

Record # 35494

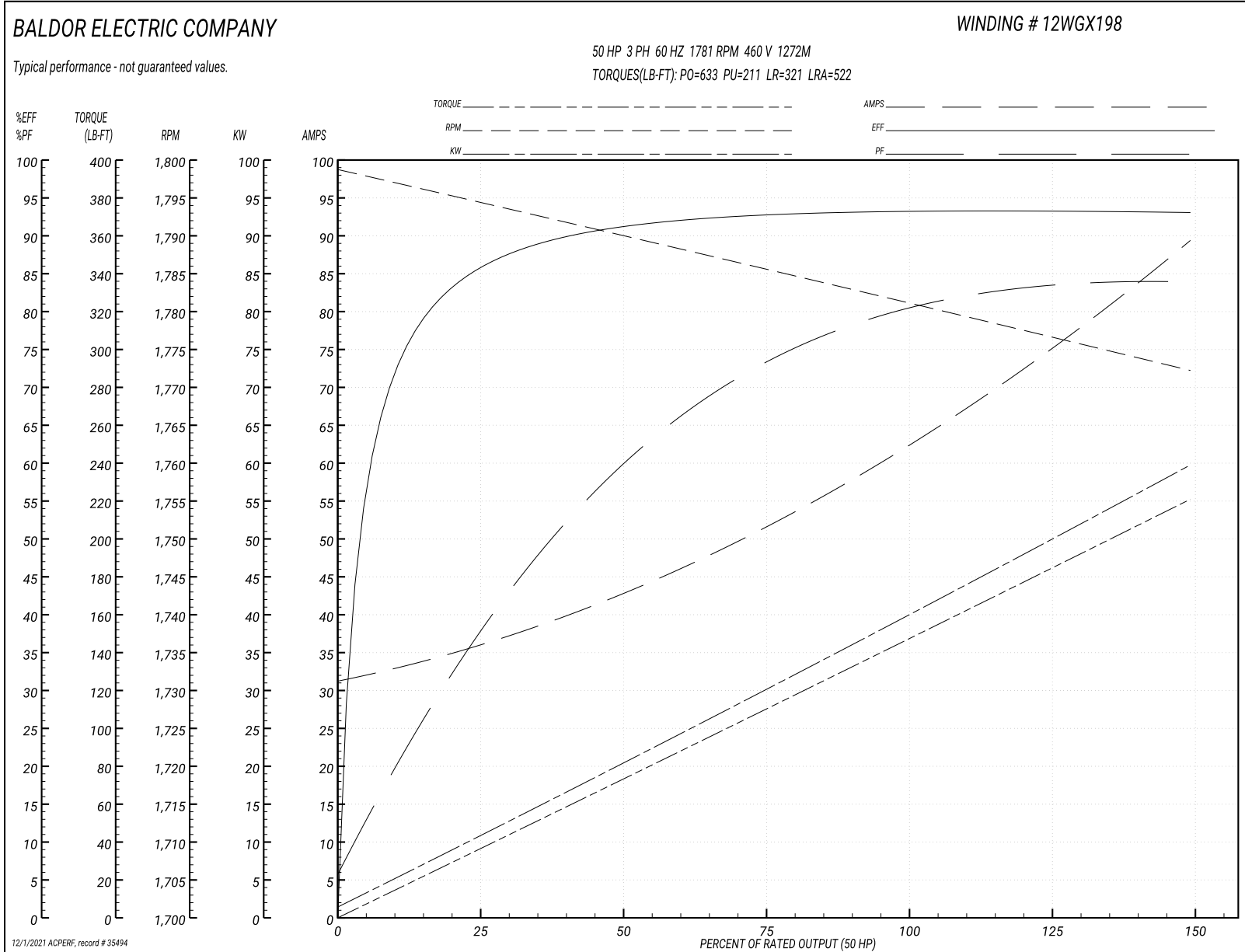
Typical performance - not guaranteed values

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	K	Starting Current	522 A	
Service Factor (S.F.)	1.15		No-load Current	32.2 A	
NEMA Nom. Eff.	0 Power Factor	0	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

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 35495

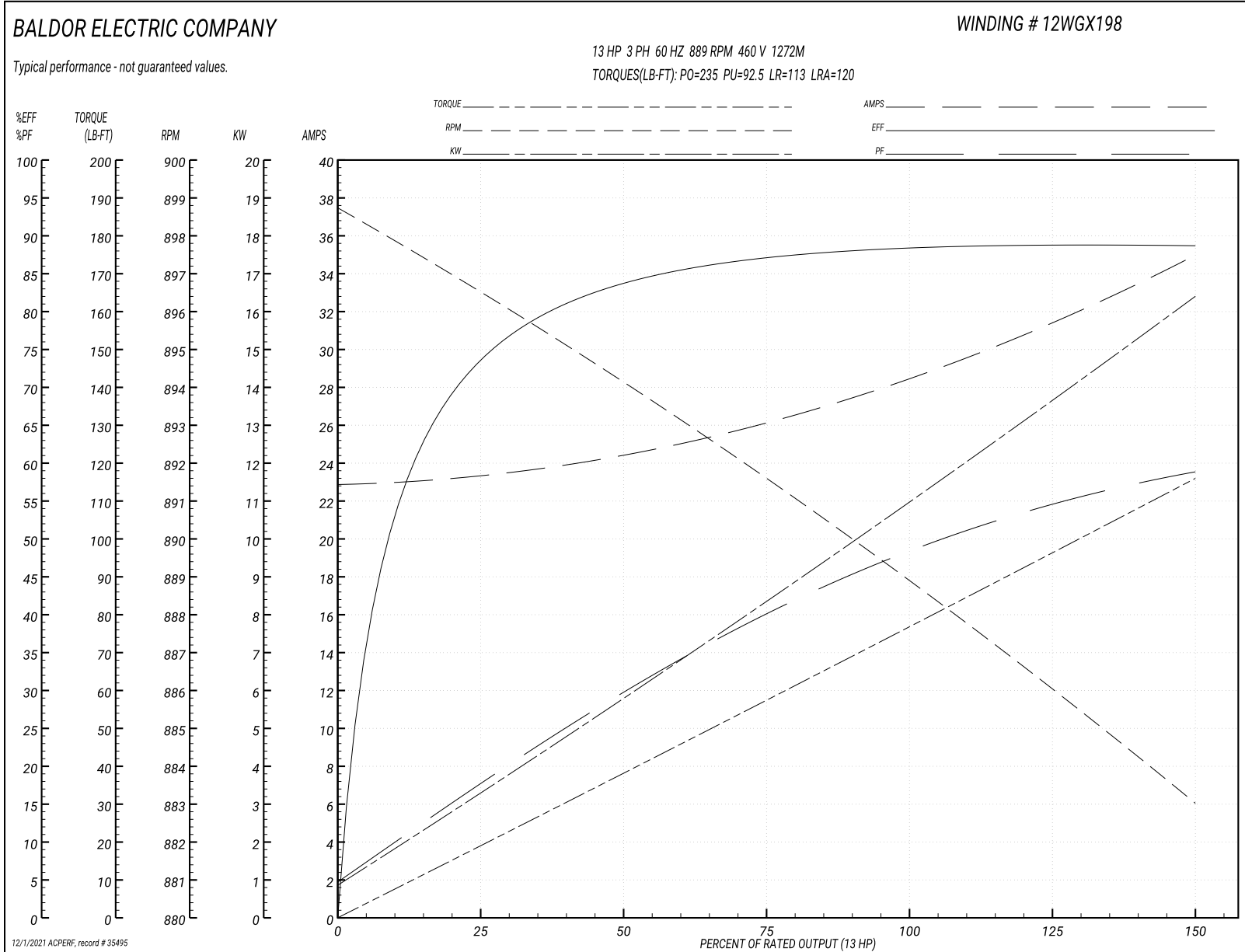
Typical performance - not guaranteed values

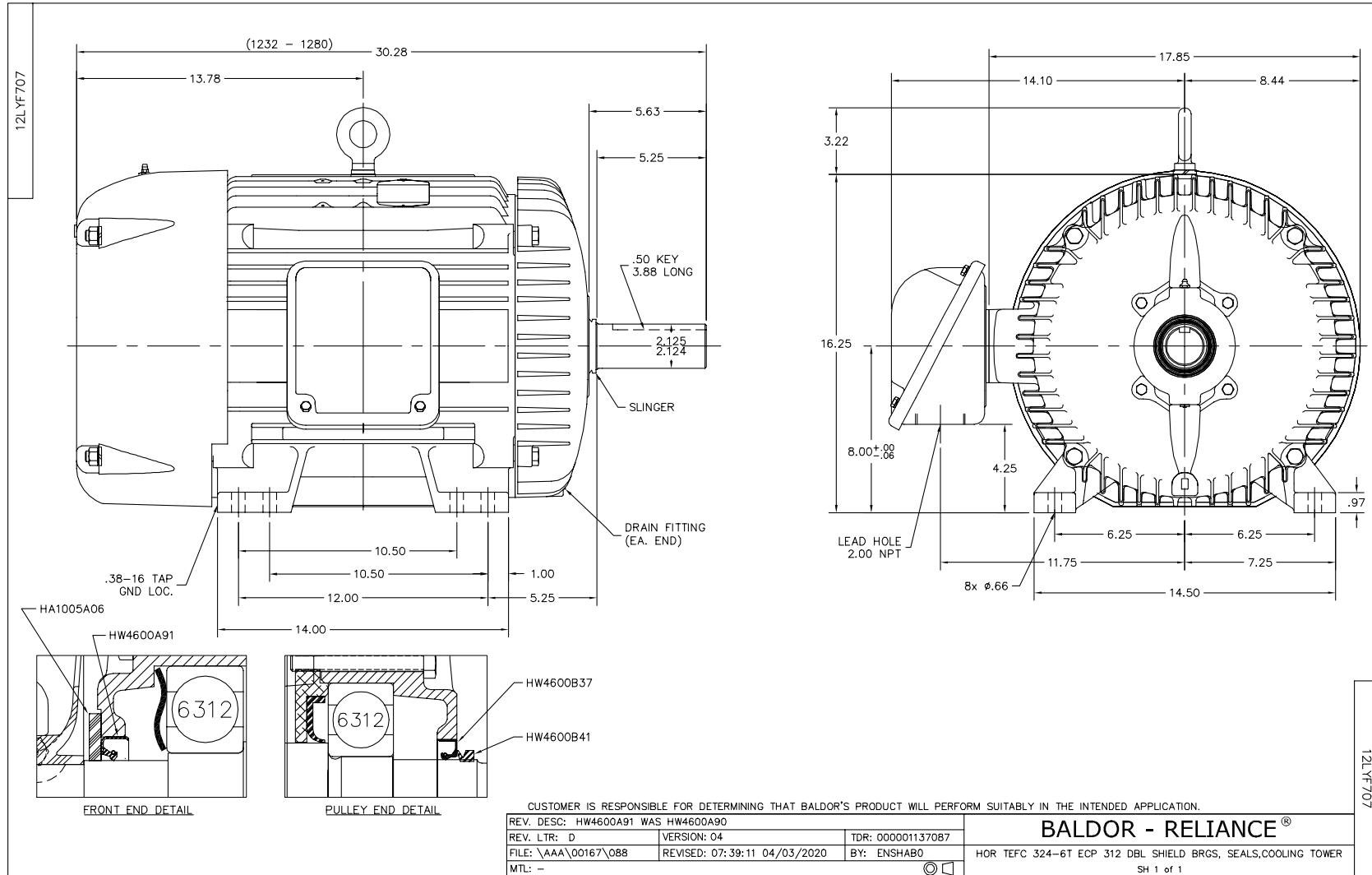
Winding: 12WGX198-R005		Type: 1272M	Enclosure: TEFC
Nameplate Data		460 V, 60 Hz: Low Speed Connection	
Rated Output (HP)	50/12.5	Full Load Torque	76.7 LB-FT
Volts	460	Start Configuration	direct on line
Full Load Amps	63/28	Breakdown Torque	235 LB-FT
R.P.M.	1760/870	Pull-up Torque	92.5 LB-FT
Hz	60 Phase	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

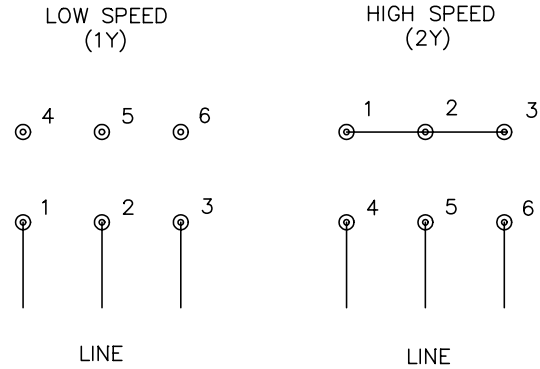
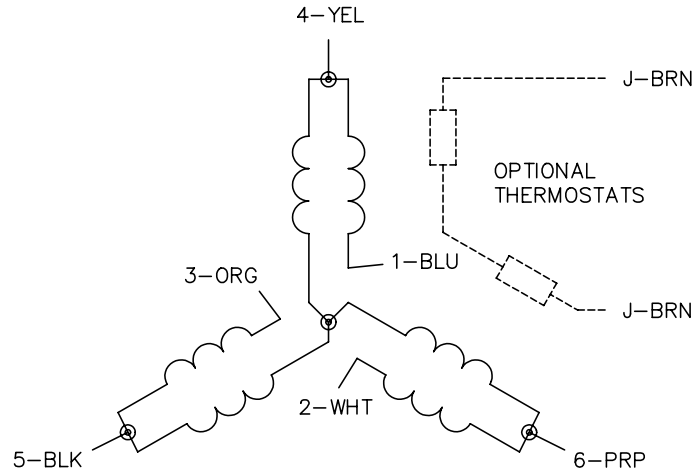
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	18	30	40	48	54	59	52
Efficiency	74	83.4	86.9	88.3	88.8	88.7	88.6
Speed	896	894	892	889	886	883	887
Line amperes	23.2	24.3	26.2	28.5	31.4	34.9	30.2

Performance Graph at 460V, 60Hz, 13.0HP Typical performance - Not guaranteed values





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: -
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BALDOR ELECTRIC Co.

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

CD0032

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