

ABB BALDOR RELIANCE III

Customer information packet

M1712T

20/10HP, 1760/870RPM, 3PH, 60HZ, 284T, 1046M

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	284T
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	20.000 HP @ 60 HZ 10.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	25.000 A @ 460.0 V
Design Code	B
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	18.5 a
Insulation Class	F
Inverter Code	Not Inverter

Part Detail

Revision	V
Type	AC
Mech. spec.	10C151
Base	
Status	PRD/A
Elec. spec.	10WGY731
Layout	10LYC151
Eff. date	01-07-2026
CD Diagram	CD0011
Poles	04/08
Leads	6#10
Proprietary	False
Created date	05-19-2010

KVA Code	G
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
	8
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	1760 rpm
	870 rpm
Speed Code	2S-1W-CT
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.	M1712T								
SPEC.	10C151Y731								
HP	20/10								
VOLTS	460								
AMP	25/18.5								
RPM	1760/870								
FRAME	284T		HZ	60			PH	3	
SER.F.	1.15	CODE	G	DES	B	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 # 31205

Typical performance - not guaranteed values

Winding: 10WGY731-R001			Type: 1046M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Speed Connection			
Rated Output (HP)		20/10	Full Load Torque		60 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		25/18.5	Breakdown Torque		158 LB-FT	
R.P.M.		1760/870	Pull-up Torque		67.6 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		100 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		147 A	
Service Factor (S.F.)		1.15	No-load Current		5.99 A	
NEMA Nom. Eff.		0 Power Factor	Line-line Res. @ 25°C		0.612 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		71°C	
S.F. Amps			Temp. Rise @ S.F. Load		87°C	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	65	81	86	88	88	89	88
Efficiency	81.9	87	87.3	87	85.7	82.8	86.2
Speed	1789	1780	1769	1758	1746	1730	1751
Line amperes	8.99	13.6	18.8	24.6	30.8	37.7	28.3

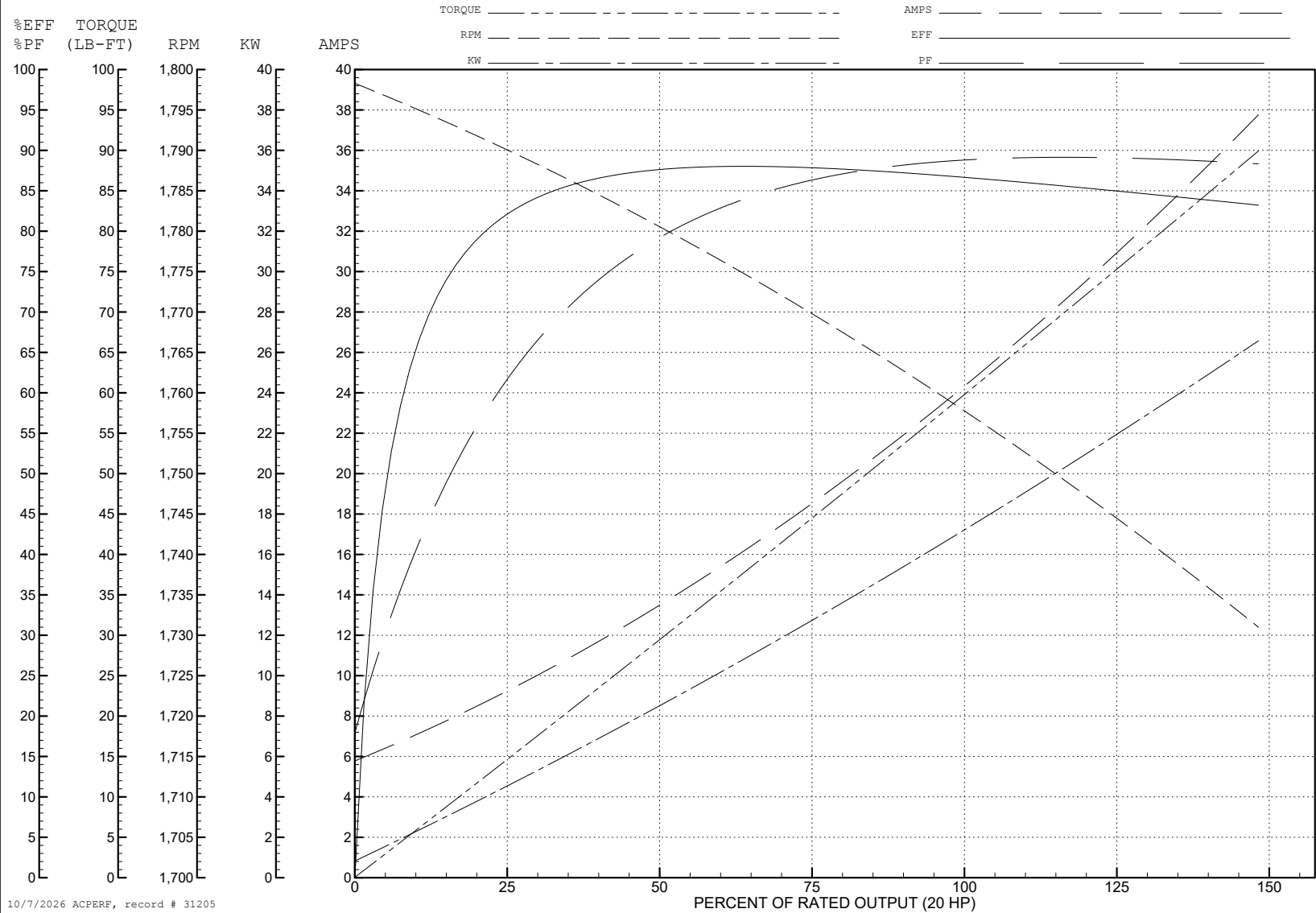
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WINDING # 10WGY731

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1758 RPM 460 V 1046M

TORQUES (LB-FT): PO=158 PU=67.6 LR=100 LRA=147



AC Induction Motor Performance Data

Record # 31206

Typical performance - not guaranteed values

Winding: 10WGY731-R001			Type: 1046M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: Low Speed Connection			
Rated Output (HP)		20/10		Full Load Torque		60 LB-FT	
Volts		460		Start Configuration		direct on line	
Full Load Amps		25/18.5		Breakdown Torque		178 LB-FT	
R.P.M.		1760/870		Pull-up Torque		100 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		132 LB-FT	
NEMA Design Code		B	KVA Code	G	Starting Current		92.2 A
Service Factor (S.F.)		1.15		No-load Current		12.8 A	
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		0.816 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		55°C	
S.F. Amps				Temp. Rise @ S.F. Load		63°C	

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	25	40	51	59	64	68	62
Efficiency	72.9	81.9	85.2	86.7	86.4	85.6	86.5
Speed	895	891	887	882	877	872	879
Line amperes	13.3	14.5	16.3	18.4	21.1	24.2	20

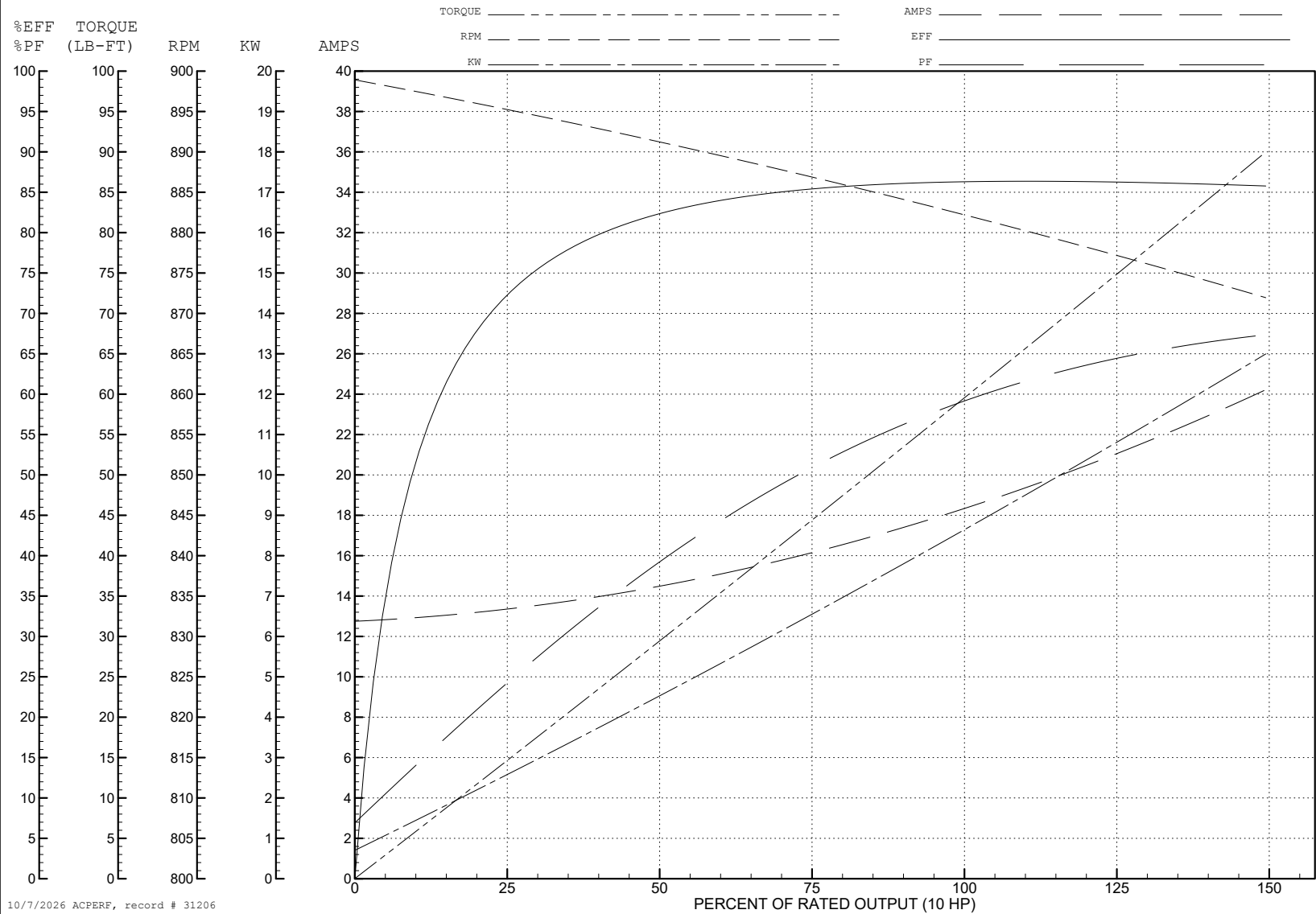
ABB Motors and Mechanical Inc.

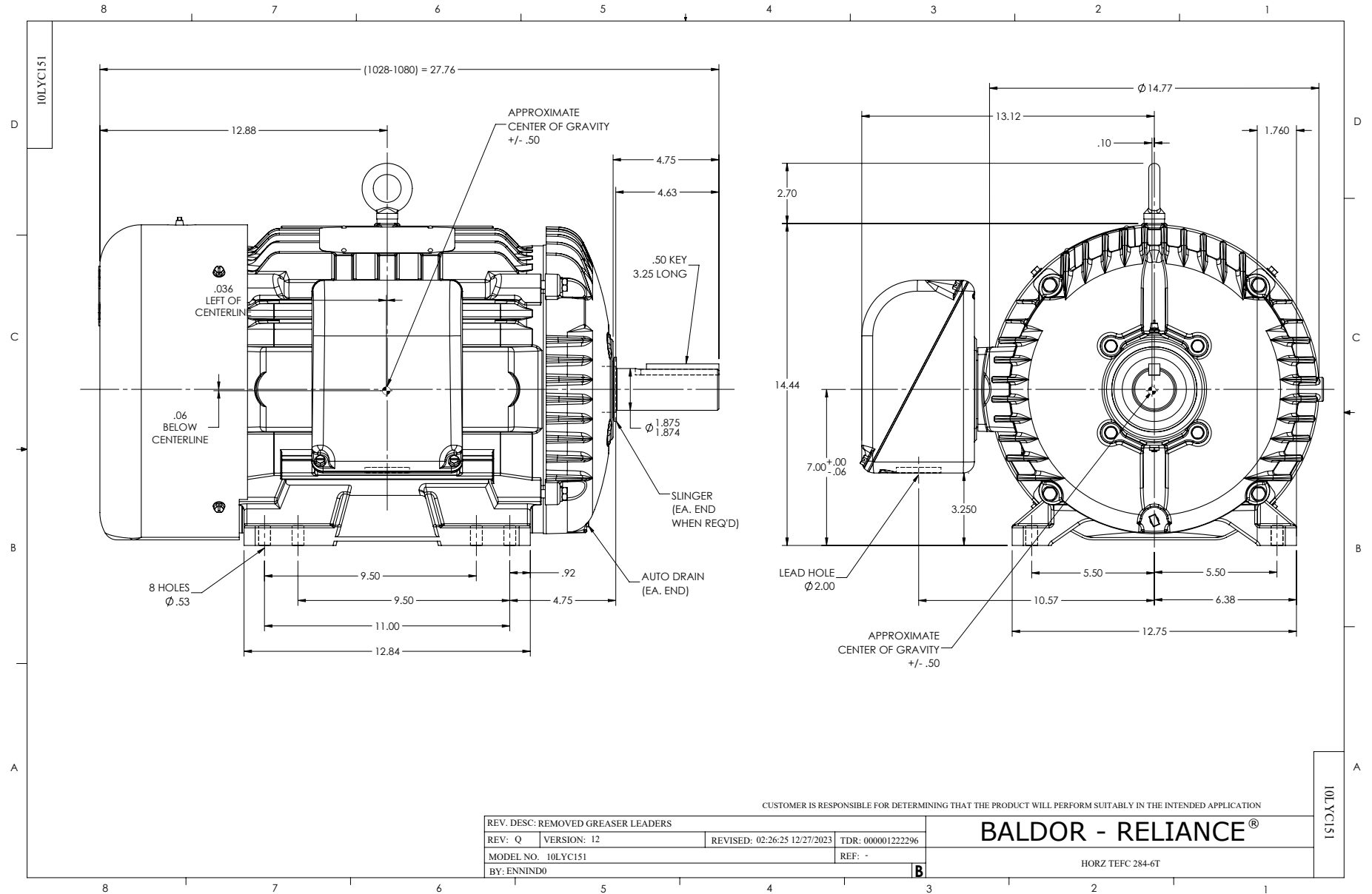
WINDING # 10WGY731

Typical performance - not guaranteed values.

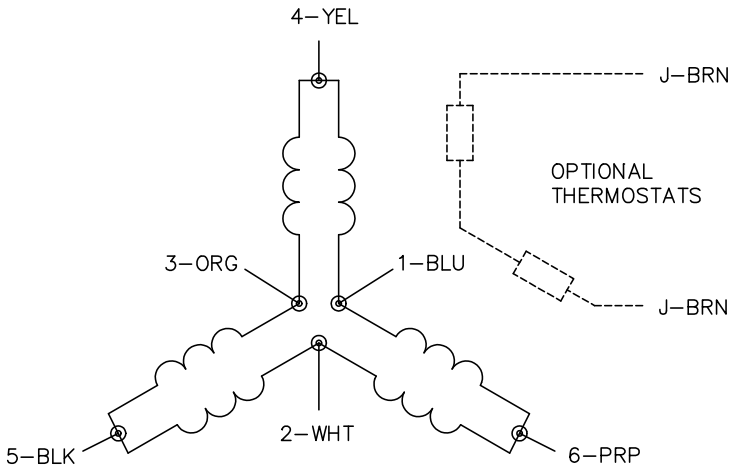
10 HP 3 PH 60 HZ 882 RPM 460 V 1046M

TORQUES (LB-FT): PO=178 PU=100 LR=132 LRA=92.2

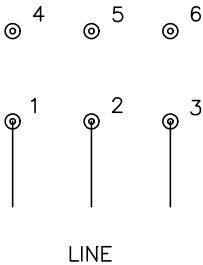




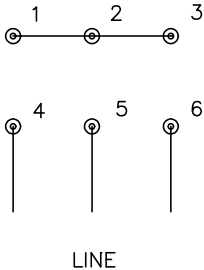
CD0011



LOW SPEED
(1D)



HIGH SPEED
(2Y)



- 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: F	BY: JLP	REVISED: 01/21/99 5:04	TDR: 0171435
110000		FILE: DWG\142.wg	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

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

CD0011