

ABB BALDOR RELIANCE III

Customer information packet

EM7079T

15//20HP, 980//1180RPM, 3PH, 50//60HZ, 286T

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	286T
Frame Material	Iron
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	15.000 HP @ 50 HZ 20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 190.0 V @ 50 HZ
Agency Approvals	CSA UL
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	56.000 A @ 208.0 V 54.000 A @ 230.0 V 50.000 A @ 190.0 V 27.000 A @ 460.0 V 25.000 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	X
Type	AC
Mech. spec.	10E106
Base	
Status	PRD/A
Elec. spec.	10WGY730
Layout	10LYE106
Eff. date	02-15-2024
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	08-02-2010

Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	25.0 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1054M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	28.61 IN
Power Factor	77
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.00
Shaft Diameter	1.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger

Speed	1180 rpm 980 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	NONE (OLD)
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1426XPSLEV									
NO.		CC	010A						
SER.									
SPEC.	10E106Y730G1								
CAT.NO.	EM7079T								
HP	20//15	T. CODE	T3C						
VOLTS	230/460//190/380								
AMPS	54/27//50/25								
RPM	1180//980								
HZ	60//50	PH	3	CL	B				
SER.F.	1.00	DES	A	CODE	H				
RATING	40C AMB-CONT								
FRAME	286T	NEMA-NOM-EFF	91.7						
		PF	77						
BLANK									

AC Induction Motor Performance Data

Record # 32058

Typical performance - not guaranteed values

Winding: 10WGY730-R004				Type: 1054M		Enclosure: XPFC	
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		15//20		Full Load Torque		89.4 LB-FT	
Volts		190/380//230/460		Start Configuration		direct on line	
Full Load Amps		50/25//54/27		Breakdown Torque		276 LB-FT	
R.P.M.		980//1180		Pull-up Torque		115 LB-FT	
Hz		50//60		Phase		3	
NEMA Design Code		A		KVA Code		H	
Service Factor (S.F.)		1		No-load Current		13.1 A	
NEMA Nom. Eff.		91.7		Power Factor		77	
Rating - Duty		40C		AMB-CONT			
				Temp. Rise @ Rated Load		65°C	
				Locked-rotor Power Factor		32	
				Rotor inertia		6.61 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	39	60	71	77	79	80
Efficiency	86.6	91.1	91.9	91.7	90.9	89.8
Speed	1194.6	1189.5	1184.1	1178.3	1171.4	1163.8
Line amperes	14.3	17.5	21.9	26.9	32.7	39.3

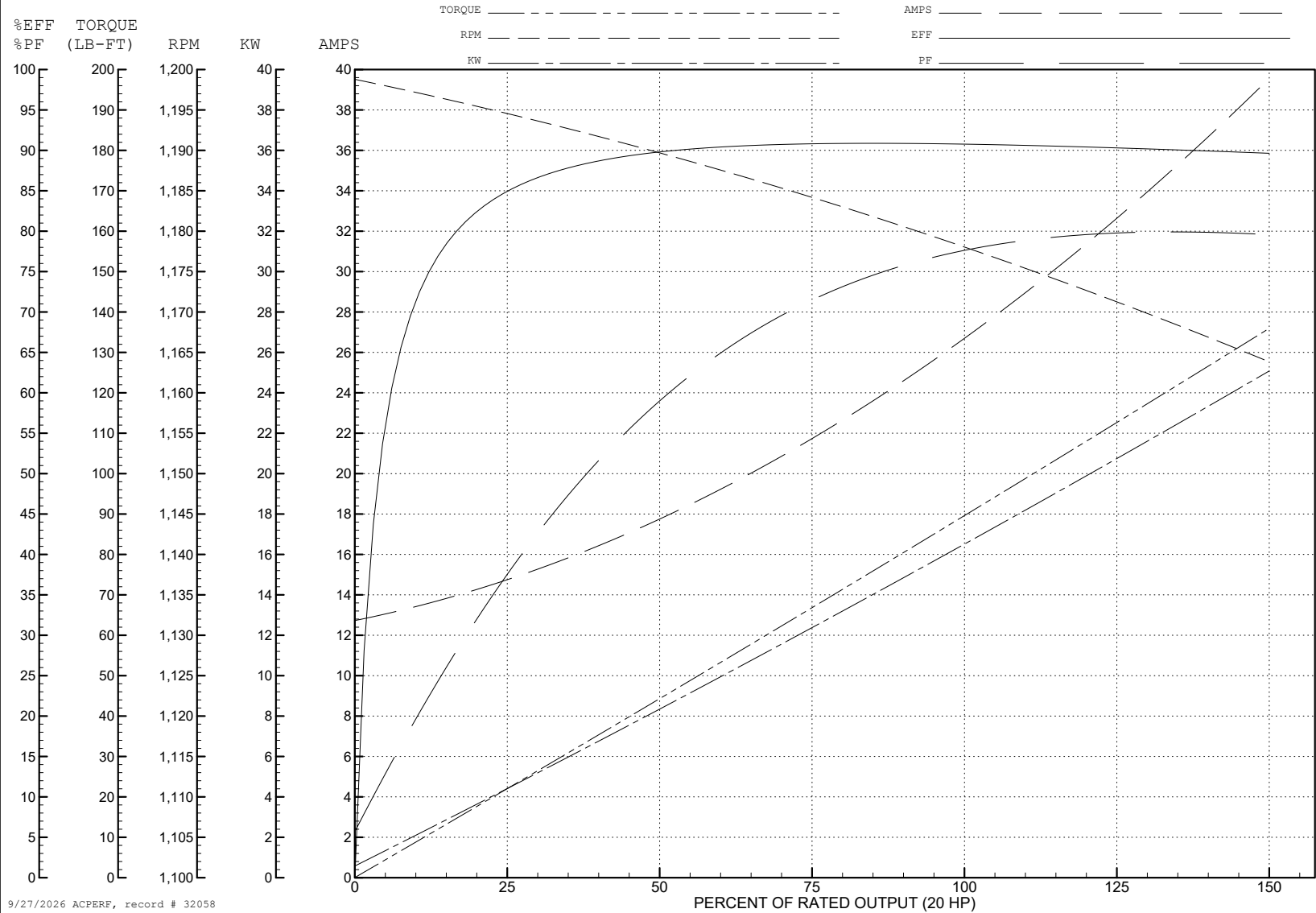
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WINDING # 10WGY730

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1178.3 RPM 460 V 1054M

TORQUES (LB-FT): PO=276 PU=115 LR=166 LRA=165



AC Induction Motor Performance Data

Record # 32059

Typical performance - not guaranteed values

Winding: 10WGY730-R004				Type: 1054M		Enclosure: XPFC		
Nameplate Data						380 V, 50 Hz: High Voltage Connection		
Rated Output (HP)			15//20			Full Load Torque		80.5 LB-FT
Volts			190/380//230/460			Start Configuration		direct on line
Full Load Amps			50/25//54/27			Breakdown Torque		265 LB-FT
R.P.M.			980//1180			Pull-up Torque		119 LB-FT
Hz		50//60	Phase		3	Locked-rotor Torque		171 LB-FT
NEMA Design Code		A	KVA Code		H	Starting Current		160 A
Service Factor (S.F.)			1			No-load Current		12.8 A
NEMA Nom. Eff.		91.7	Power Factor		77	Line-line Res. @ 25°C		0.403 Ω
Rating - Duty			40C AMB-CONT			Temp. Rise @ Rated Load		58°C
						Locked-rotor Power Factor		35
						Rotor inertia		6.61 LB-FT2

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	38	58	69	76	79	80
Efficiency	82.8	88.6	90.4	90.3	89.6	89.2
Speed	995	991	986	981	975	968
Line amperes	13.8	16.6	20.5	24.9	30.1	36

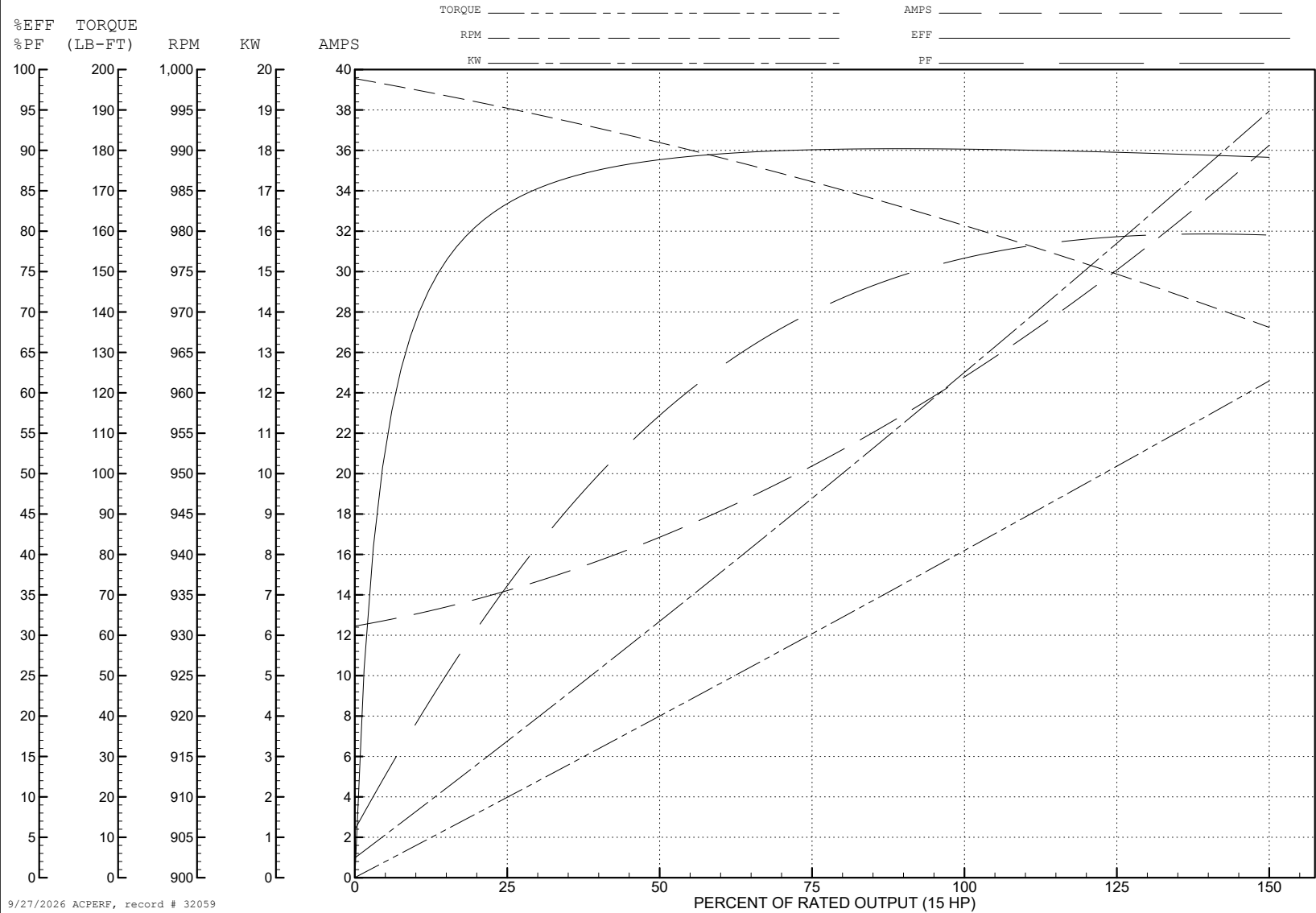
ABB Motors and Mechanical Inc.

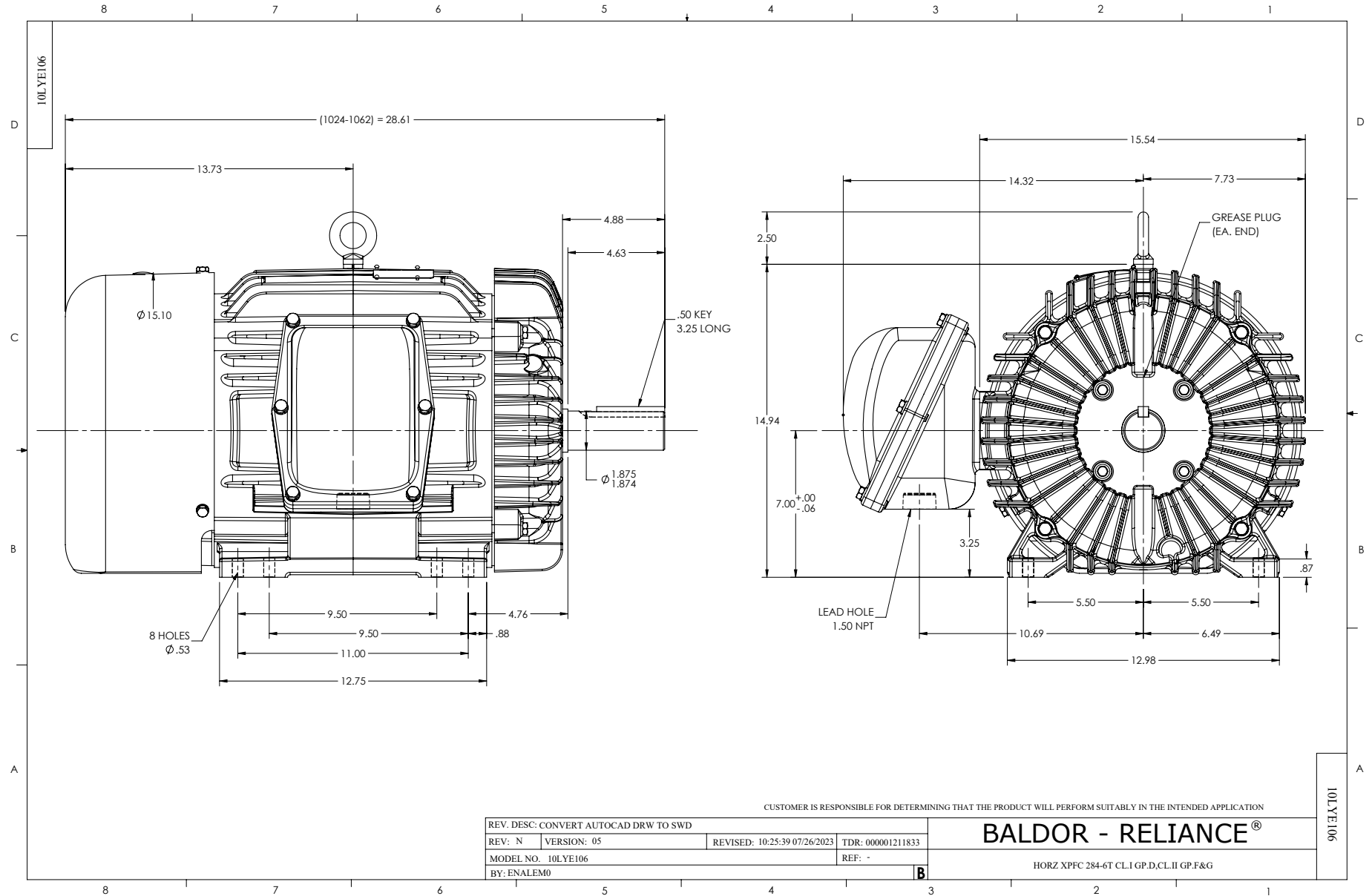
WINDING # 10WGY730

Typical performance - not guaranteed values.

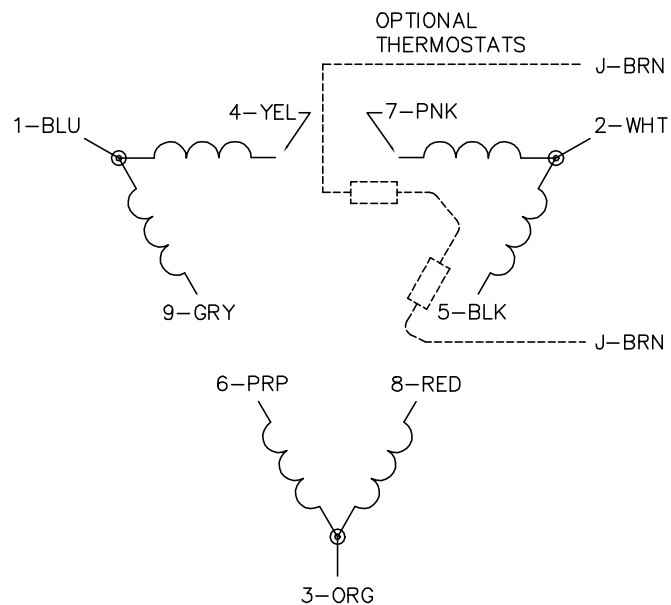
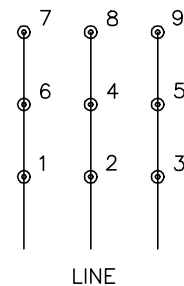
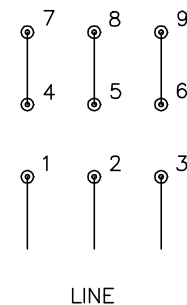
15 HP 3 PH 50 HZ 981 RPM 380 V 1054M

TORQUES (LB-FT): PO=265 PU=119 LR=171 LRA=160





CD0180


 LOW VOLTAGE
(2D)

 HIGH VOLTAGE
(1D)

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: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —


BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

CD0180