ABB BALDOR RELIANCE

Customer information packet

EM7013T-I

1//.75HP, 3450//2850RPM, 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	1.000 HP @ 60 HZ
	.750 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	190.0 V @ 50 HZ
	230.0 V @ 60 HZ
	380.0 V @ 50 HZ
Agency Approvals	UL
	CSA
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	1.400 A @ 380.0 V
	1.400 A @ 460.0 V
	2.800 A @ 190.0 V
	2.800 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	77.0 %

Part Detail

Revision	Z
Type	AC
Mech. spec.	35X081
Base	
Status	PRD/A
Elec. spec.	35WGY474
Layout	35LYX081
Eff. date	05-20-2024
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	07-12-2010

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	1.4 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.21 IN
Power Factor	87
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2850 rpm
	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

NP0977XPSLEV											
NO.						**CC**	010A				
SER.						**TEMP CODE**	T3C				
SPEC.	35X081Y474G1										
CAT.NO.	EM7013T-I										
HP	1//.75										
VOLTS	230/460//190/380										
AMPS	2.8/1.4										
RPM	3450//2850					**MOTOR WEIGHT**	51				
HERTZ	60//50	**PH**	3	**CL**	F	**DE BRG**	6205				
SER.F.	1.15	**DES**	B	**CODE**	K	**ODE BRG**	6203				
FRAME	143T	**GREASE**	POLYREX EM								
RATING	40C AMB-CONT										
				NEMA-NOM-EFF		77	**PF**	87			
	55C AMB @ 1.0 SF										

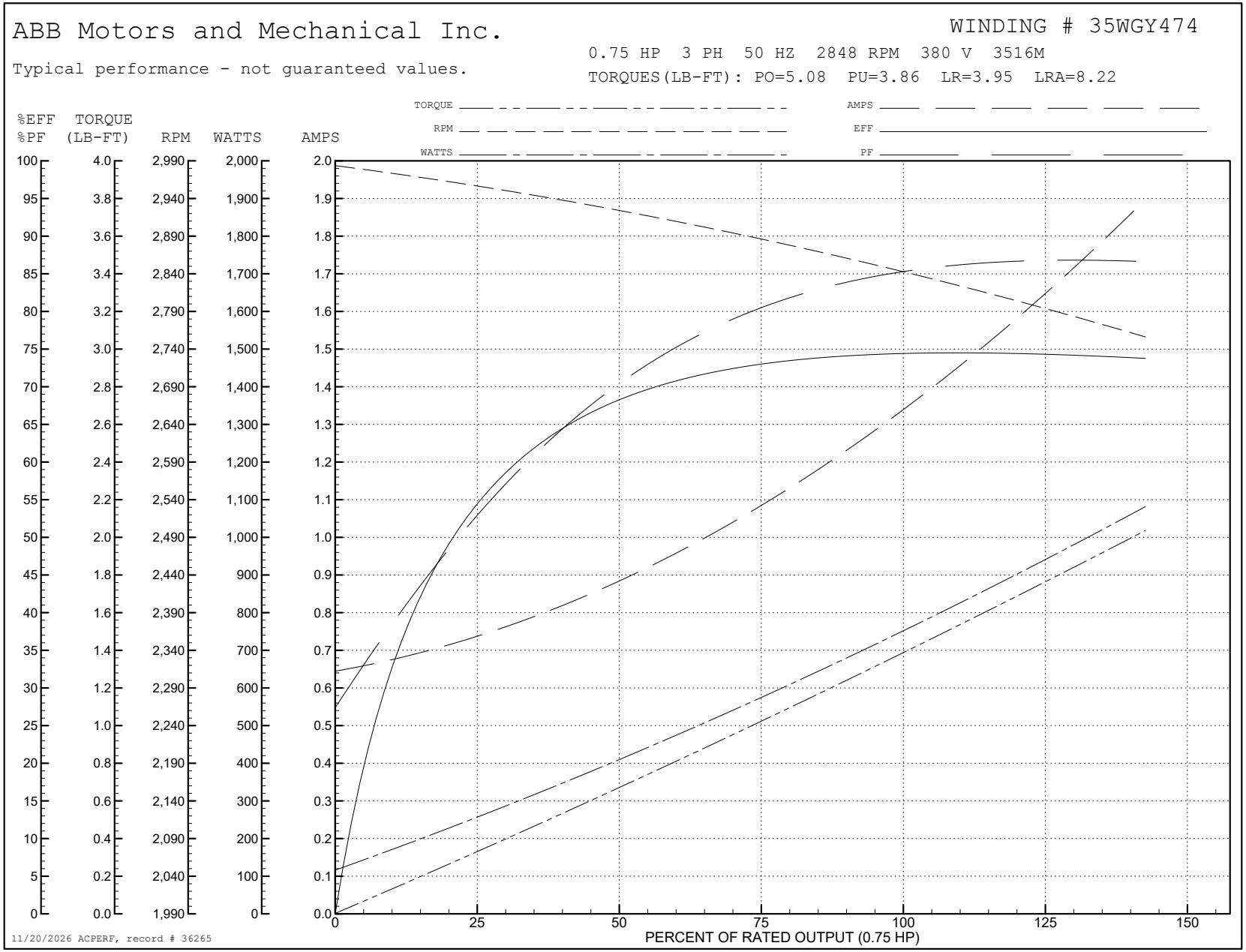
AC Induction Motor Performance Data
Record # 36265
Typical performance - not guaranteed values

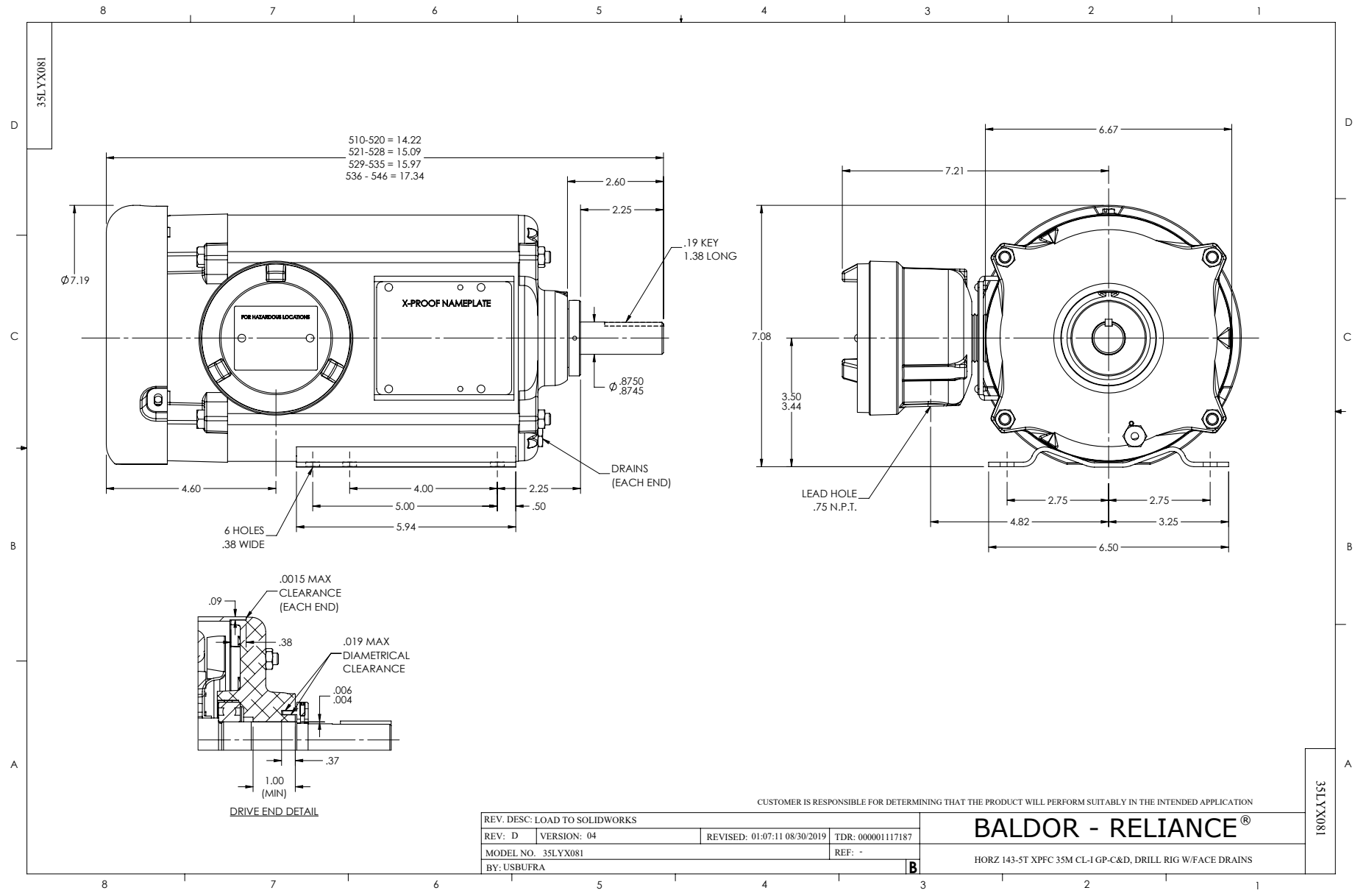
Winding: 35WGY474-R009	**Type:** 3516M	**Enclosure:** XPFC

Nameplate Data				**380 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			1//.75	**Full Load Torque**	1.36 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			2.8/1.4	**Breakdown Torque**	5.08 LB-FT
R.P.M.			3450//2850	**Pull-up Torque**	3.86 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	3.95 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	8.22 A
Service Factor (S.F.)			1.15	**No-load Current**	0.646 A
NEMA Nom. Eff.	77	**Power Factor**	87	**Line-line Res. @ 25ºC**	19.4 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	41°C
S.F. Amps				**Temp. Rise @ S.F. Load**	47°C
				Locked-rotor Power Factor	70
				Rotor inertia	0.0443 LB-FT2

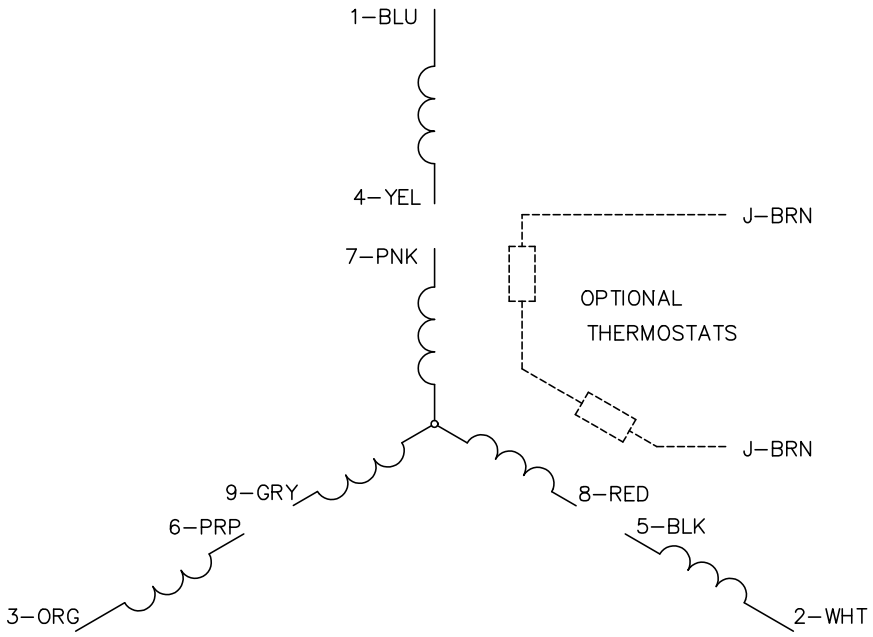
Load Characteristics 380 V, 50 Hz, 0.75 HP

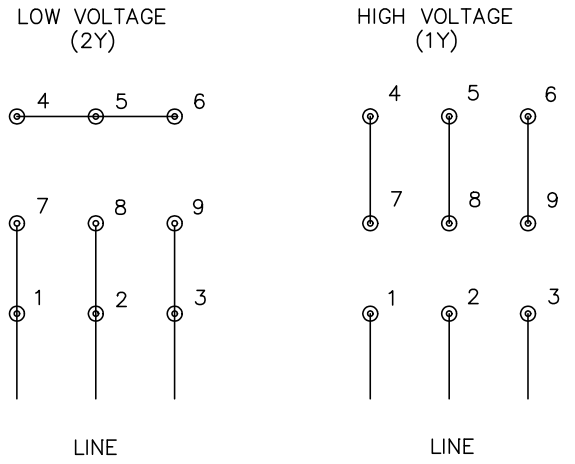
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	54	71	80	85	87	87	86
Efficiency	54.2	67.7	73	74.8	74.8	73.5	74.8
Speed	2955	2922	2886	2848	2804	2754	2822
Line amperes	0.737	0.882	1.09	1.32	1.59	1.9	1.48


ABB Motors and Mechanical Inc.
WINDING # 35WGY474
0.75 HP 3 PH 50 HZ 2848 RPM 380 V 3516M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=5.08 PU=3.86 LR=3.95 LRA=8.22
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (0.75 HP)
11/20/2026 ACPERF, record # 36265


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