ABB BALDOR RELIANCE

Customer information packet

EM7079T-I

20//15HP, 1180//980RPM, 3PH, 60//50HZ, 286T
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	286T
Frame Material	Iron
Frequency	50.00 Hz
	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
	15.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1000 RPM @ 50 HZ
Voltage @ Frequency	190.0 V @ 50 HZ
	230.0 V @ 60 HZ
	380.0 V @ 50 HZ
	460.0 V @ 60 HZ
Agency Approvals	UL
	CSA
	CSA EEV
	UR
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	23.000 A @ 380.0 V
	25.000 A @ 460.0 V
	46.000 A @ 190.0 V
	50.000 A @ 230.0 V
	54.000 A @ 208.0 V
Design Code	B

Part Detail

Revision	AG
Type	AC
Mech. spec.	10E950
Base	
Status	PRD/A
Elec. spec.	10WGZ033
Layout	10LYE950
Eff. date	11-22-2024
CD Diagram	CD0180
Poles	06
Leads	9#10
Proprietary	False
Created date	06-04-2012

Drip Cover	No Drip Cover
Duty Rating	CONT
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	23.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	G
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	X1056M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	28.61 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
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	1180 rpm
	980 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

NP0977XPSLEV											
NO.						**CC**	010A				
SER.						**TEMP CODE**	T3C				
SPEC.	10E950Z033G1										
CAT.NO.	EM7079T-I										
HP	20//15 NEMA MG-1 PT.5,IP55										
VOLTS	230/460//190/380										
AMPS	50/25//46/23										
RPM	1180//980					**MOTOR WEIGHT**	475				
HERTZ	60//50	**PH**	3	**CL**	F	**DE BRG**	6311				
SER.F.	1.15	**DES**	B	**CODE**	G	**ODE BRG**	6309				
FRAME	286T	**GREASE**	POLYREX EM								
RATING	40C AMB-CONT										
				NEMA-NOM-EFF		91.7	**PF**	78			
	55C AMB @ 1.0 SF 60C RISE										

AC Induction Motor Performance Data
Record # 38689
Typical performance - not guaranteed values

Winding: 10WGZ033-R001	**Type:** 1056M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			20//15
Volts			230/460//190/380
Full Load Amps			50/25//46/23
R.P.M.			1180//980
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	G
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	91.7	**Power Factor**	78
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	89.2 LB-FT
Start Configuration	direct on line
Breakdown Torque	243 LB-FT
Pull-up Torque	94 LB-FT
Locked-rotor Torque	134 LB-FT
Starting Current	146 A
No-load Current	10.7 A
Line-line Res. @ 25ºC	0.477 Ω
Temp. Rise @ Rated Load	51°C
Temp. Rise @ S.F. Load	63°C
Locked-rotor Power Factor	30
Rotor inertia	6.86 LB-FT2

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	44	66	76	80	81	81	81
Efficiency	88.5	92.2	93.1	92.8	91.4	91.3	92
Speed	1194	1190	1185	1180	1174	1168	1176
Line amperes	12.1	15.7	20.1	25.4	31.3	38.2	28.9

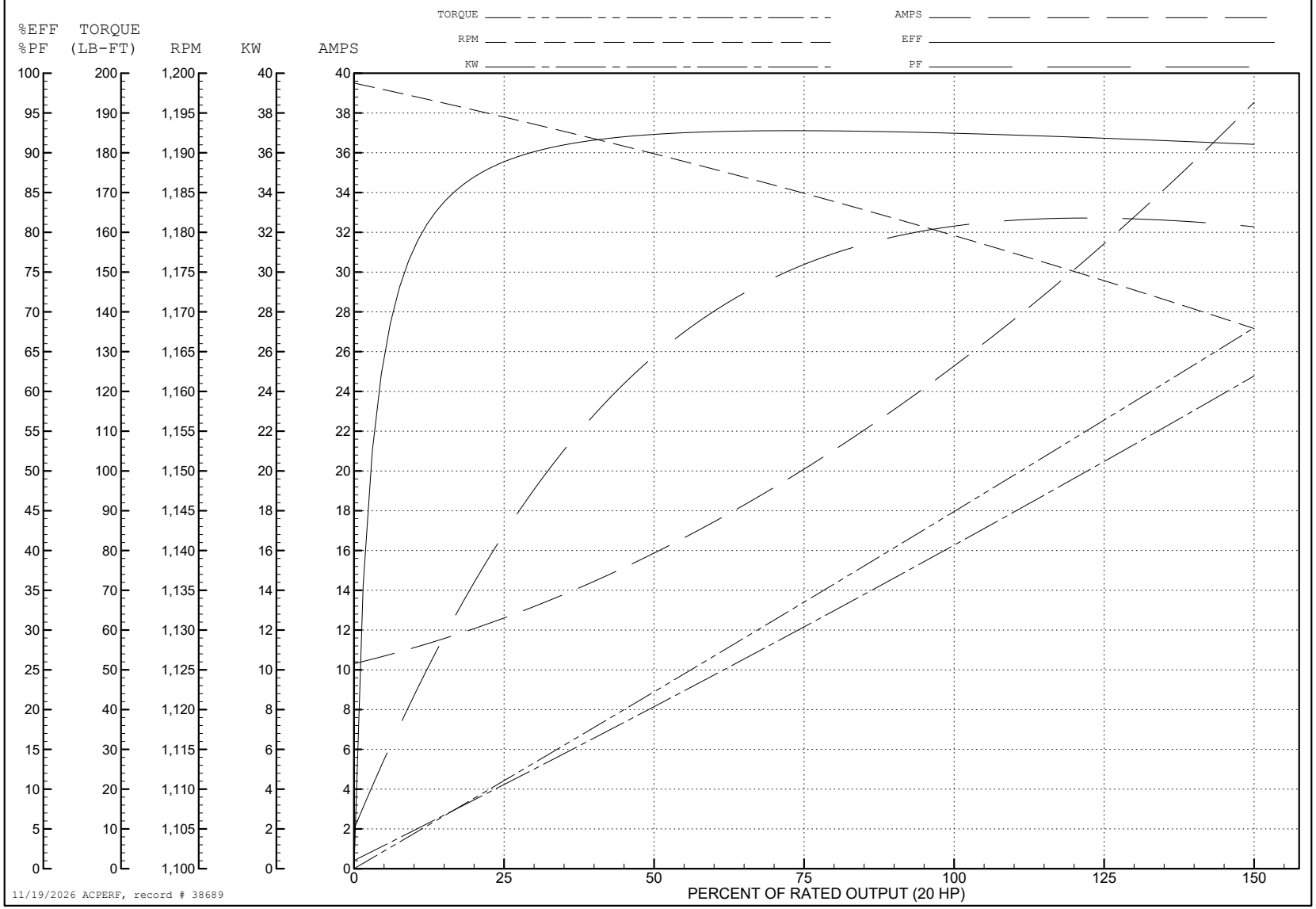
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WINDING # 10WGZ033

20 HP 3 PH 60 HZ 1180 RPM 460 V 1056M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=243 PU=94 LR=134 LRA=146



AC Induction Motor Performance Data
Record # 38690
Typical performance - not guaranteed values

Winding: 10WGZ033-R001	**Type:** 1056M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			20//15
Volts			230/460//190/380
Full Load Amps			50/25//46/23
R.P.M.			1180//980
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	G
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	91.7	**Power Factor**	78
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	80.4 LB-FT
Start Configuration	direct on line
Breakdown Torque	234 LB-FT
Pull-up Torque	97.3 LB-FT
Locked-rotor Torque	139 LB-FT
Starting Current	142 A
No-load Current	10.5 A
Line-line Res. @ 25ºC	0.477 Ω
Temp. Rise @ Rated Load	45°C
Temp. Rise @ S.F. Load	56°C
Locked-rotor Power Factor	34
Rotor inertia	6.86 LB-FT2

Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	42	63	75	79	81	82	80
Efficiency	87.2	91.4	92.4	92.1	90.7	90.8	91.3
Speed	995	991	986	982	977	971	979
Line amperes	11.7	14.9	18.7	23.5	28.7	34.8	26.6

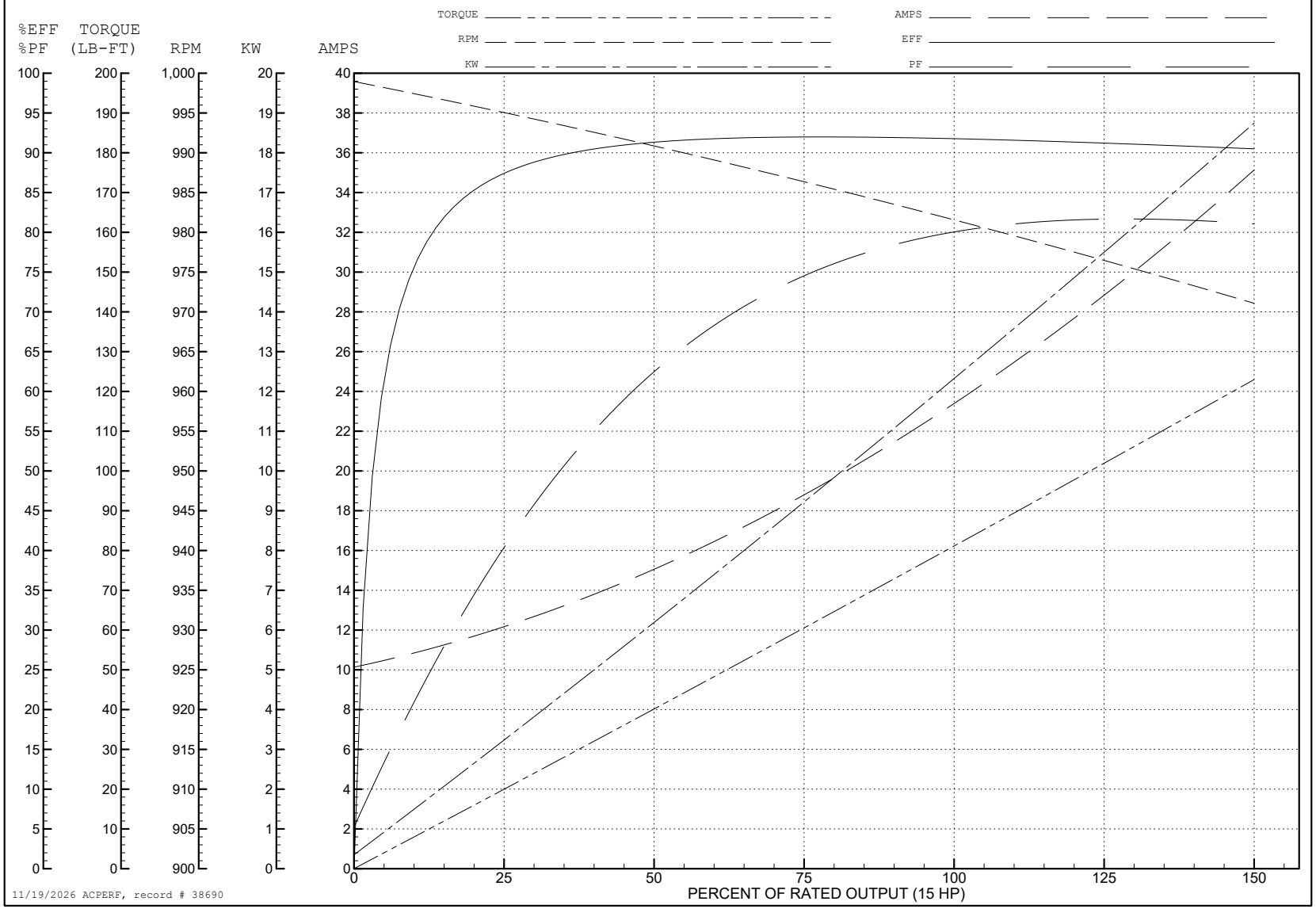
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WINDING # 10WGZ033

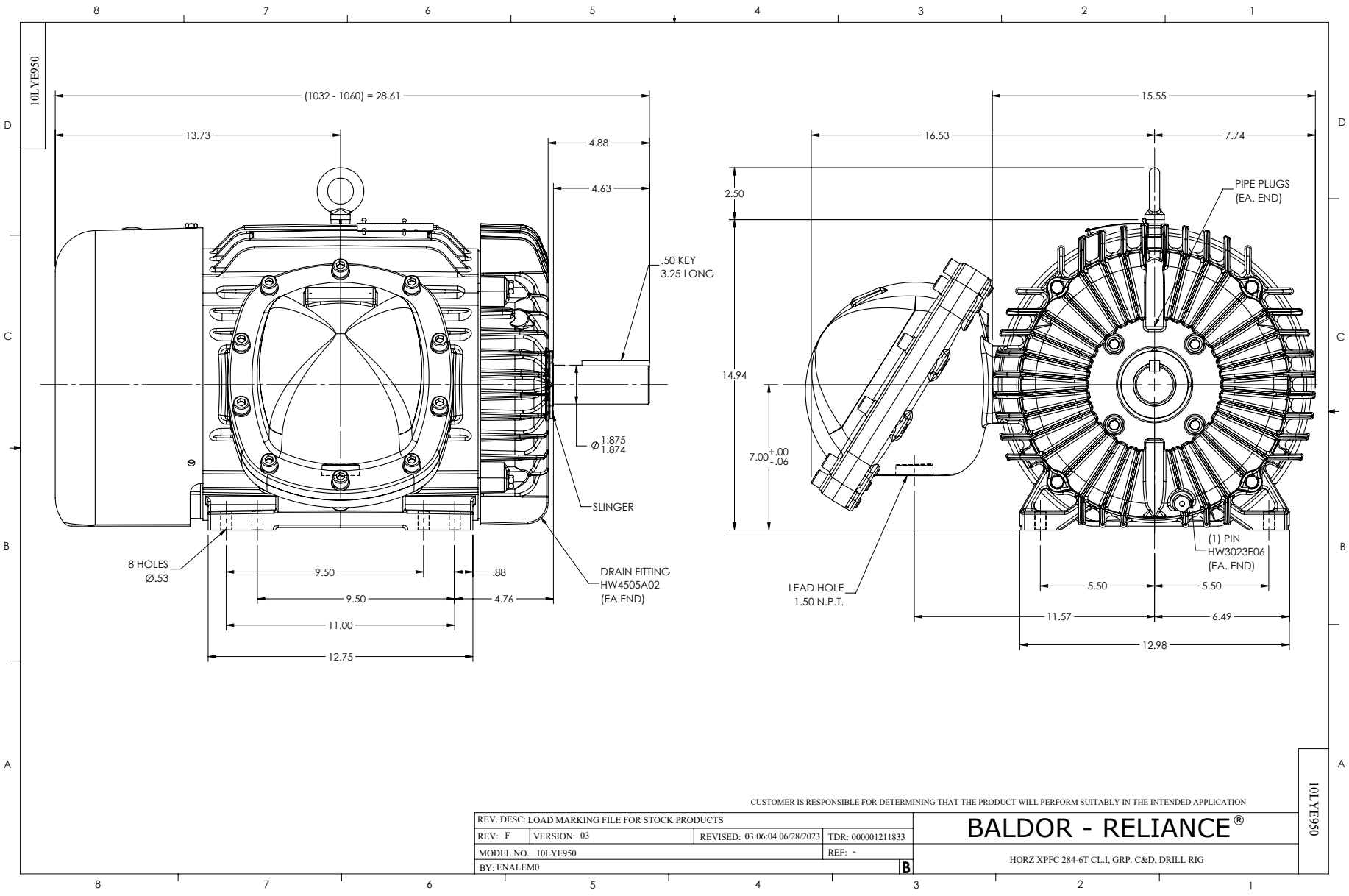
15 HP 3 PH 50 HZ 982 RPM 380 V 1056M

Typical performance - not guaranteed values.

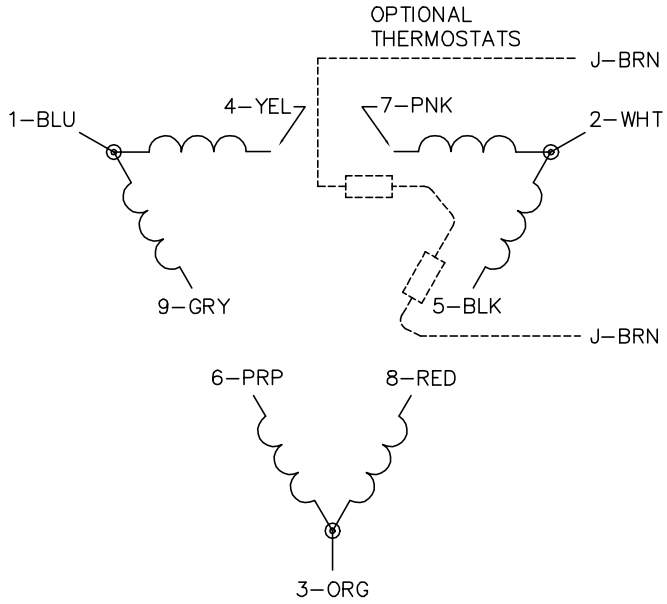
TORQUES(LB-FT): PO=234 PU=97.3 LR=139 LRA=142

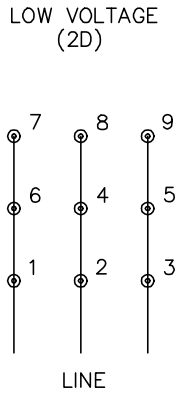


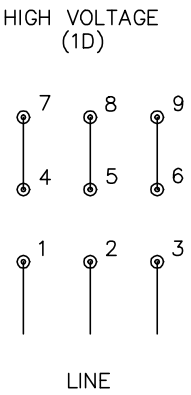
11/19/2026 ACPERF, record # 38690


10LYE950
(1032 - 1060) = 28.61
13.73
4.88
4.63
.50 KEY
3.25 LONG
Ø1.875
1.874
SLINGER
8 HOLES
Ø.53
9.50
.88
9.50
4.76
11.00
12.75
DRAIN FITTING
HW4505A02
(EA END)
15.55
16.53
7.74
2.50
PIPE PLUGS
(EA. END)
14.94
7.00 +.00 -.06
LEAD HOLE
1.50 N.P.T.
(1) PIN
HW3023E06
(EA. END)
5.50
5.50
11.57
6.49
12.98
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD MARKING FILE FOR STOCK PRODUCTS
REV: F
VERSION: 03
REVISED: 03:06:04 06/28/2023
TDR: 000001211833
MODEL NO. 10LYE950
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ XPFC 284-6T CL.I, GRP. C&D, DRILL RIG
10LYE950

CD0180







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.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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