ABB BALDOR RELIANCE

Customer information packet

DRX14124T-5

1HP, 3450RPM, 3PH, 60HZ, 143T, XPFC, F1
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	143T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 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	1.100 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.1 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGT463
Layout	35LYX081
Eff. date	06-15-2020
CD Diagram	CD0006
Poles	02
Leads	3#18
Proprietary	False
Created date	07-16-2019

IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.22 IN
Power Factor	82
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3450 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.	35-0000-0261				**INV.TYPE**	PWM						
CAT.NO.	DRX14124T-5				**C HP FR**	60	**C HP TO**	90				
HP	1				**CT HZ FROM**	6			**CT HZ TO**	60		
VOLTS	575				**VT HZ FROM**	6			**VT HZ TO**	60		
AMPS	1.1			**MAG CUR**	.55							
RPM	3450			**MX RPM**	5400							
HZ	60	**PH**	3	**CL**	F	**NOM.EFF.**	84					
SER.F.	1.00	**DES**	B	**SL HZ**	2	**WK2**	0.036					
FRAME	143T	**RATING**	40C AMB-CONT									
	55C AMB @ 1.0SF											
	1.15 SF SINEWAVE				NEMA MG-1 PT 5,IP55							

AC Induction Motor Performance Data
Record # 77516
Typical performance - not guaranteed values

Winding: 35WGT463-R027	**Type:** 3516M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			1
Volts			575
Full Load Amps			1.1
R.P.M.			3450
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	L
Service Factor (S.F.)			1
NEMA Nom. Eff.	84	**Power Factor**	82
Rating - Duty			40C AMB-CONT
S.F. Amps			

575 V, 60 Hz: Single Voltage Motor	
Full Load Torque	1.5 LB-FT
Start Configuration	direct on line
Breakdown Torque	6.5 LB-FT
Pull-up Torque	4.8 LB-FT
Locked-rotor Torque	5.7 LB-FT
Starting Current	9.7 A
No-load Current	0.54 A
Line-line Res. @ 25ºC	24.1 Ω
Temp. Rise @ Rated Load	43°C
Temp. Rise @ S.F. Load	50°C
Locked-rotor Power Factor	56.5
Rotor inertia	0.0443 LB-FT2

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	45	65	77	83	87	87
Efficiency	70.3	80.5	83.9	84.6	84.6	83.7
Speed	3567	3539	3510	3479	3446	3410
Line amperes	0.6	0.72	0.87	1.06	1.25	1.5

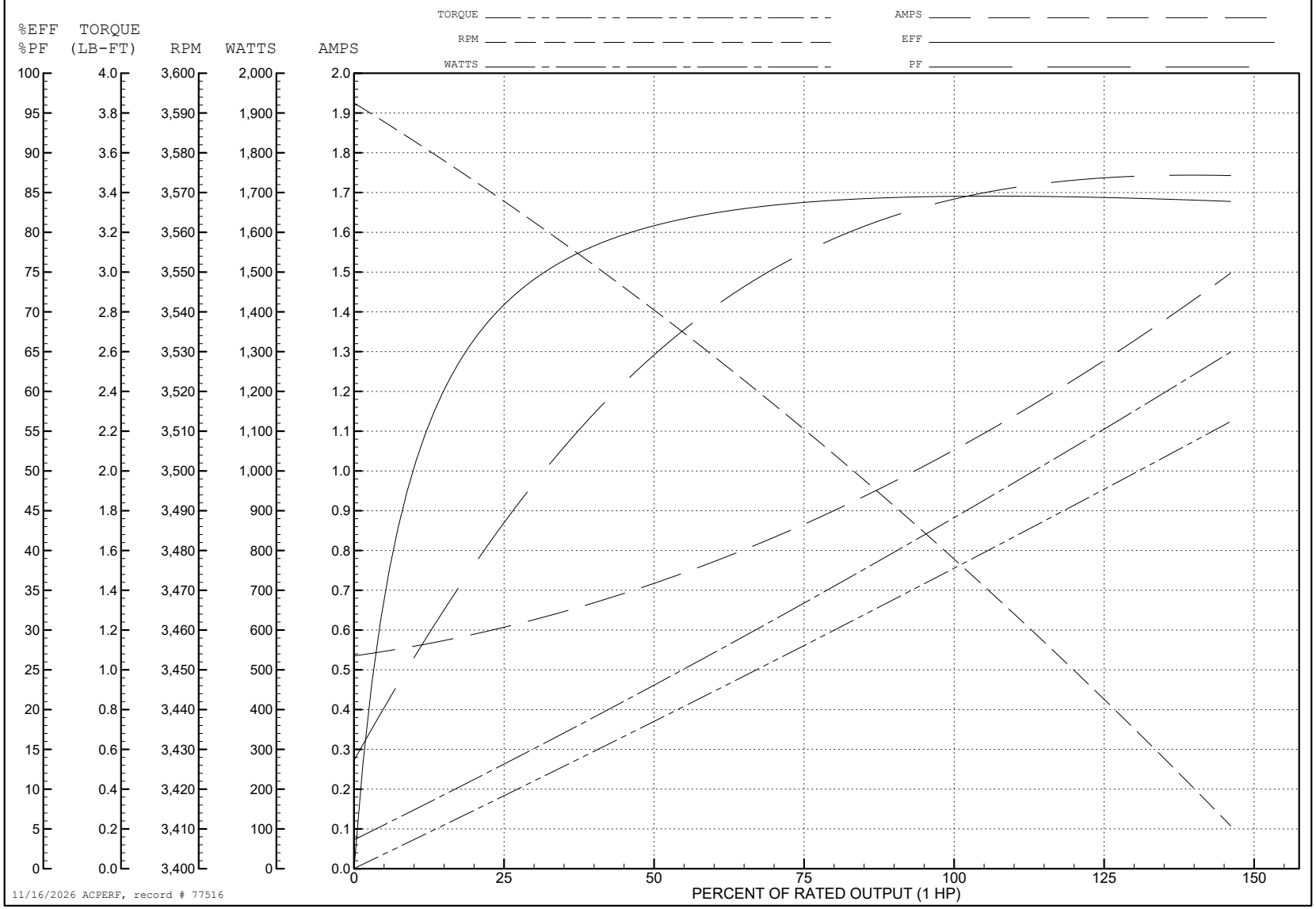
ABB Motors and Mechanical Inc.

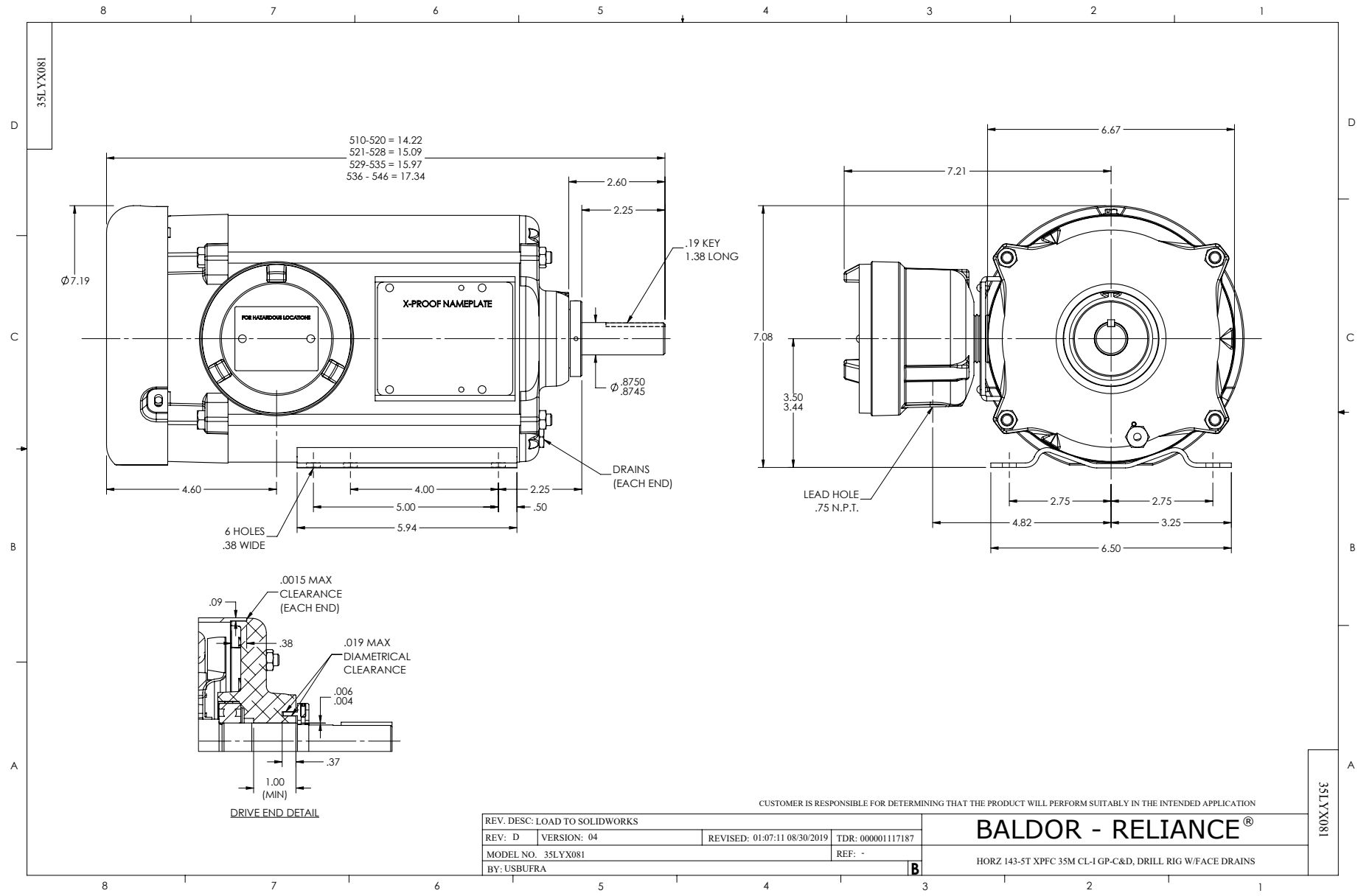
WINDING # 35WGT463

1 HP 3 PH 60 HZ 3450 RPM 575 V 3516M

Typical performance - not guaranteed values.

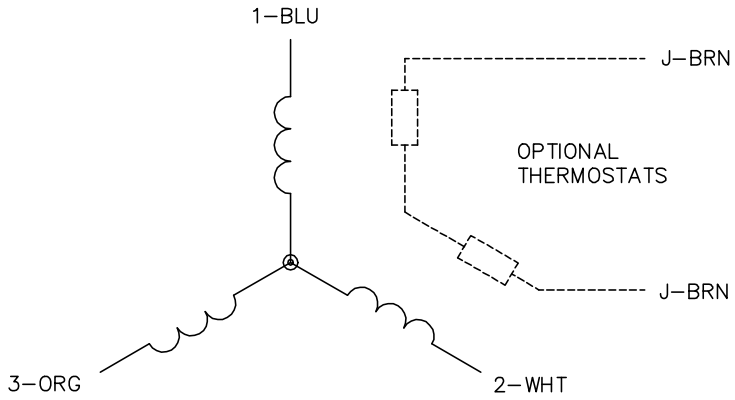
TORQUES(LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=9.7

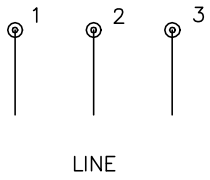



35LYX081
510-520 = 14.22
521-528 = 15.09
529-535 = 15.97
536 - 546 = 17.34
2.60
2.25
.19 KEY
1.38 LONG
Ø7.19
X-PROOF NAMEPLATE
FOR HAZARDOUS LOCATIONS
Ø .8750
.8745
DRAINS
(EACH END)
4.60
4.00
2.25
5.00
.50
5.94
6 HOLES
.38 WIDE
6.67
7.21
7.08
3.50
3.44
LEAD HOLE
.75 N.P.T.
2.75
2.75
4.82
3.25
6.50
.0015 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

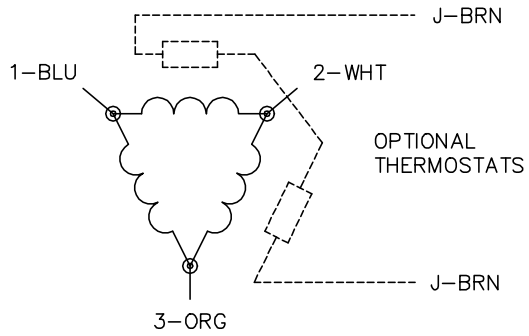
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007			BALDOR - RELIANCE®
REV. LTR: E	VERSION: 01	TDR: 000001099922	
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0	3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED
MTL: –			SH 1 of 1