ABB BALDOR RELIANCE

Customer information packet

DRX14144T

1//.75HP, 1770//1475RPM, 3PH, 60//50HZ, 143T
Class - CLI GP C,D
Division - Division I

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/16/2026 12:50:55 AM

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	230.0 V @ 60 HZ
	190.0 V @ 50 HZ
	460.0 V @ 60 HZ
	380.0 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
Constant Torque Speed Range	6
Current @ Voltage	3.200 A @ 208.0 V
	3.200 A @ 230.0 V
	3.080 A @ 190.0 V
	1.600 A @ 460.0 V
	1.540 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

Part Detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYX081
Eff. date	01-10-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.22 IN
Power Factor	69
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
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

NP1401XPSLEV											
NO.					**CC**	010A					
S/N					**TEMP CODE**	T3C					
SPEC.	35-0000-1359				**INV.TYPE**	PWM					
CAT.NO.	DRX14144T				**C HP FR**	60	**C HP TO**	90			
HP	1//.75				**CT HZ FROM**	6			**CT HZ TO**	60	
VOLTS	230/460//190/380				**VT HZ FROM**	6			**VT HZ TO**	60	
AMPS	3.2/1.6//3.08/1.54			**MAG CUR**	2.2/1.1						
RPM	1770//1475			**MX RPM**	2700						
HZ	60//50	**PH**	3	**CL**	F	**NOM.EFF.**	85.5				
SER.F.	1.00	**DES**	B	**SL HZ**	1	**WK2**	0.144				
FRAME	143T	**RATING**	40C AMB-CONT								

AC Induction Motor Performance Data
Record # 86931
Typical performance - not guaranteed values

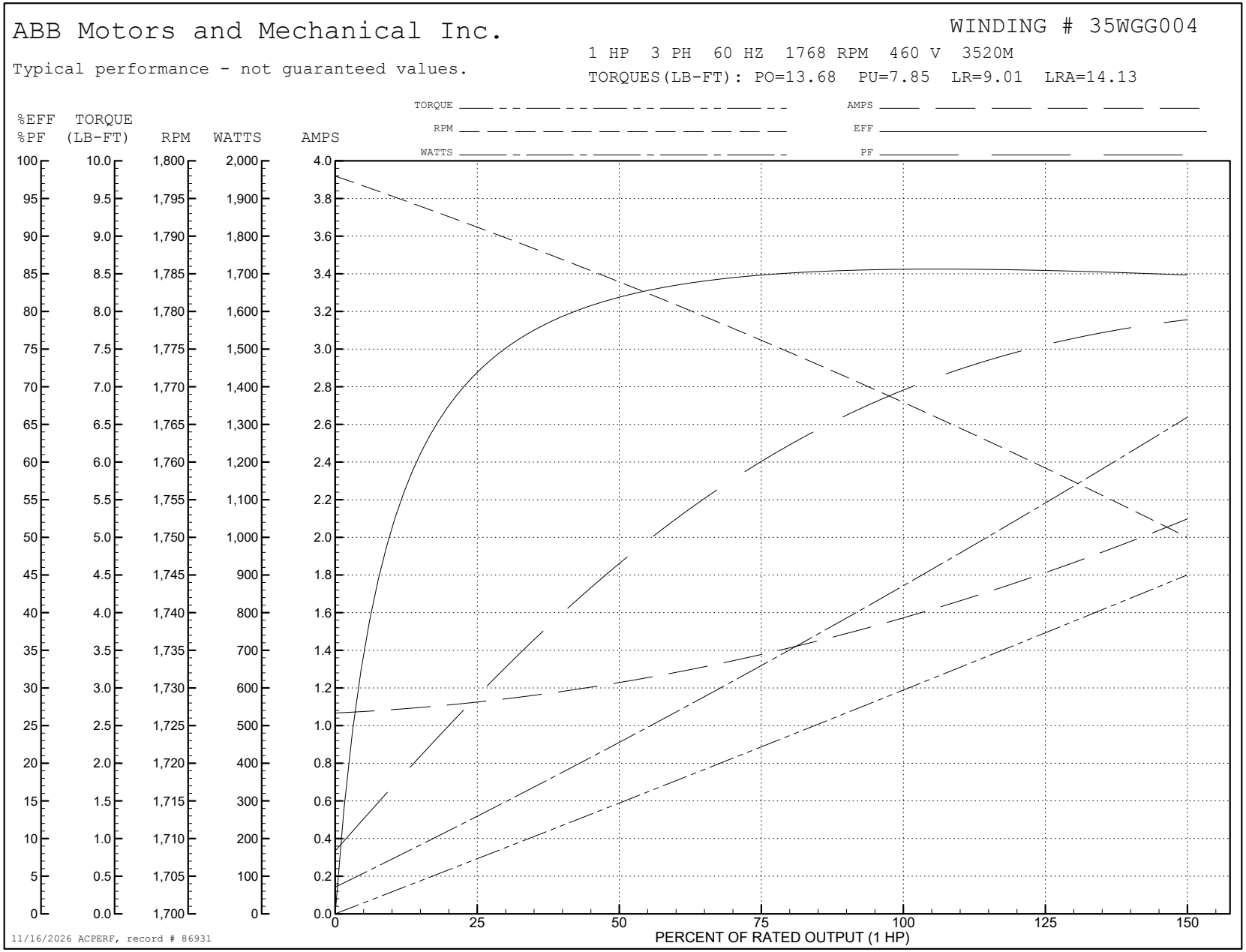
Winding: 35WGG004-R010	**Type:** 3520M	**Enclosure:** XPFC

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
NEMA Nom. Eff.	85.5	**Power Factor**	67
Rating - Duty			40C AMB-CONT

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
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**
Power Factor	30	47	60	69	76	79
Efficiency	72.1	81.7	84.7	85.7	85.5	84.7
Speed	1791	1784	1776	1768	1759	1750
Line amperes	1.11	1.22	1.38	1.59	1.82	2.09


ABB Motors and Mechanical Inc.
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)
11/16/2026 ACPERF, record # 86931

AC Induction Motor Performance Data
Record # 86932
Typical performance - not guaranteed values

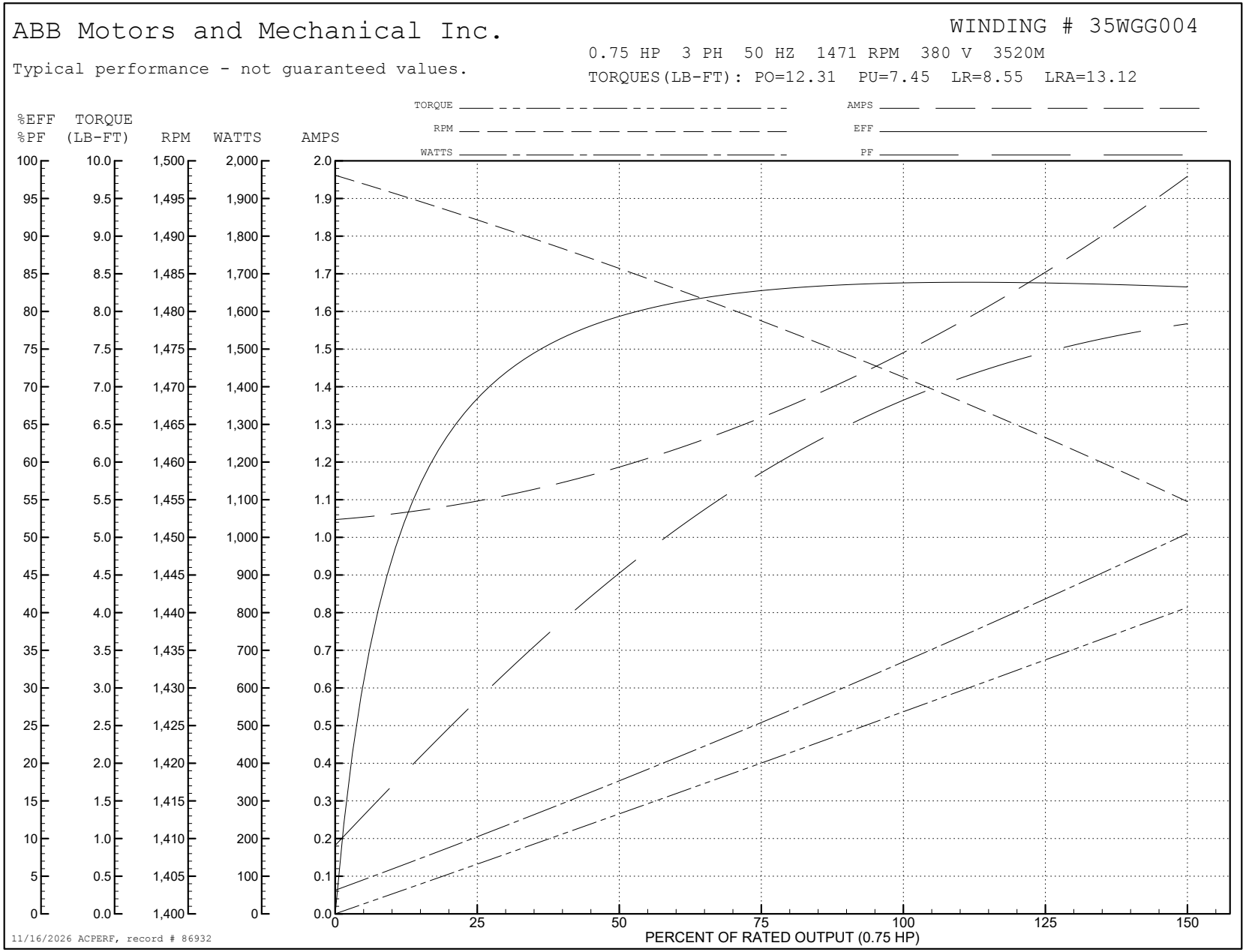
Winding: 35WGG004-R010	**Type:** 3520M	**Enclosure:** XPFC

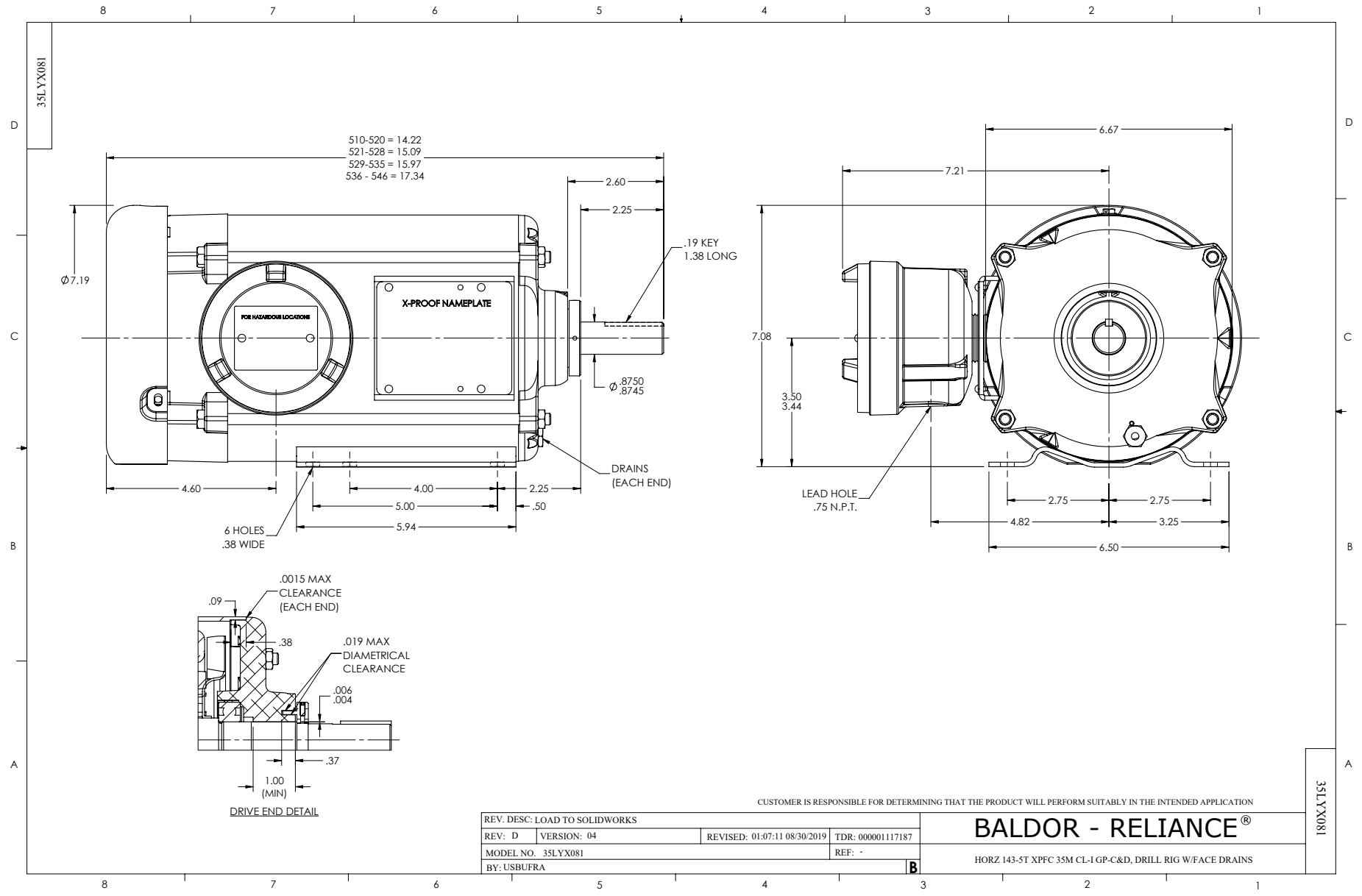
Nameplate Data			
Rated Output (HP)			1//.75
Volts			230/460//190/380
Full Load Amps			3.26/1.63//3.08/1.54
R.P.M.			1760//1475
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1
NEMA Nom. Eff.	85.5	**Power Factor**	67
Rating - Duty			40C AMB-CONT

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
Locked-rotor Power Factor	67.1
Rotor inertia	0.144 lb-ft²

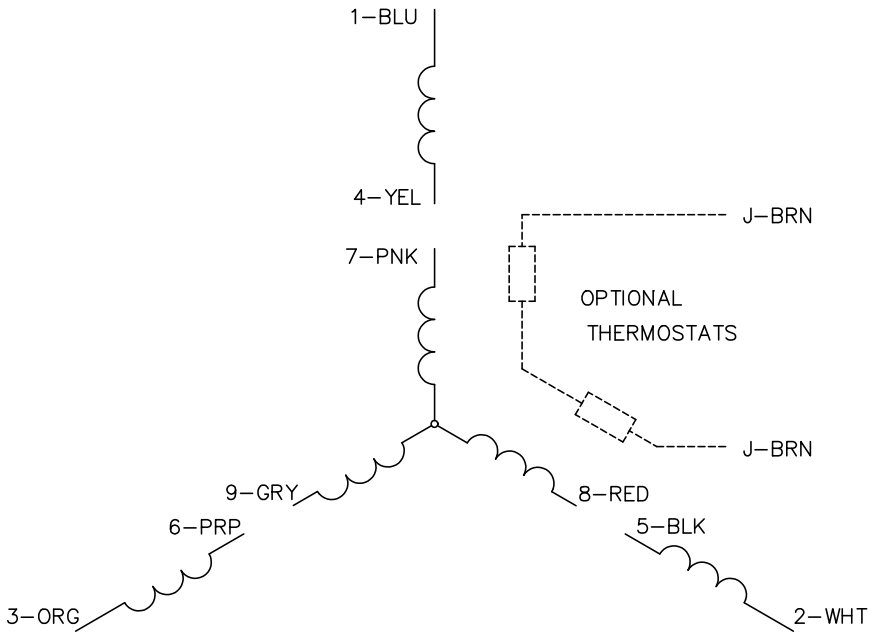
Load Characteristics 380 V, 50 Hz, 0.75 HP

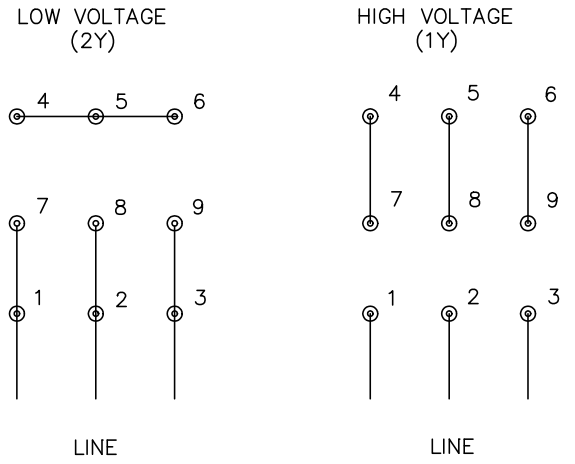
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	29	46	58	67	74	79
Efficiency	68.3	79	82.7	84	83.7	83.2
Speed	1492	1486	1479	1471	1463	1455
Line amperes	1.08	1.18	1.32	1.5	1.71	1.95


ABB Motors and Mechanical Inc.
WINDING # 35WGG004
Typical performance - not guaranteed values.
0.75 HP 3 PH 50 HZ 1471 RPM 380 V 3520M
TORQUES(LB-FT): PO=12.31 PU=7.45 LR=8.55 LRA=13.12
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
11/16/2026 ACPERF, record # 86932


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