ABB BALDOR RELIANCE

Customer information packet

IDXM7556T

20HP, 1770RPM, 3PH, 60HZ, 284T, 1046M, XPFC, F1
Class - CLI GP D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	284T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	UL
	CSA
	CSA EEV
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
Constant Torque Speed Range	6
Current @ Voltage	46.000 A @ 230.0 V
	23.000 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	T
Type	AC
Mech. spec.	10E647
Base	
Status	PRD/A
Elec. spec.	10WGY137
Layout	10LYE647
Eff. date	07-19-2023
CD Diagram	CD0005
Poles	04
Leads	9#10
Proprietary	False
Created date	01-14-2011

Haz Area Temp Code	T2B
Heater Indicator	No Heater
High Voltage Full Load Amps	23.0 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X1046M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	28.61 IN
Power Factor	87
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-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	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None

Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0890XPSLEV											
NO.					**CC**	010A					
S/N					**TEMP CODE**	T2B					
SPEC.	10E647Y137G2				**INV.TYPE**	PWM					
CAT.NO.					**C HP FR**	60	**C HP TO**	90			
HP	20				**CT HZ FROM**	6			**CT HZ TO**	60	
VOLTS	230/460				**VT HZ FROM**	6			**VT HZ TO**	60	
AMPS	46/23			**MAG CUR**	15.8/7.9						
RPM	1770			**MX RPM**	2700						
HZ	60	**PH**	3	**CL**	F	**NOM.EFF.**	93				
SER.F.	1.00	**DES**	B	**SL HZ**	1	**WK2**	3.66				
FRAME	284T	**RATING**	40C AMB-CONT								

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AC Induction Motor Performance Data

Record # 33311
Typical performance - not guaranteed values

Winding: 10WGY137	**Type:** 1046M	**Enclosure:** XPFC

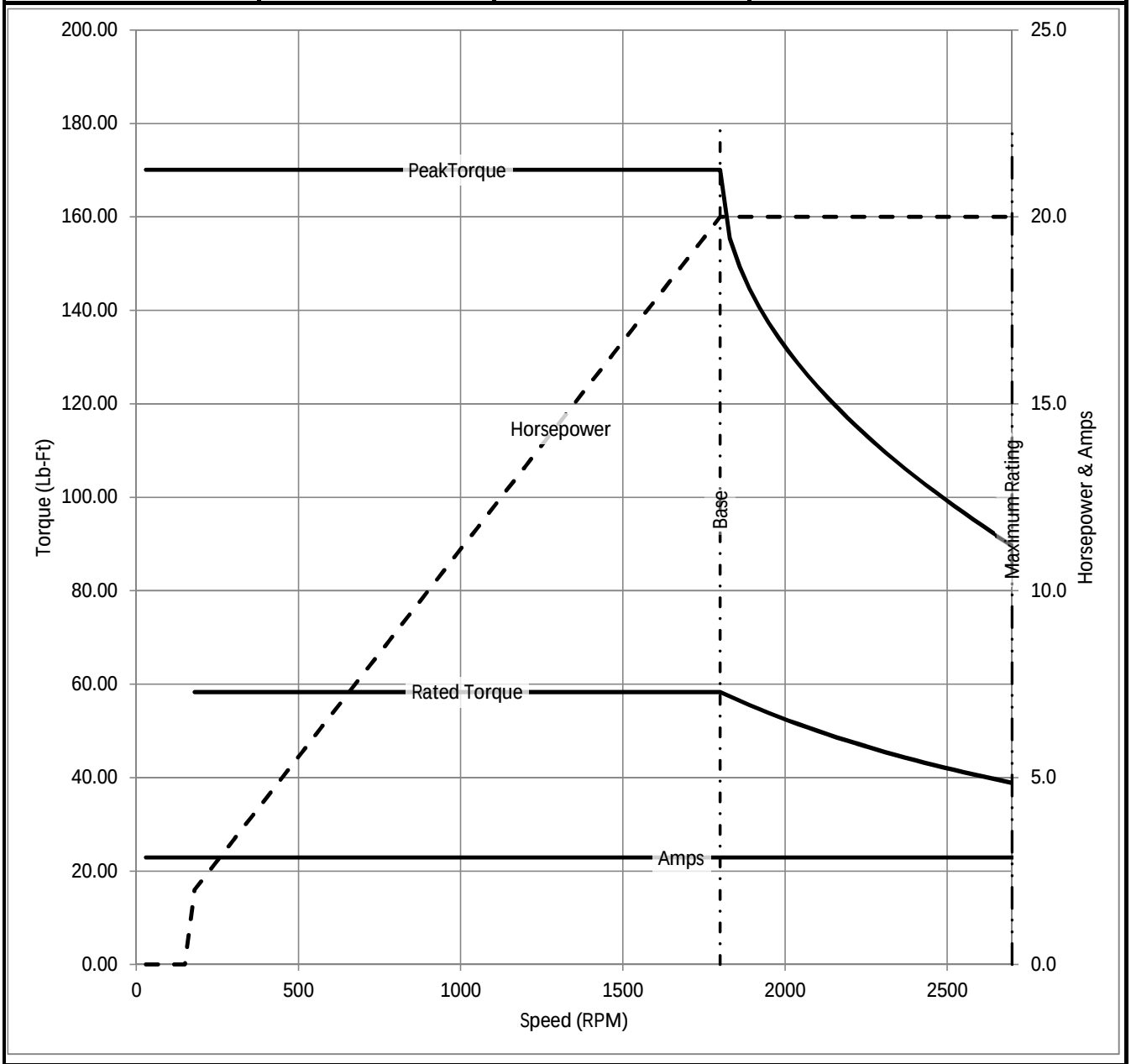
Nameplate Data				General Characteristics at 460 V, 60 Hz: High Volt Connection	
Rated Output (HP)	20			Full Load Torque	59.3 LB-FT
Volts	230/460			Start Configuration	DOL
Full Load Amps	46/23			Break Down Torque	189 LB-FT
R.P.M.	1770			Pull-Up Torque	77.7 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	97.5 LB-FT
NEMA Design Code	B	KVA Code	G	Starting Current	147 Amps
Service Factor	1			No-load Current	7.87 Amps
NEMA Nom. Eff.	93	P.F.	87	Line-line Res. @ 25°C.	0.378 Ohms
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	41°C
S.F. Amps				Temp. Rise @ S.F. Load	

Load Characteristics at 460 Volts, 60 Hz, 20 HP

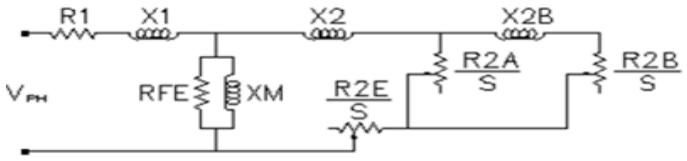
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	57	78	85	88	88	87	
Efficiency	88.2	91.9	93.3	93.3	92.9	92.1	
Speed	1793	1785	1779	1771	1763	1755	
Line Amperes	9.51	13.1	17.8	22.9	28.5	34.7	

Baldor Electric Company Fort Smith, Arkansas BALDOR • RELIANCE

Catalog	IDXM7556T	NP VOLTS	230/460	ENCLOSURE	XPFC	WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)			
FRAME	284T	NP AMPS	46/23	Base Volts	460	R1	0.197	X1	0.864
HP	20 HP	DUTY	Cont	Base AMPS	22.9	R2	0.795	X2	0.692
BASE SPEED	1800	MAX SAFE RPM	2700	Slip Hz	0.97	R2B	0.116	X2B	1.113
PHASE/HZ	3/60	AMB^{0}C/INSUL	40/F	WK^2 (lb-ft^2)	3.66	R2E	0.041	XM	26.254



Remarks: Calculated Data



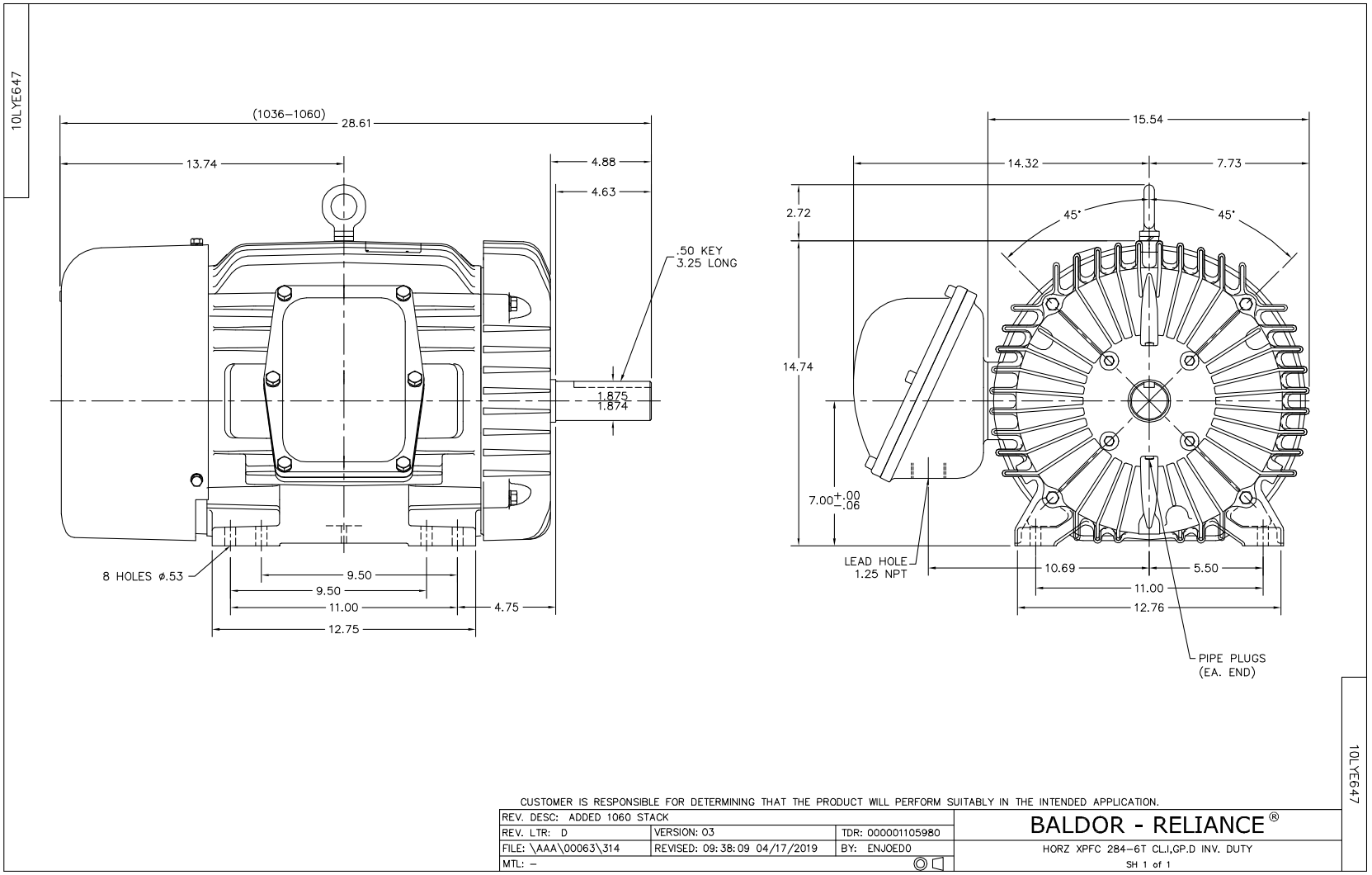
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DR BY ENR
CK BY
APP BY ENR
DATE 3/1/2013

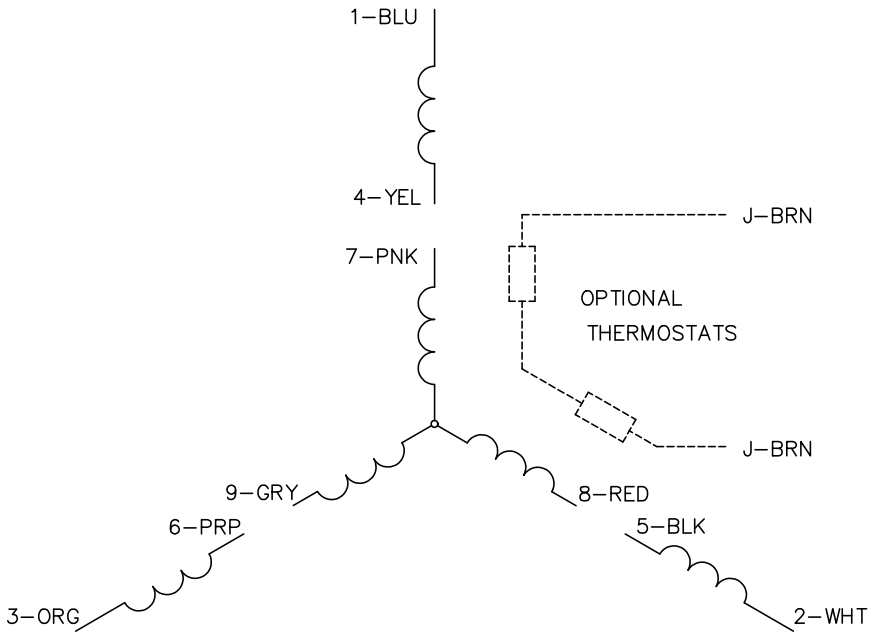
A-C MOTOR
PERFORMANCE CURVES

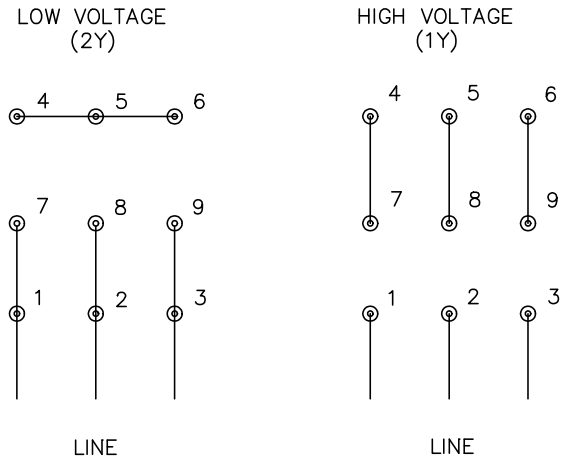
10E647Y137G2

ISSUE DATE 3/1/2013


10LYE647
(1036–1060)
28.61
13.74
4.88
4.63
.50 KEY
3.25 LONG
1.875
1.874
8 HOLES ø.53
9.50
9.50
11.00
4.75
12.75
15.54
14.32
7.73
2.72
45°
45°
14.74
7.00 +.00 −.06
LEAD HOLE
1.25 NPT
10.69
5.50
11.00
12.76
PIPE PLUGS
(EA. END)
10LYE647
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: ADDED 1060 STACK
REV. LTR: D
VERSION: 03
TDR: 000001105980
FILE: \AAA\00063\314
REVISED: 09:38:09 04/17/2019
BY: ENJOED0
MTL: –
BALDOR - RELIANCE®
HORZ XPFC 284–6T CL.I,GP.D INV. DUTY
SH 1 of 1

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS