ABB BALDOR RELIANCE

Customer information packet

DRX14124T

1//.75HP, 3450//2885RPM, 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	3600 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
Constant Torque Speed Range	6
Current @ Voltage	2.800 A @ 230.0 V
	2.600 A @ 190.0 V
	1.400 A @ 460.0 V
	1.300 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	A
Type	AC
Mech. spec.	35X081
Base	
Status	PRD/A
Elec. spec.	35WGS921
Layout	35LYX081
Eff. date	10-30-2026
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	05-13-2026

Efficiency @ 100% Load	84.0 %
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	1.3 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.22 IN
Power Factor	82
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	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
Shaft Slinger Indicator	No Slinger
Speed	2885 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

NP1401XPSLEV											
NO.				**CC**	010A						
S/N				**TEMP CODE**	T3C						
SPEC.	35X081S921G3			**INV.TYPE**	PWM						
CAT.NO.	DRX14124T			**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	2.8/1.4//2.6/1.3		**MAG CUR**	1.4/.7							
RPM	3450//2885		**MX RPM**	5400							
HZ	60//50	**PH**	3	**CL**	F	**NOM.EFF.**	84				
SER.F.	1.00	**DES**	B	**SL HZ**	2	**WK2**	0.05				
FRAME	143T	**RATING**	40C AMB-CONT								
	55C AMB @ 1.0SF										
	1.15SF ON SINEWAVE			NEMA MG-1 PT 5,IP55							

AC Induction Motor Performance Data
Record # 58785
Typical performance - not guaranteed values

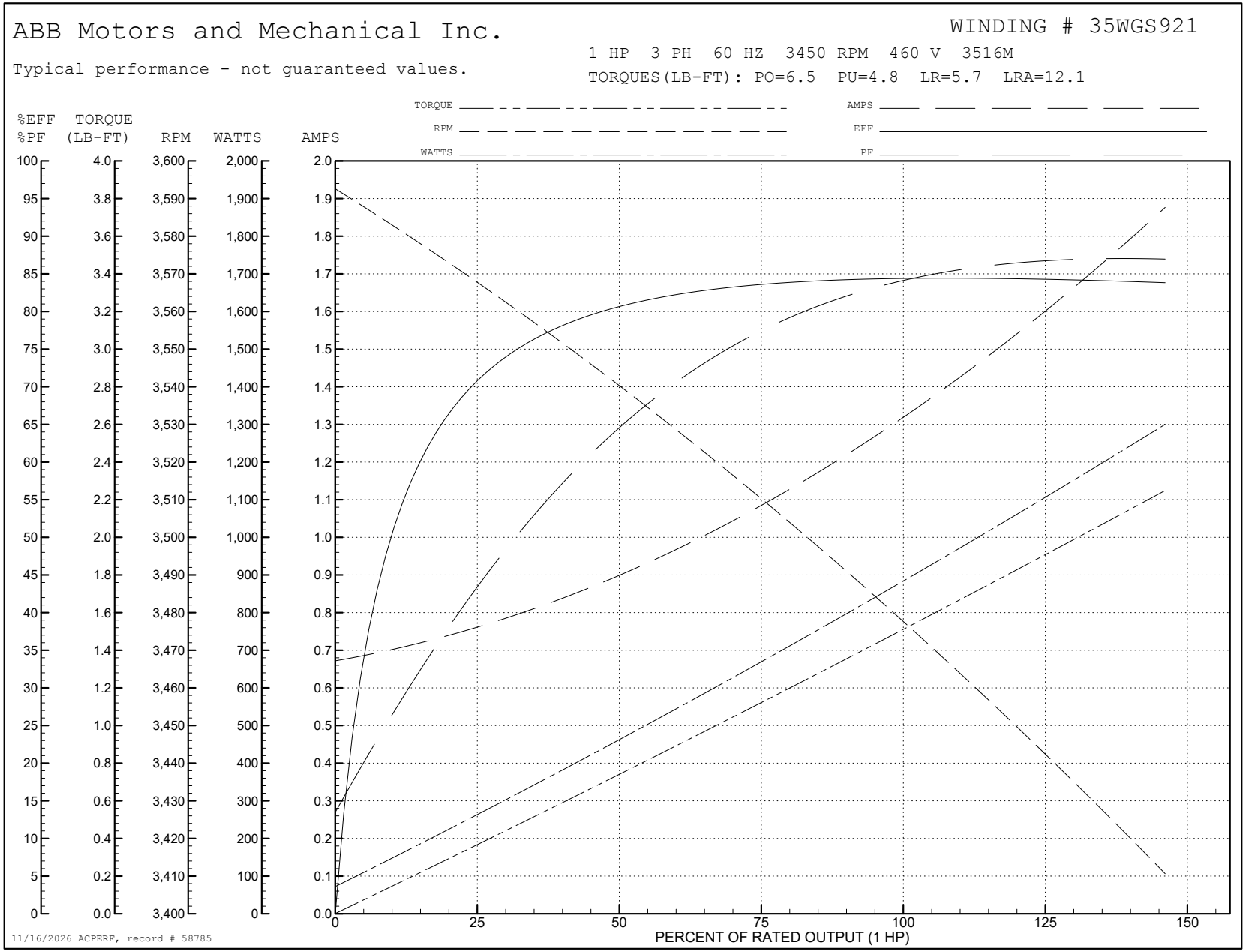
Winding: 35WGS921-R006	**Type:** 3516M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			1
Volts			230/460
Full Load Amps			2.8/1.4
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

460 V, 60 Hz: High Voltage Connection	
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	12.1 A
No-load Current	0.68 A
Line-line Res. @ 25ºC	15.1 Ω
Temp. Rise @ Rated Load	33°C
Locked-rotor Power Factor	56.1
Rotor inertia	0.0443 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	44	65	77	84	87	89
Efficiency	70.5	80.5	83.6	84.6	84.4	83.7
Speed	3567	3539	3510	3479	3446	3410
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88


ABB Motors and Mechanical Inc.
WINDING # 35WGS921
Typical performance - not guaranteed values.
1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M
TORQUES(LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1
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 # 58785

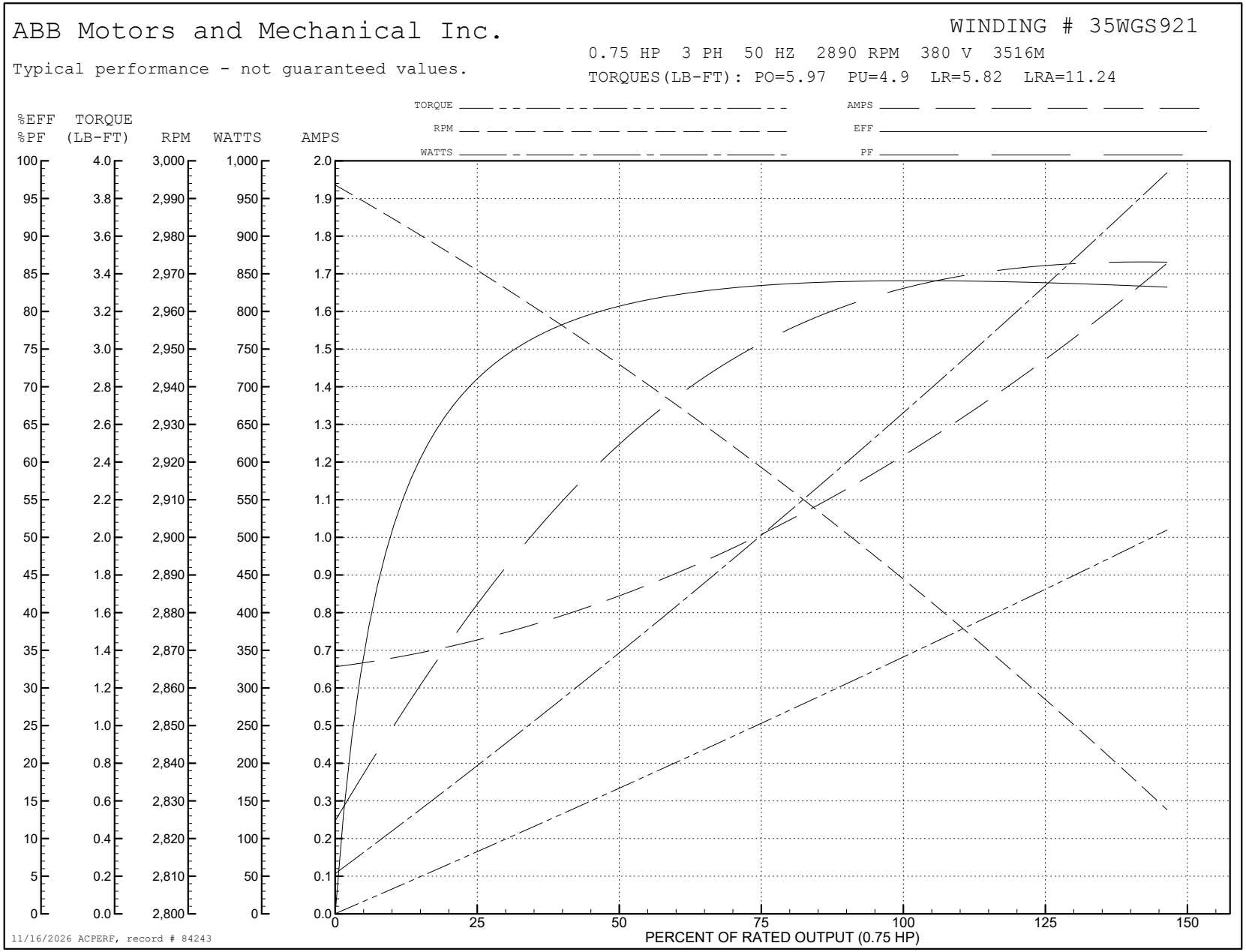
AC Induction Motor Performance Data
Record # 84243
Typical performance - not guaranteed values

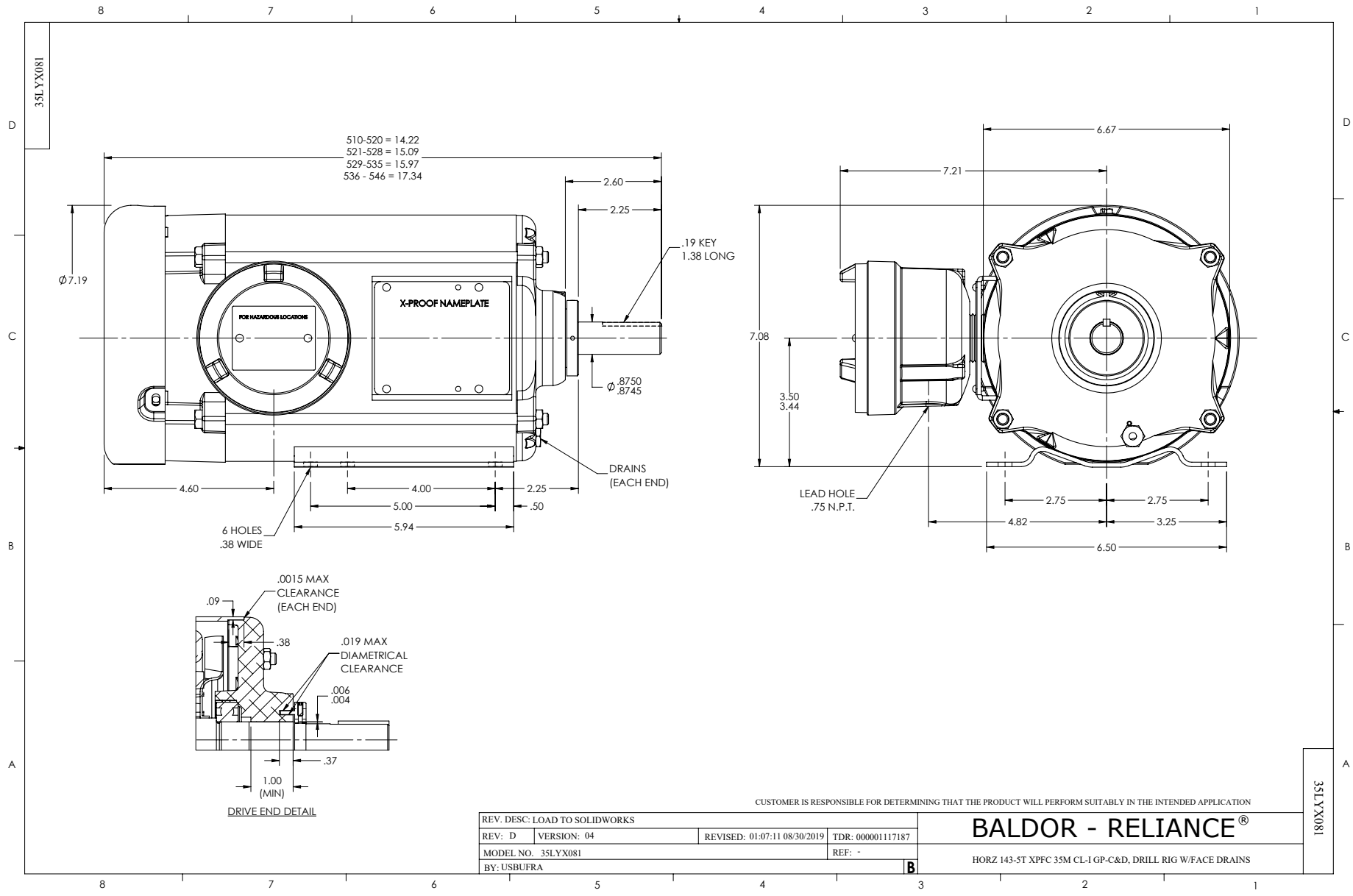
Winding: 35WGS921-R020	**Type:** 3516M	**Enclosure:** XPFC

Nameplate Data				**380 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			1//.75	**Full Load Torque**	1.35 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			2.8/1.4//2.6/1.3	**Breakdown Torque**	5.97 LB-FT
R.P.M.			3450//2885	**Pull-up Torque**	4.9 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	5.82 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	11.24 A
Service Factor (S.F.)			1	**No-load Current**	0.664 A
NEMA Nom. Eff.	84	**Power Factor**	82	**Line-line Res. @ 25ºC**	15.2 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	29°C
				Locked-rotor Power Factor	56.1
				Rotor inertia	0.0443 lb-ft²

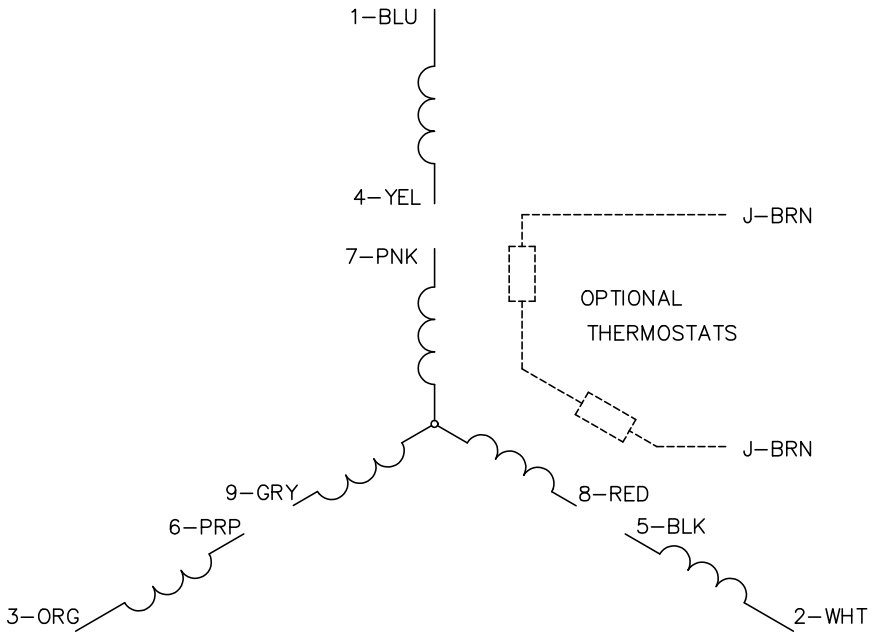
Load Characteristics 380 V, 50 Hz, 0.75 HP

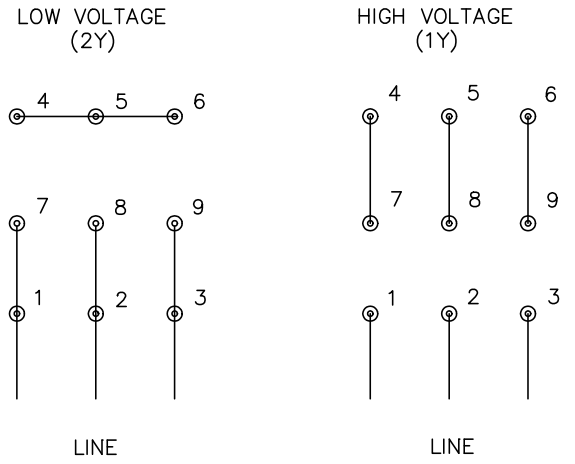
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	43	63	76	82	87	87
Efficiency	70.4	80.7	83.7	83.9	84.1	83
Speed	2970	2945	2918	2890	2860	2827
Line amperes	0.717	0.846	1.01	1.23	1.44	1.73


ABB Motors and Mechanical Inc.
WINDING # 35WGS921
0.75 HP 3 PH 50 HZ 2890 RPM 380 V 3516M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=5.97 PU=4.9 LR=5.82 LRA=11.24
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 # 84243


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