ABB BALDOR RELIANCE

Customer information packet

EM7014T-I

1//.75HP, 1760//1460RPM, 3PH, 60//50HZ, 143T
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	143T
Frame Material	Steel
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	.750 HP @ 50 HZ
	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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 EEV
	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	3.260 A @ 230.0 V
	3.200 A @ 208.0 V
	3.080 A @ 190.0 V
	1.630 A @ 460.0 V
	1.540 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	C
Type	AC
Mech. spec.	35X081
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYX081
Eff. date	05-20-2024
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-10-2022

Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.22 IN
Power Factor	67
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1475 rpm
	1760 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.	35X081G004G1									
CAT.NO.										
HP	1//.75									
VOLTS	230/460//190/380									
AMPS	3.26/1.63//3.08/1.54									
RPM	1760//1475				**MOTOR WEIGHT**					
HERTZ	60//50	**PH**	3	**CL**	F	**DE BRG**	6205			
SER.F.	1.15	**DES**	B	**CODE**	N	**ODE BRG**	6203			
FRAME	143T	**GREASE**	POLYREX EM							
RATING	40C AMB-CONT									
				NEMA-NOM-EFF		85.5	**PF**	67		
	SFA 3.46/1.73									

AC Induction Motor Performance Data
Record # 86929
Typical performance - not guaranteed values

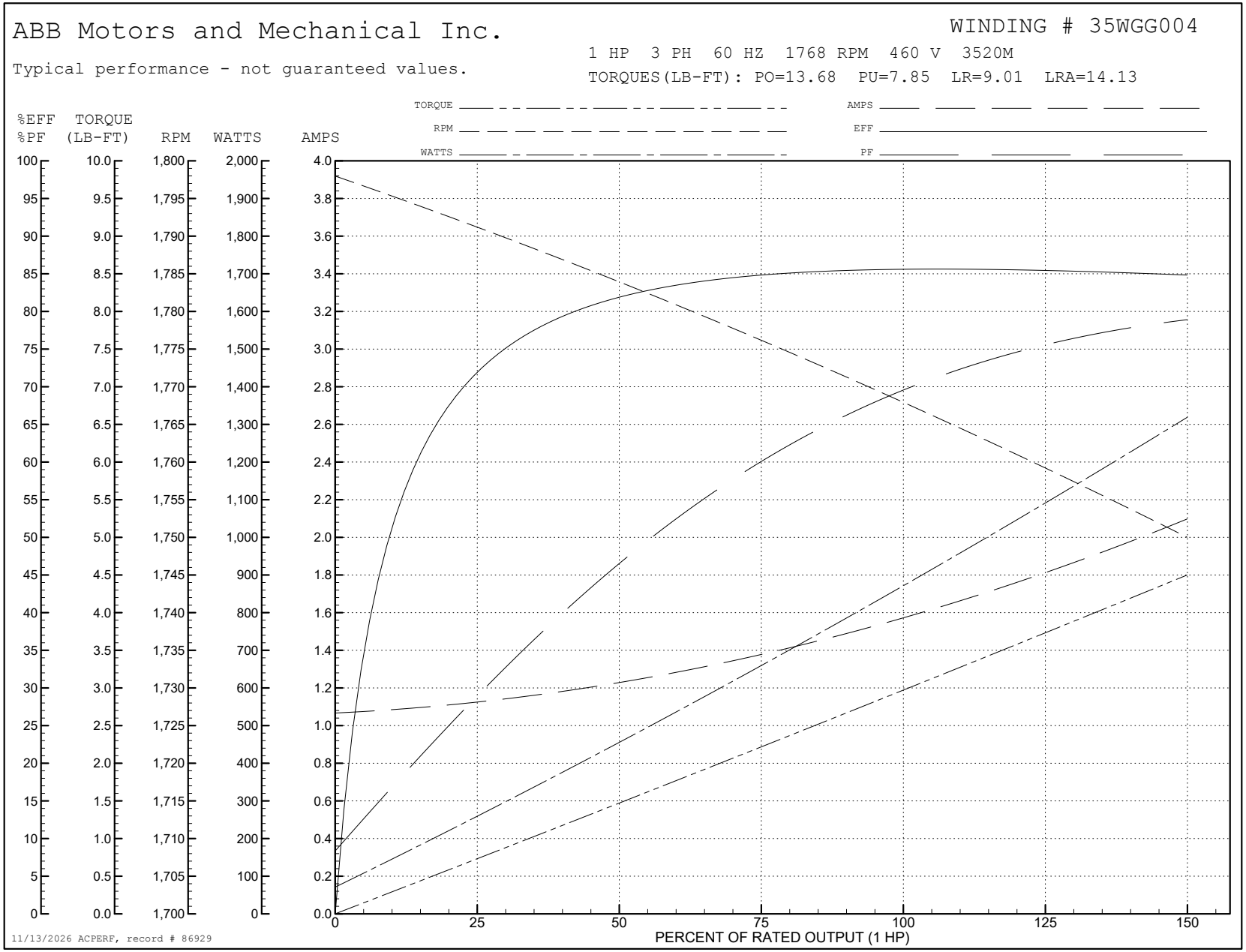
Winding: 35WGG004-R009	**Type:** 3520M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			1//.75
Volts			230/460//190/380
Full Load Amps			3.26/1.63//3.08/1.54
R.P.M.			1760//1475
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	85.5	**Power Factor**	67
Rating - Duty			40C AMB-CONT
S.F. Amps			

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	2.97 LB-FT
Start Configuration	direct on line
Breakdown Torque	13.68 LB-FT
Pull-up Torque	7.85 LB-FT
Locked-rotor Torque	9.01 LB-FT
Starting Current	14.13 A
No-load Current	1.08 A
Line-line Res. @ 25ºC	16.9 Ω
Temp. Rise @ Rated Load	24°C
Temp. Rise @ S.F. Load	27°C
Locked-rotor Power Factor	61.5
Rotor inertia	0.144 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	30	47	60	69	76	79	73
Efficiency	72.1	81.7	84.7	85.7	85.5	84.7	85.6
Speed	1791	1784	1776	1768	1759	1750	1763
Line amperes	1.11	1.22	1.38	1.59	1.82	2.09	1.73


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WINDING # 35WGG004
Typical performance - not guaranteed values.
1 HP 3 PH 60 HZ 1768 RPM 460 V 3520M
TORQUES(LB-FT): PO=13.68 PU=7.85 LR=9.01 LRA=14.13
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/13/2026 ACPERF, record # 86929

AC Induction Motor Performance Data
Record # 86930
Typical performance - not guaranteed values

Winding: 35WGG004-R009	**Type:** 3520M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			1//.75
Volts			230/460//190/380
Full Load Amps			3.26/1.63//3.08/1.54
R.P.M.			1760//1475
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	85.5	**Power Factor**	67
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	2.68 LB-FT
Start Configuration	direct on line
Breakdown Torque	12.31 LB-FT
Pull-up Torque	7.45 LB-FT
Locked-rotor Torque	8.55 LB-FT
Starting Current	13.12 A
No-load Current	1.06 A
Line-line Res. @ 25ºC	16.9 Ω
Temp. Rise @ Rated Load	22°C
Temp. Rise @ S.F. Load	25°C
Locked-rotor Power Factor	67.1
Rotor inertia	0.144 lb-ft²

Load Characteristics 380 V, 50 Hz, 0.75 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	46	58	67	74	79	71
Efficiency	68.3	79	82.7	84	83.7	83.2	83.8
Speed	1492	1486	1479	1471	1463	1455	1466
Line amperes	1.08	1.18	1.32	1.5	1.71	1.95	1.63

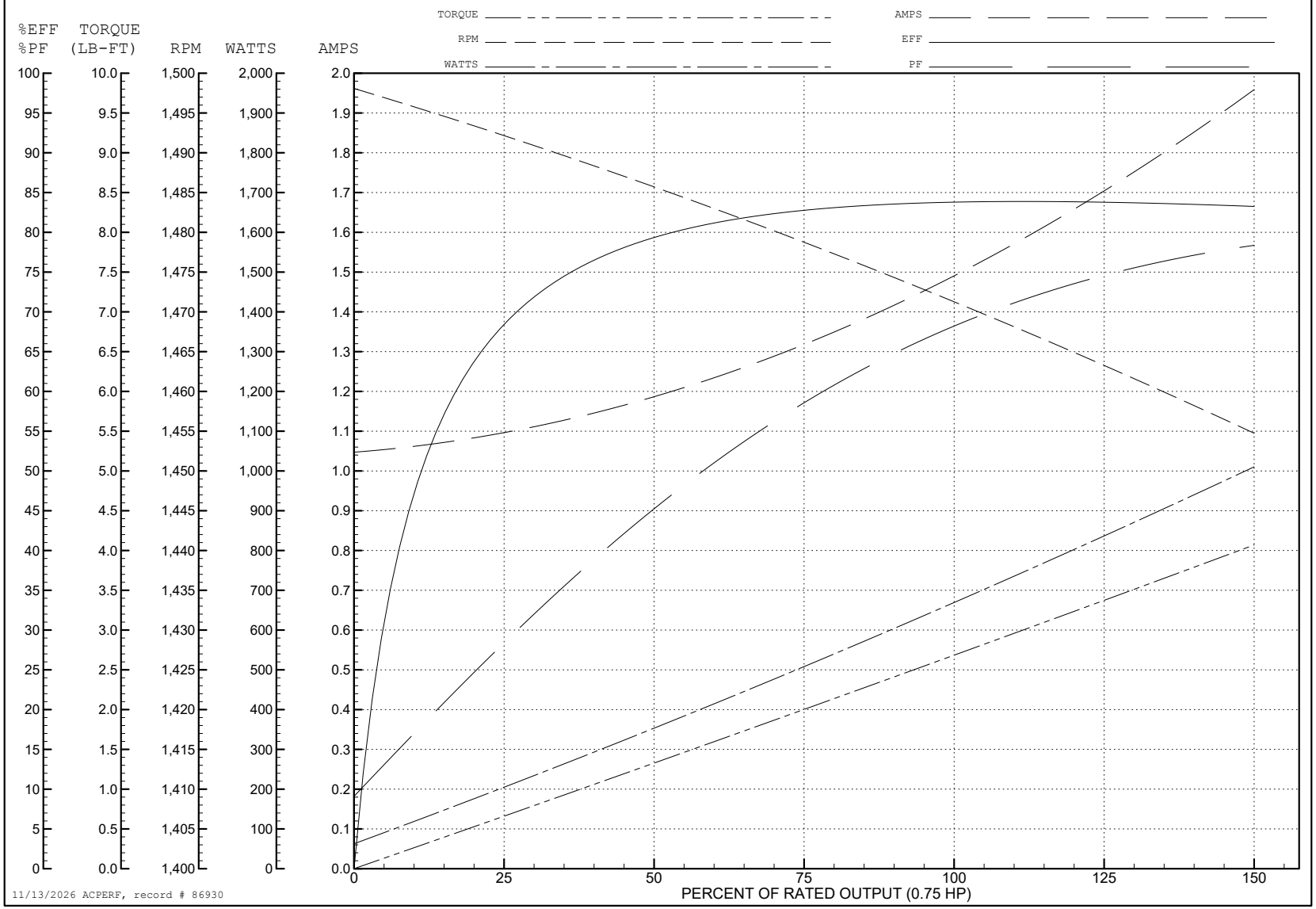
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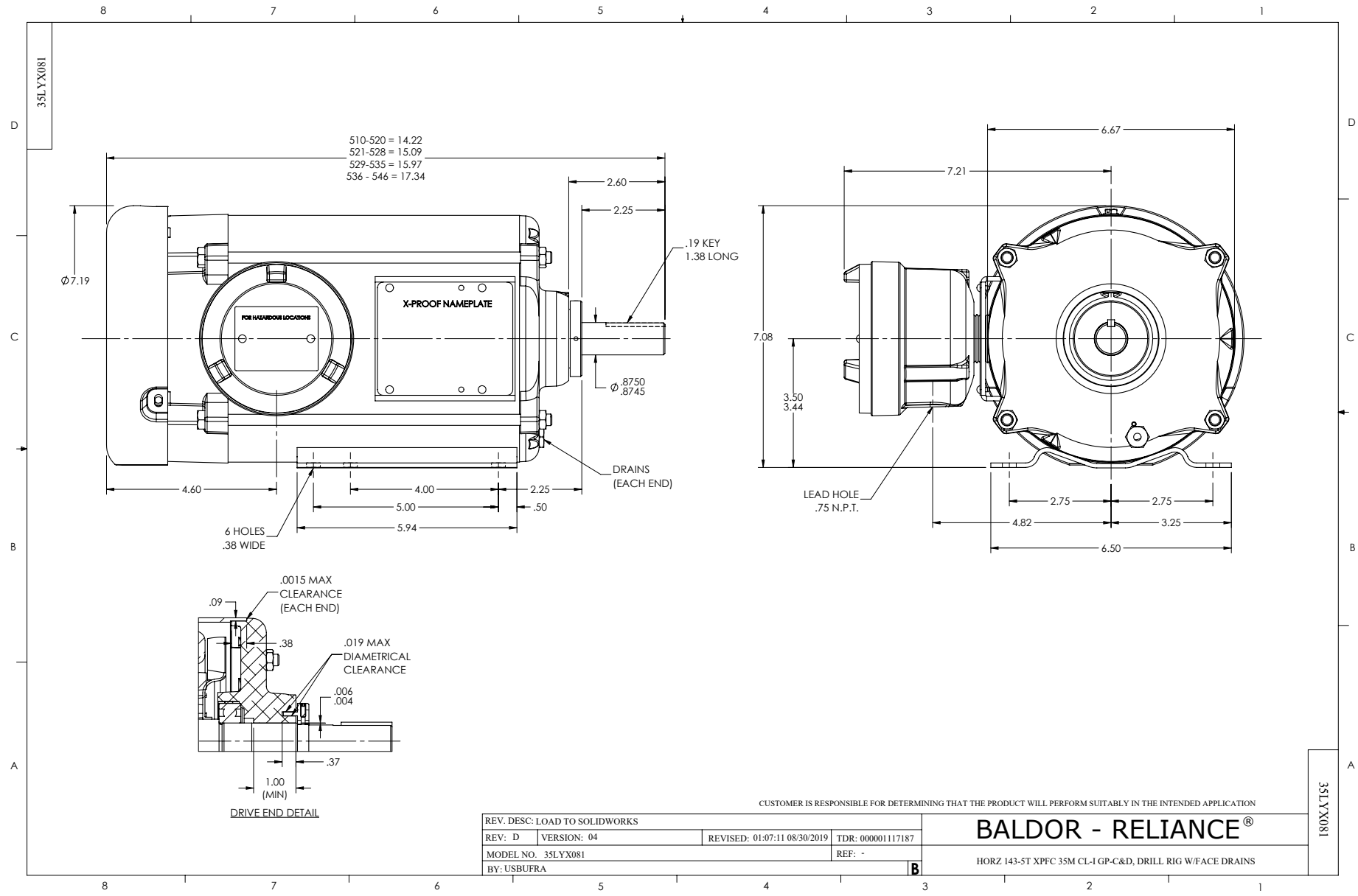
WINDING # 35WGG004

0.75 HP 3 PH 50 HZ 1471 RPM 380 V 3520M

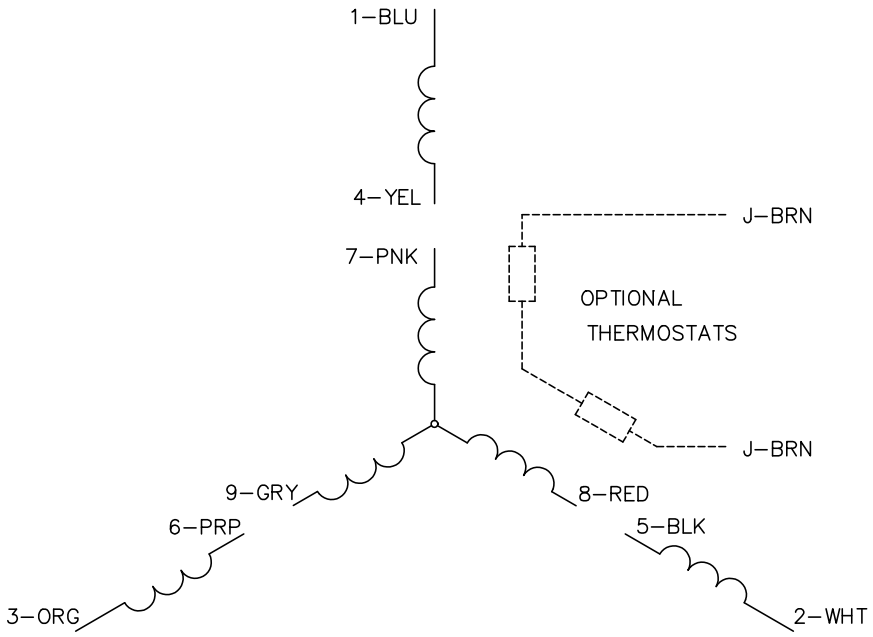
Typical performance - not guaranteed values.

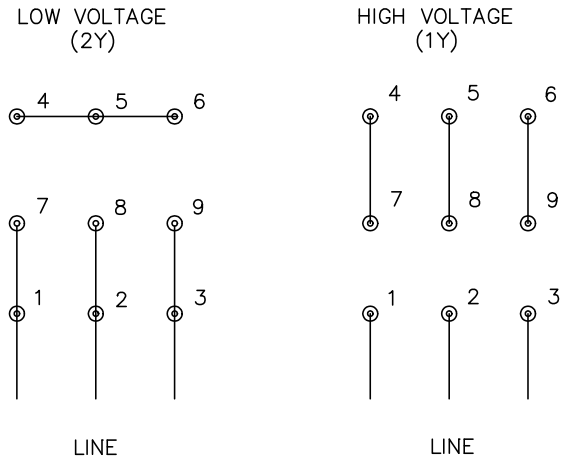
TORQUES(LB-FT): PO=12.31 PU=7.45 LR=8.55 LRA=13.12




35LYX081
510-520 = 14.22
521-528 = 15.09
529-535 = 15.97
536 - 546 = 17.34
2.60
2.25
.19 KEY
1.38 LONG
Ø7.19
X-PROOF NAMEPLATE
FOR HAZARDOUS LOCATIONS
Ø .8750
.8745
DRAINS
(EACH END)
4.60
4.00
2.25
5.00
.50
5.94
6 HOLES
.38 WIDE
6.67
7.21
7.08
3.50
3.44
LEAD HOLE
.75 N.P.T.
2.75
2.75
4.82
3.25
6.50
.0015 MAX
CLEARANCE
(EACH END)
.09
.38
.019 MAX
DIAMETRICAL
CLEARANCE
.006
.004
.37
1.00
(MIN)
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD TO SOLIDWORKS
REV: D
VERSION: 04
REVISED: 01:07:11 08/30/2019
TDR: 000001117187
MODEL NO. 35LYX081
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HORZ 143-5T XPFC 35M CL-I GP-C&D, DRILL RIG W/FACE DRAINS
35LYX081

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