ABB BALDOR RELIANCE

Customer information packet

EM7014T-I-5

1HP, 1760RPM, 3PH, 60HZ, 143T, 3520M, 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	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 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	1.200 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
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

Part Detail

Revision	P
Type	AC
Mech. spec.	35X081
Base	
Status	NLA/A
Elec. spec.	35WGM849
Layout	35LYX081
Eff. date	01-18-2023
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	08-12-2013

High Voltage Full Load Amps	1.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 18 AWG
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	71
Product Family	Hazardous Location Motor
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	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.	35X081M849G1										
CAT.NO.	EM7014T-I-5										
HP	1										
VOLTS	575										
AMPS	1.2										
RPM	1760					**MOTOR WEIGHT**		51			
HERTZ	60	**PH**	3	**CL**	F	**DE BRG**	6205				
SER.F.	1.15	**DES**	B	**CODE**	L	**ODE BRG**	6203				
FRAME	143T	**GREASE**	POLYREX EM								
RATING	40C AMB-CONT 55C AMB AT 1.0 SF										
NEMA-NOM-EFF	85.5	**PF**	71								
	NEMA MG-1 PT 5,IP55										

AC Induction Motor Performance Data
Record # 50388
Typical performance - not guaranteed values

Winding: 35WGM849-R007	**Type:** 3520M	**Enclosure:** XPFC

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			1	**Full Load Torque**	2.99 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			1.2	**Breakdown Torque**	13.3 LB-FT
R.P.M.			1760	**Pull-up Torque**	8.11 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	8.38 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	9.77 A
Service Factor (S.F.)			1.15	**No-load Current**	0.84 A
NEMA Nom. Eff.	85.5	**Power Factor**	71	**Line-line Res. @ 25ºC**	23.9 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	36°C
S.F. Amps				**Temp. Rise @ S.F. Load**	42°C
				Locked-rotor Power Factor	53.9
				Rotor inertia	0.118 LB-FT2

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	47	60	69	76	80	75
Efficiency	74.4	83.2	85.2	85.9	85.3	84.4	85.5
Speed	1790	1780	1770	1760	1748	1735	1754
Line amperes	0.872	0.977	1.1	1.26	1.46	1.68	1.35

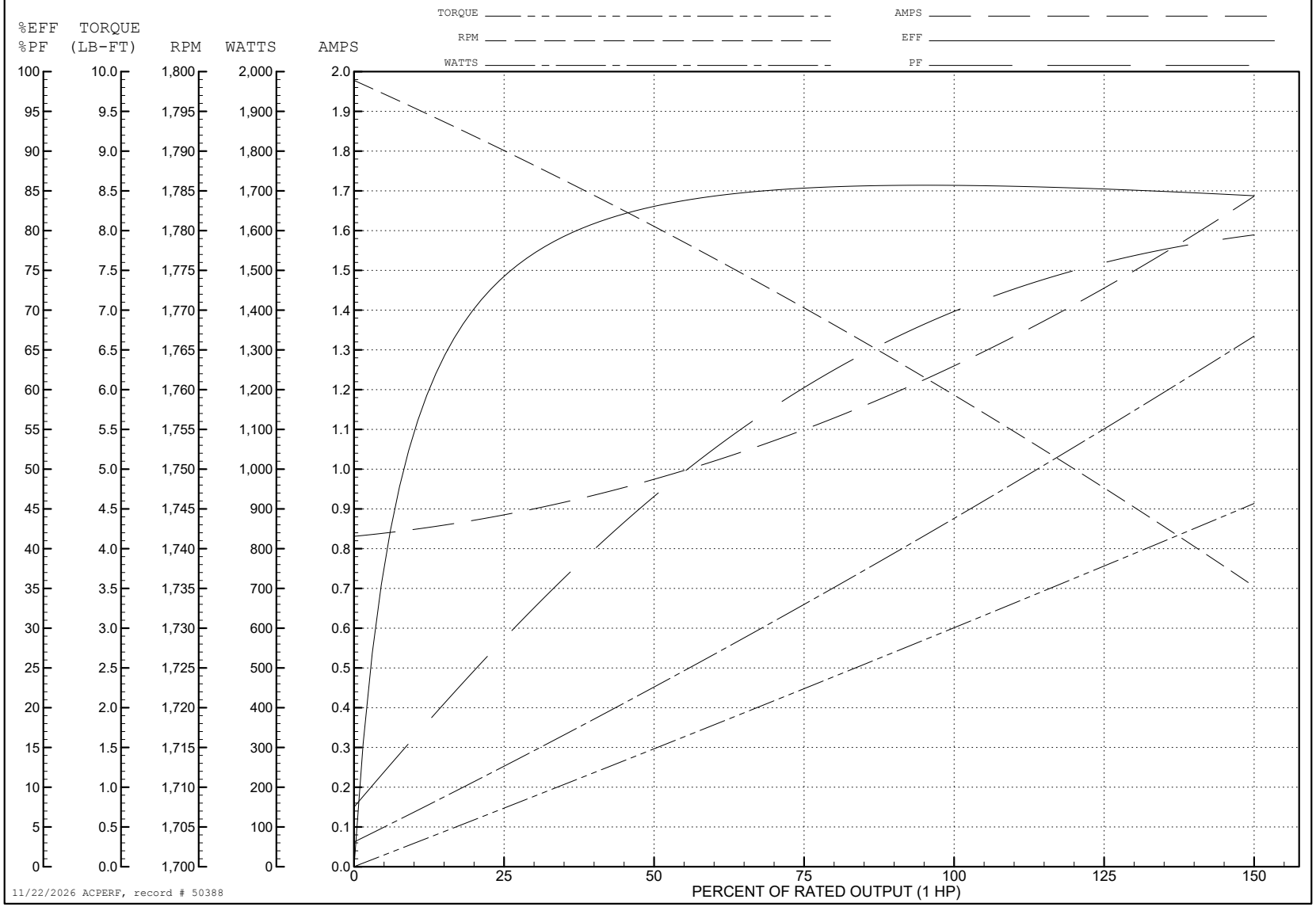
ABB Motors and Mechanical Inc.

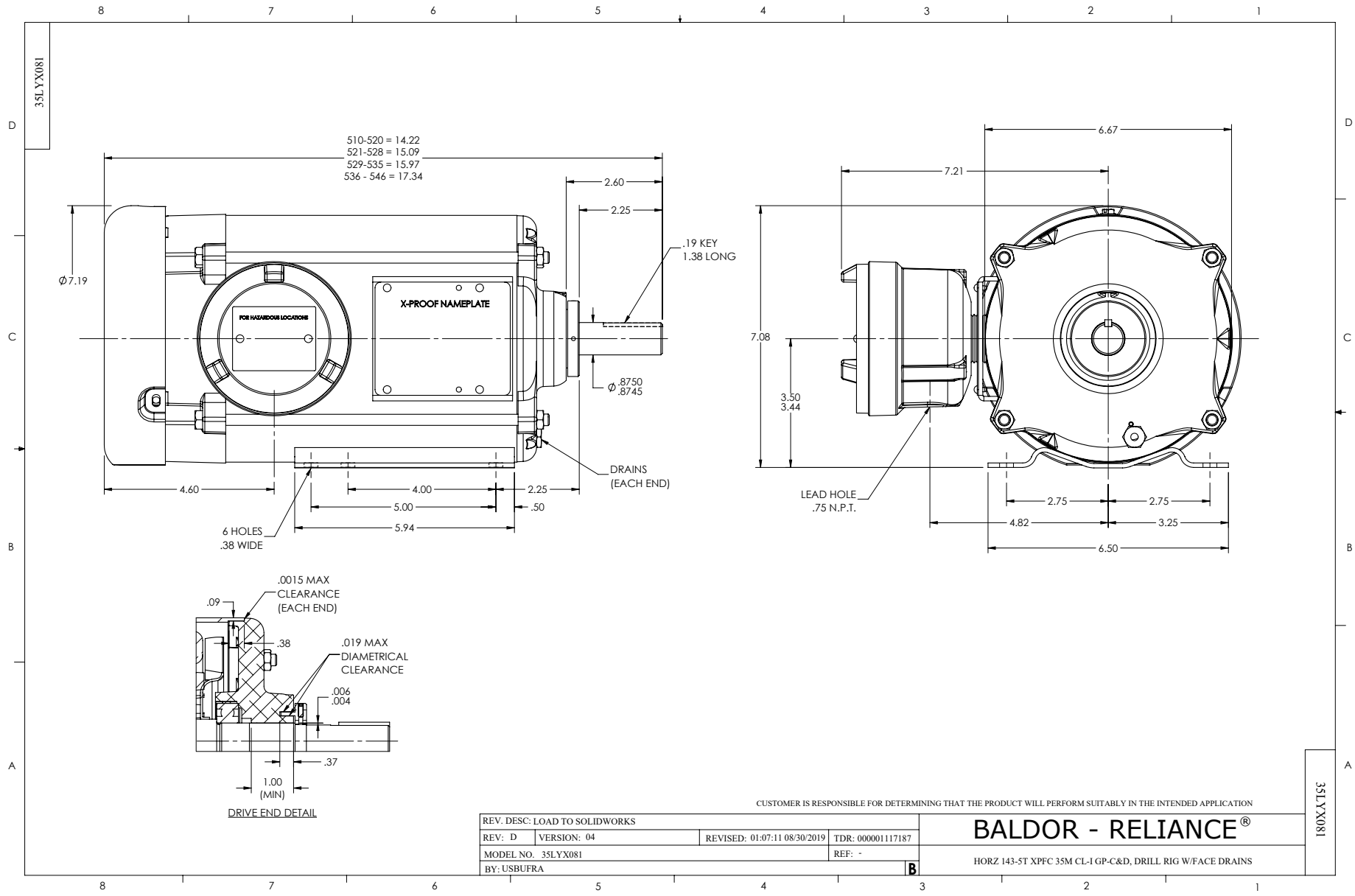
WINDING # 35WGM849

1 HP 3 PH 60 HZ 1760 RPM 575 V 3520M

Typical performance - not guaranteed values.

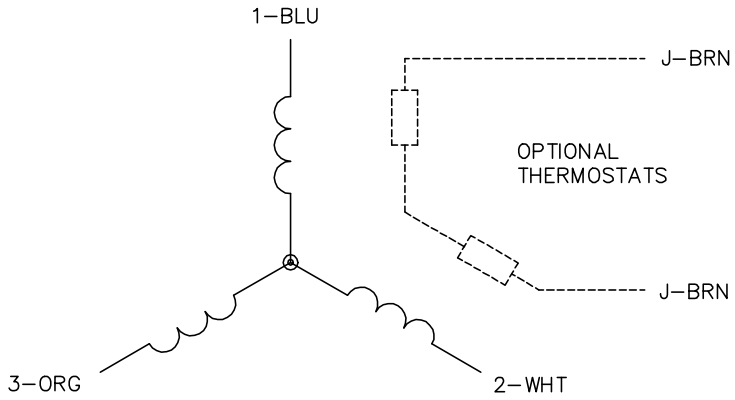
TORQUES(LB-FT): PO=13.3 PU=8.11 LR=8.38 LRA=9.77

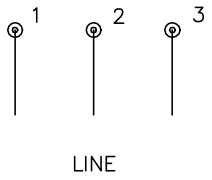



35LYX081
510-520 = 14.22
521-528 = 15.09
529-535 = 15.97
536 - 546 = 17.34
2.60
2.25
.19 KEY
1.38 LONG
Ø7.19
X-PROOF NAMEPLATE
FOR HAZARDOUS LOCATIONS
Ø .8750
.8745
DRAINS
(EACH END)
4.60
4.00
2.25
5.00
.50
5.94
6 HOLES
.38 WIDE
6.67
7.21
7.08
3.50
3.44
LEAD HOLE
.75 N.P.T.
2.75
2.75
4.82
3.25
6.50
.0015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

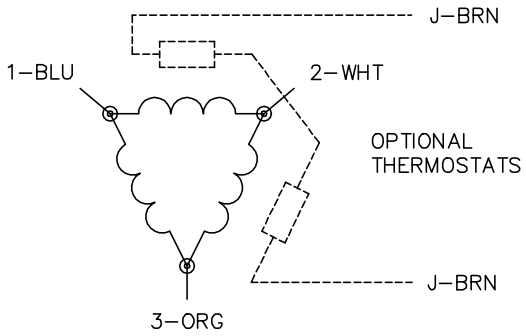
CD0006

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