

BALDOR • RELIANCE

Customer information packet

M1728T

20/8.9HP, 1760/1160RPM, 3PH, 60HZ, 286T

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	286T
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	8.900 HP @ 60 HZ 20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	27.000 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	14.0 a
Insulation Class	F
Inverter Code	Not Inverter

Part detail

Revision	AE
Type	AC
Mech. spec.	10C151
Base	
Status	PRD/A
Elec. spec.	10WGW440
Layout	10LYC151
Eff. date	02-08-2024
CD Diagram	CD0013
Poles	04/06
Leads	6#10
Proprietary	False
Created date	01-01-0001

KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1046M
Mounting Arrangement	F1
Number of Poles	4 6
Overall Length	27.76 IN
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1160 rpm 1760 rpm
Speed Code	2S-2W-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

NP1256L									
CAT.NO.	M1728T								
SPEC.	10C151W440								
HP	20/8.9								
VOLTS	460								
AMP	27/14								
RPM	1760/1160								
FRAME	286T		HZ	60		PH	3		
SER.F.	1.15	CODE	J	DES	A	CLASS	F		
NEMA-NOM-EFF		PF							
RATING	40C AMB-CONT								
CC									
DE	6311		ODE	6309					
ENCL	TEFC	SN							

Accessories

Part number	Description	Multiplier
10-1305	C FACE KIT	A8
10EP1502A01SP	D-FLANGE KIT	A8

AC Induction Motor Performance Data

Record # 36422

Typical performance - not guaranteed values

Winding: 10WGW440-R003		Type: 1046M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Speed Connection	
Rated Output (HP)	20/8.9	Full Load Torque	60 LB-FT	
Volts	460	Start Configuration	direct on line	
Full Load Amps	27/14	Breakdown Torque	161 LB-FT	
R.P.M.	1760/1160	Pull-up Torque	94 LB-FT	
Hz	60 Phase	Locked-rotor Torque	141 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	181 A	
Service Factor (S.F.)	1.15	No-load Current	11.9 A	
NEMA Nom. Eff.	0 Power Factor	Line-line Res. @ 25°C	0.517 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	73°C	
S.F. Amps		Temp. Rise @ S.F. Load	85°C	
		Locked-rotor Power Factor	40.5	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	66	76	81	83	83	82
Efficiency	77.4	85.8	88.4	89.2	89	88.3	89.1
Speed	1794	1790	1785	1780	1773	1766	1776
Line amperes	13.7	17	21.4	26.3	32.2	38.8	29.8

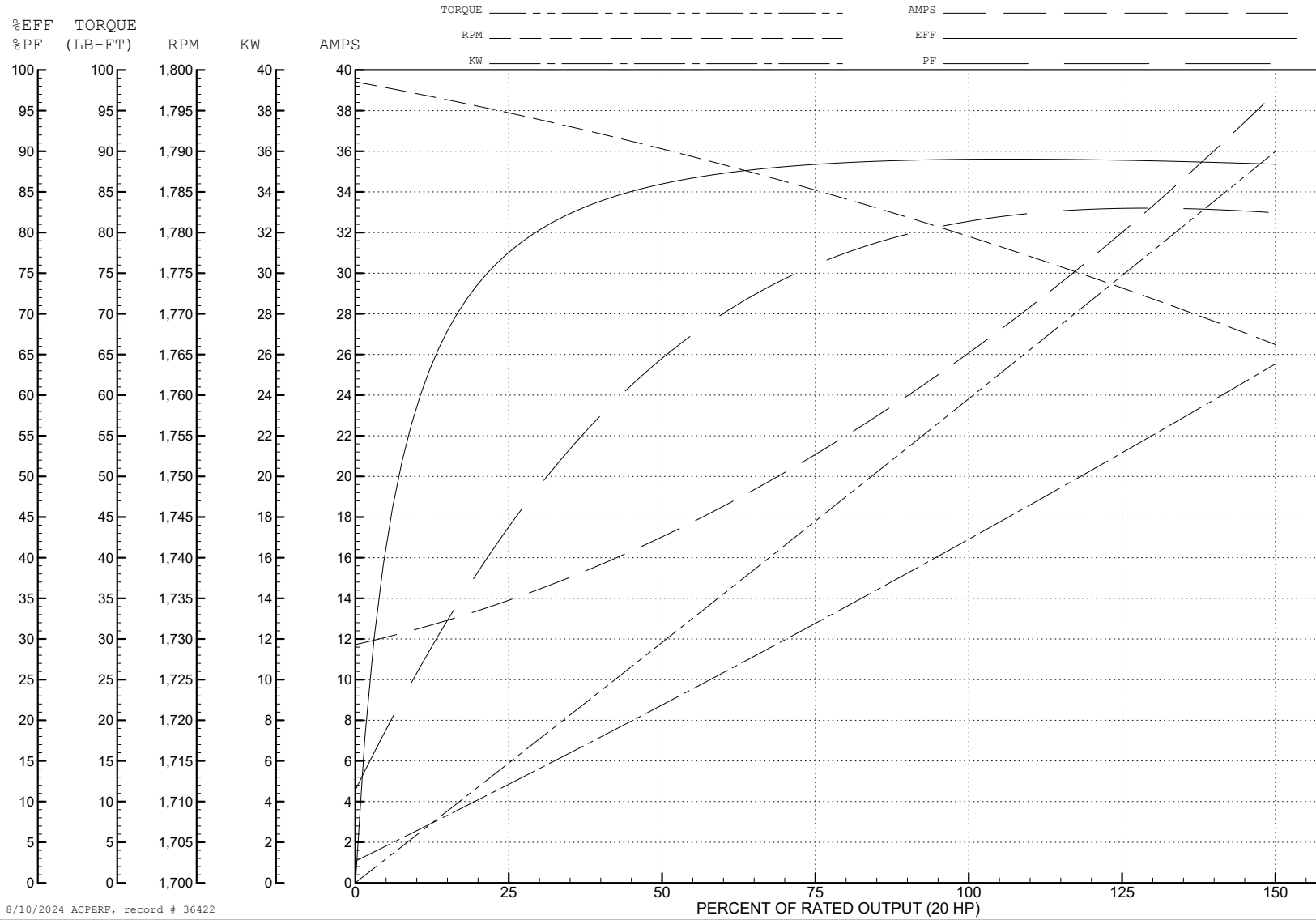
ABB Motors and Mechanical Inc.

WINDING # 10WGW440

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1780 RPM 460 V 1046M

TORQUES (LB-FT): PO=161 PU=94 LR=141 LRA=181



8/10/2024 ACPERF, record # 36422

AC Induction Motor Performance Data

Record # 36423

Typical performance - not guaranteed values

Winding: 10WGW440-R003		Type: 1046M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Low Speed Connection	
Rated Output (HP)	20/8.9	Full Load Torque	39.5 LB-FT	
Volts	460	Start Configuration	direct on line	
Full Load Amps	27/14	Breakdown Torque	108 LB-FT	
R.P.M.	1760/1160	Pull-up Torque	75 LB-FT	
Hz	60 Phase	Locked-rotor Torque	123 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	87.3 A	
Service Factor (S.F.)	1.15	No-load Current	7.5 A	
NEMA Nom. Eff.	0 Power Factor	Line-line Res. @ 25°C	1.516 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	50°C	
S.F. Amps		Temp. Rise @ S.F. Load	58°C	
		Locked-rotor Power Factor	43.3	

Load Characteristics 460 V, 60 Hz, 8.9 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	55	66	71	76	77	74
Efficiency	70.7	81.9	85.3	86.3	86.2	85.6	86.2
Speed	1197	1194	1191	1187	1183	1179	1185
Line amperes	8.1	9.4	11.2	13.6	16	18.8	15

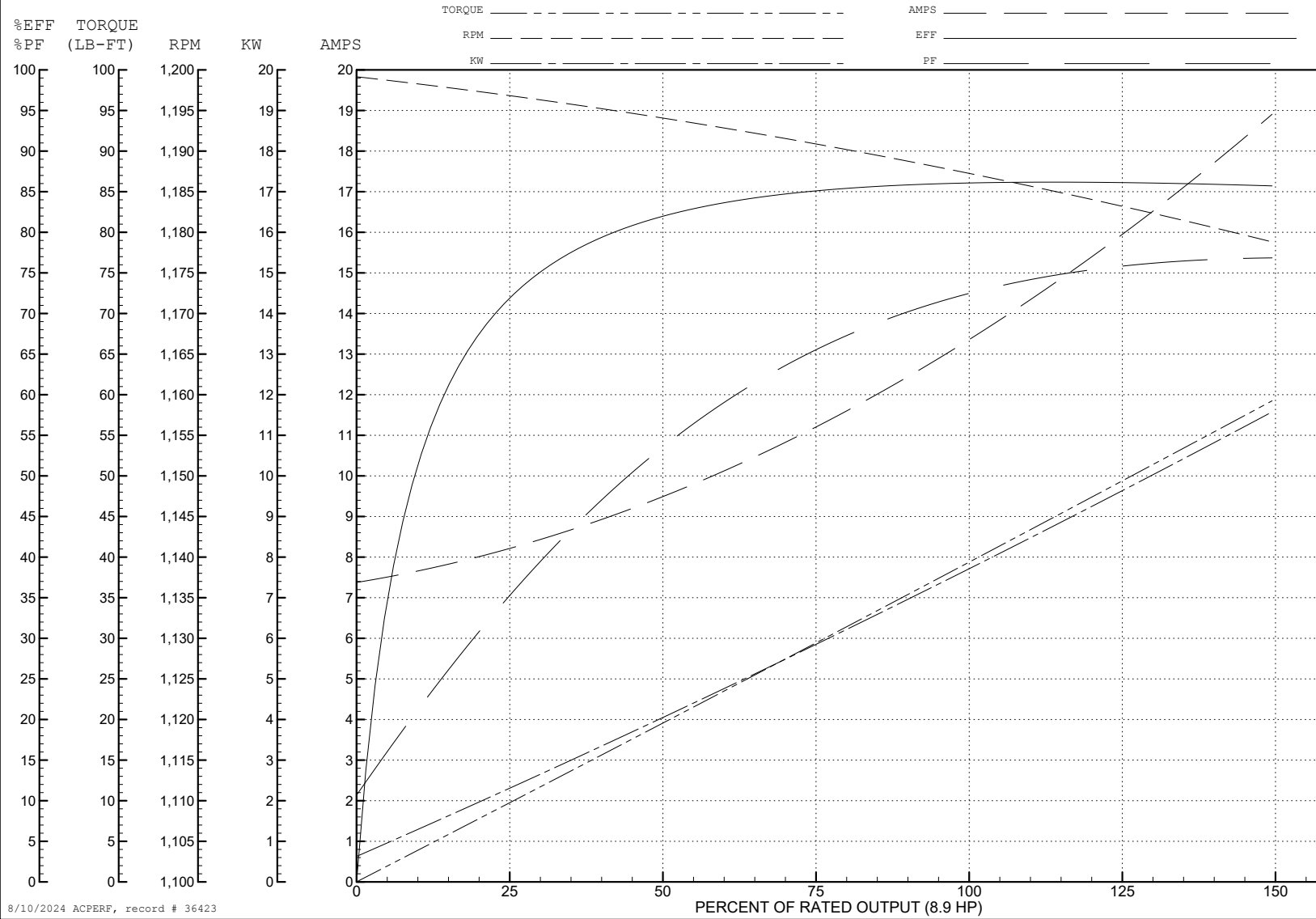
ABB Motors and Mechanical Inc.

WINDING # 10WGW440

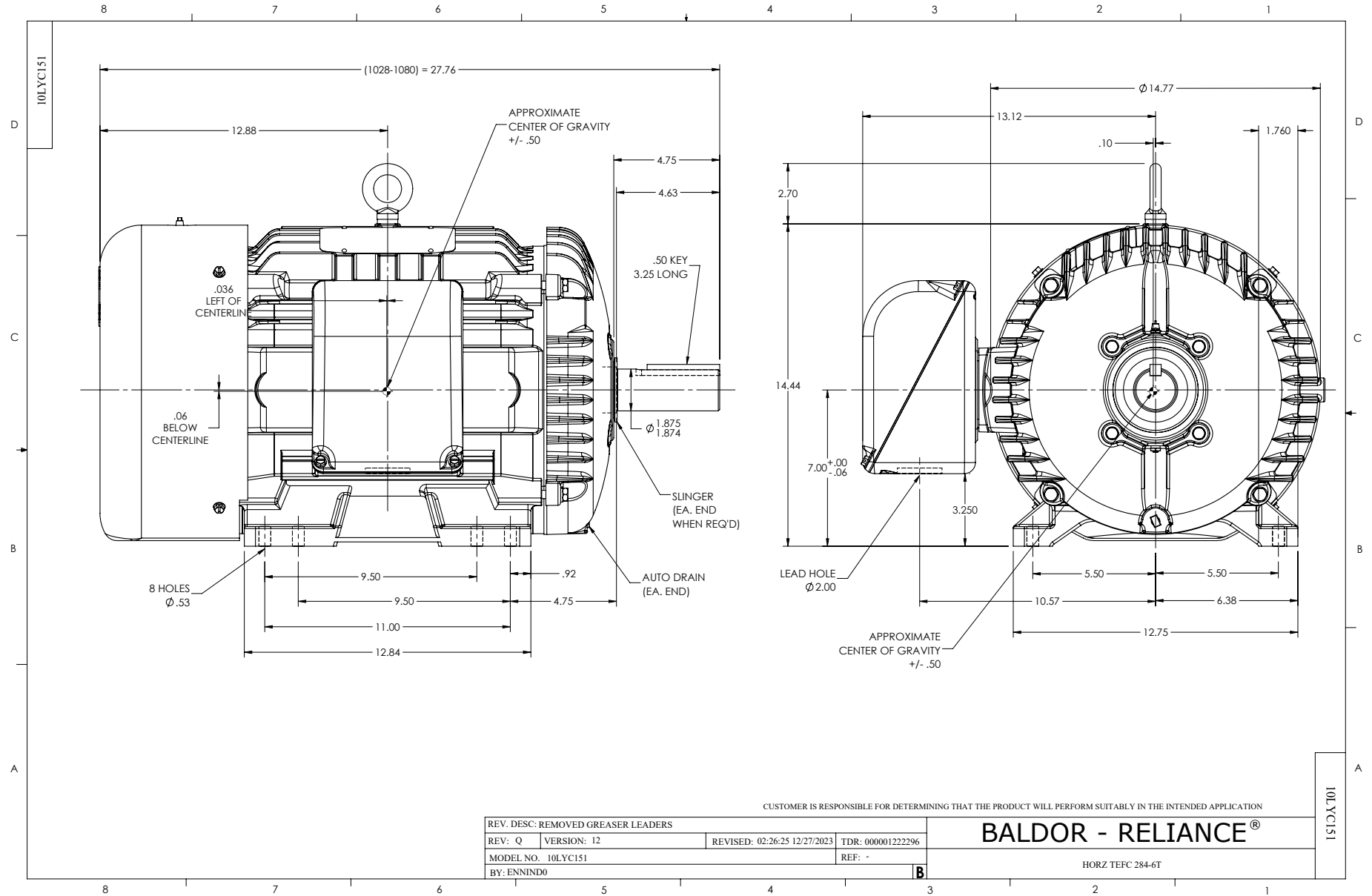
Typical performance - not guaranteed values.

8.9 HP 3 PH 60 HZ 1187 RPM 460 V 1046M

TORQUES (LB-FT): PO=108 PU=75 LR=123 LRA=87.3



8/10/2024 ACPERF, record # 36423



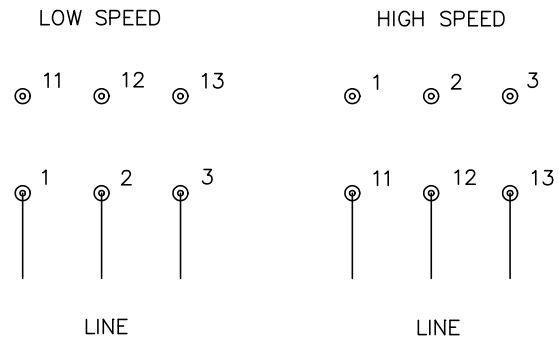
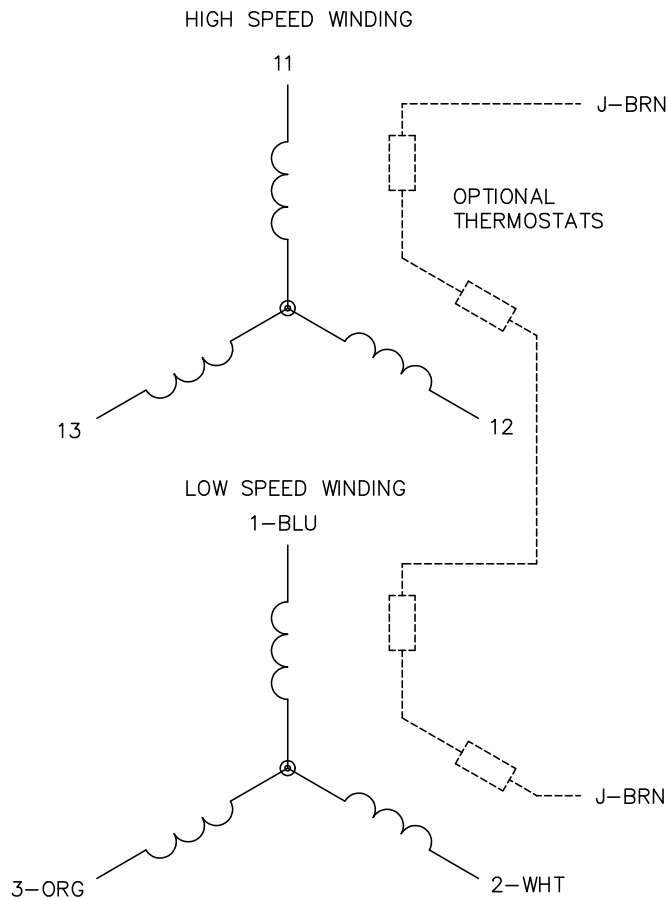
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: REMOVED GREASER LEADERS			
REV: Q	VERSION: 12	REVISED: 02:26:25 12/27/2023	TDR: 000001222296
MODEL NO. 10LYC151		REF: -	
BY: ENNIND0			

BALDOR - RELIANCE®

HORZ TEFC 284-6T

CD0013



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 VARY.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0013

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 01/22/99 8:50	TDR: 0171435
Ω 10000		FILE: AAA00005143	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 2-WINDING