ABB BALDOR RELIANCE

Customer information packet

EM7020T-I

1.5//1HP, 1165//970 75C RISERPM, 3PH, 60//5
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.
11/10/2026 10:59:23 AM

Specifications

Enclosure	XPFC
Frame	182T
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	1.500 HP @ 60 HZ
	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1000 RPM @ 50 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	2.100 A @ 380.0 V
	2.400 A @ 460.0 V
	4.200 A @ 190.0 V
	4.800 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	87.5 %

Part Detail

Revision	R
Type	AC
Mech. spec.	36J694
Base	
Status	PRD/A
Elec. spec.	36WGS916
Layout	36LYJ694
Eff. date	02-19-2026
CD Diagram	CD0005
Poles	06
Leads	9#16
Proprietary	False
Created date	05-16-2012

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	2.1 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 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3632M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	18.27 IN
Power Factor	67
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1165 rpm

	970 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

NP0977XPSL											
NO.						**CC**	010A				
SER.						**TEMP CODE**	T3C				
SPEC.	36J694S916G1										
CAT.NO.	EM7020T-I										
HP	1.5//1										
VOLTS	230/460//190/380										
AMPS	4.8/2.4//4.2/2.1										
RPM	1165//970 75C RISE				**MOTOR WEIGHT**		108				
HERTZ	60//50	**PH**	3	**CL**	F	**DE BRG**	6206				
SER.F.	1.15	**DES**	B	**CODE**	K	**ODE BRG**	6205				
FRAME	182T	**GREASE**	POLYREX EM								
RATING	40C AMB-CONT										
				NEMA-NOM-EFF			87.5	**PF**	67		
	NEMA MG-1 PT 5,IP55										

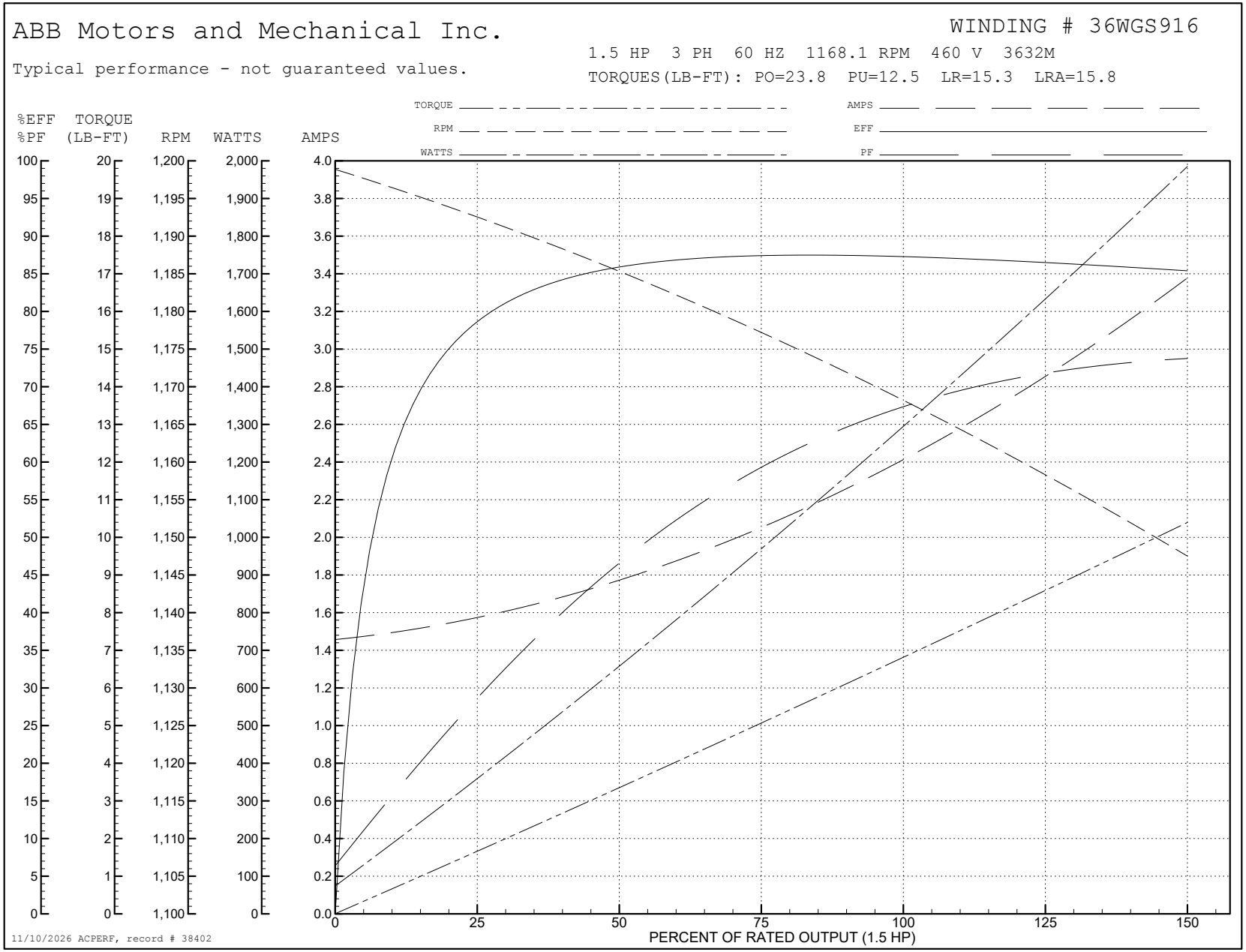
AC Induction Motor Performance Data
Record # 38402
Typical performance - not guaranteed values

Winding: 36WGS916-R003	**Type:** 3632M	**Enclosure:** XPFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5//1	**Full Load Torque**	6.86 LB-FT
Volts			230/460//190/380	**Start Configuration**	direct on line
Full Load Amps			4.8/2.4//4.2/2.1	**Breakdown Torque**	23.8 LB-FT
R.P.M.			1165//970	**Pull-up Torque**	12.5 LB-FT
Hz	60//50	**Phase**	3	**Locked-rotor Torque**	15.3 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	15.8 A
Service Factor (S.F.)			1.15	**No-load Current**	1.47 A
NEMA Nom. Eff.	87.5	**Power Factor**	67	**Line-line Res. @ 25ºC**	7.3716 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	34°C
S.F. Amps				**Temp. Rise @ S.F. Load**	41°C
				Locked-rotor Power Factor	30
				Rotor inertia	0.301 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	30	48	59	67	71	74	69
Efficiency	79.1	86	87.5	87.5	86.5	85.2	86.9
Speed	1192.2	1184.8	1176.8	1168.1	1158.2	1147.5	1162
Line amperes	1.57	1.77	2.07	2.43	2.88	3.36	2.7


ABB Motors and Mechanical Inc.
WINDING # 36WGS916
Typical performance - not guaranteed values.
1.5 HP 3 PH 60 HZ 1168.1 RPM 460 V 3632M
TORQUES(LB-FT): PO=23.8 PU=12.5 LR=15.3 LRA=15.8
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1.5 HP)
11/10/2026 ACPERF, record # 38402

AC Induction Motor Performance Data
Record # 38405
Typical performance - not guaranteed values

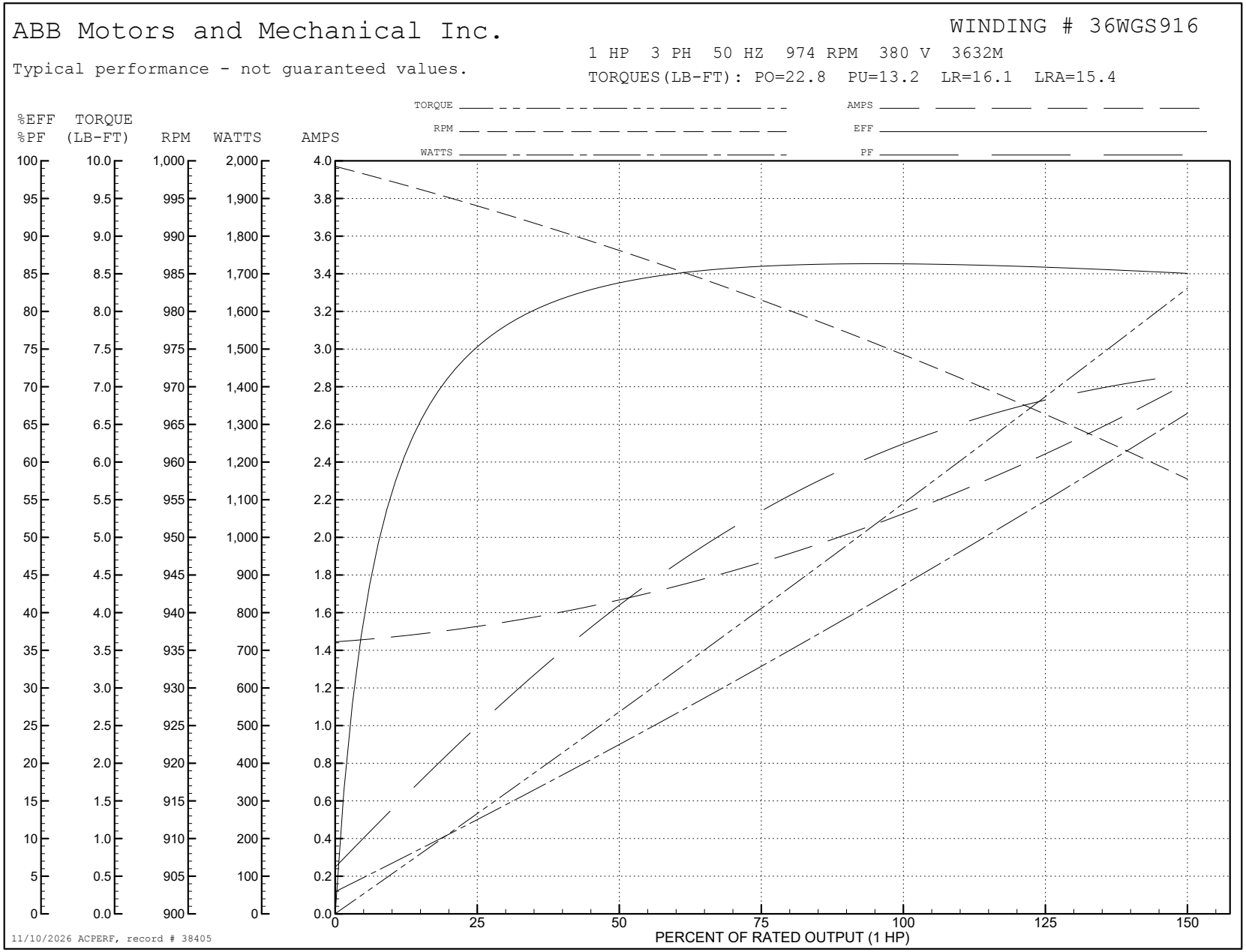
Winding: 36WGS916-R003	**Type:** 3632M	**Enclosure:** XPFC

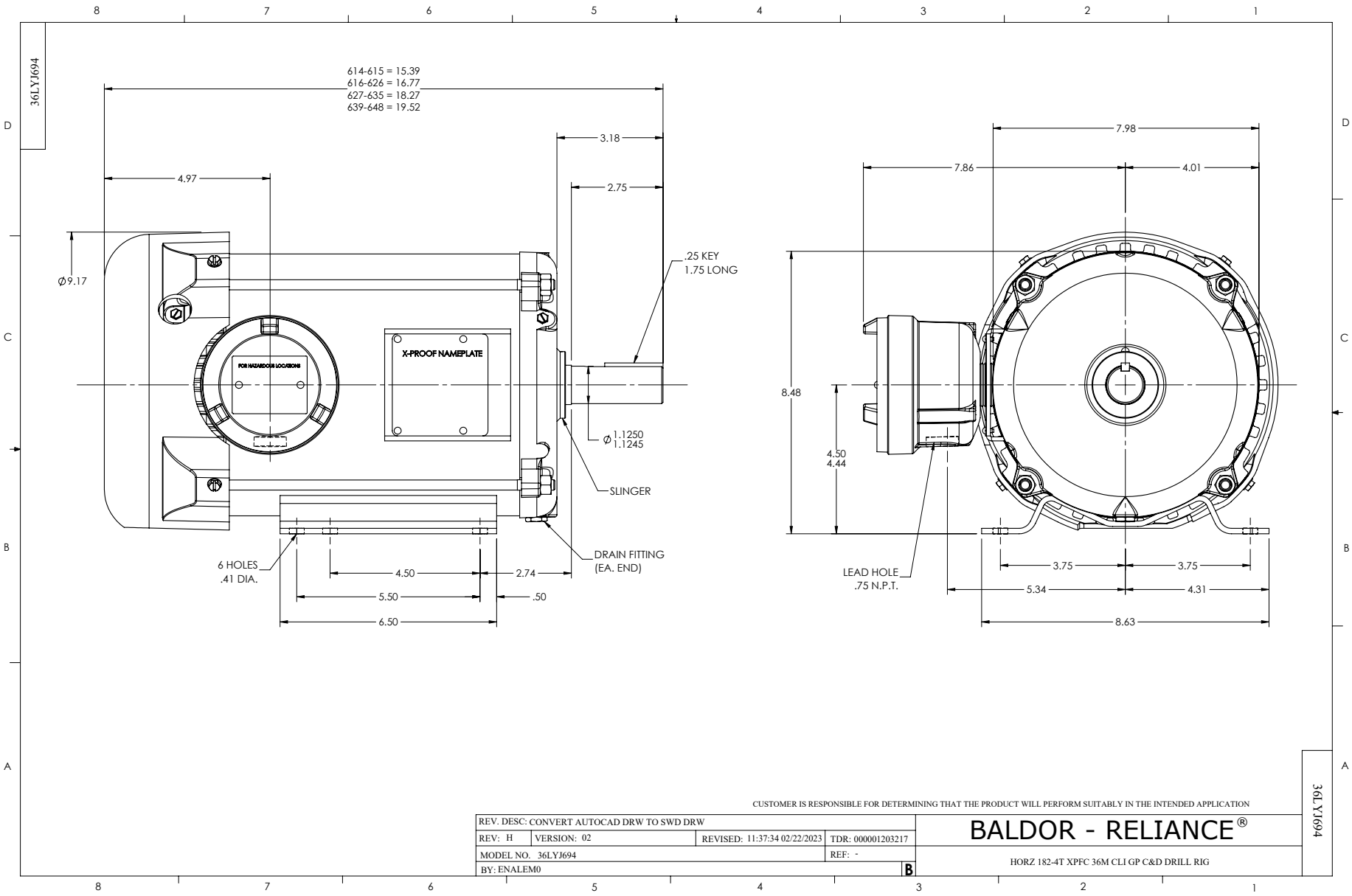
Nameplate Data			
Rated Output (HP)			1.5//1
Volts			230/460//190/380
Full Load Amps			4.8/2.4//4.2/2.1
R.P.M.			1165//970
Hz	60//50	**Phase**	3
NEMA Design Code	B	**KVA Code**	K
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	87.5	**Power Factor**	67
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	5.48 LB-FT
Start Configuration	direct on line
Breakdown Torque	22.8 LB-FT
Pull-up Torque	13.2 LB-FT
Locked-rotor Torque	16.1 LB-FT
Starting Current	15.4 A
No-load Current	1.45 A
Line-line Res. @ 25ºC	7.12 Ω
Temp. Rise @ Rated Load	27°C
Temp. Rise @ S.F. Load	32°C
Locked-rotor Power Factor	34
Rotor inertia	0.301 LB-FT2

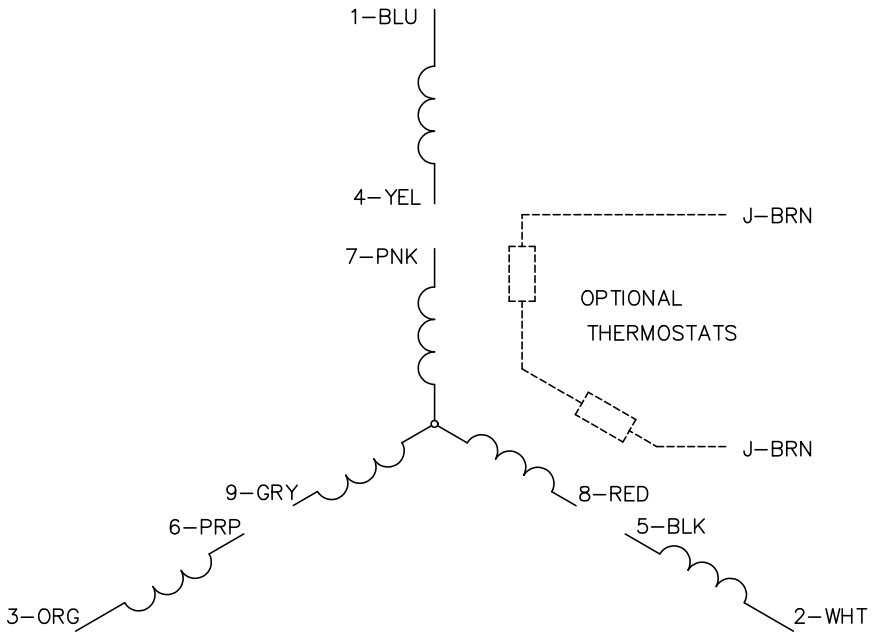
Load Characteristics 380 V, 50 Hz, 1 HP

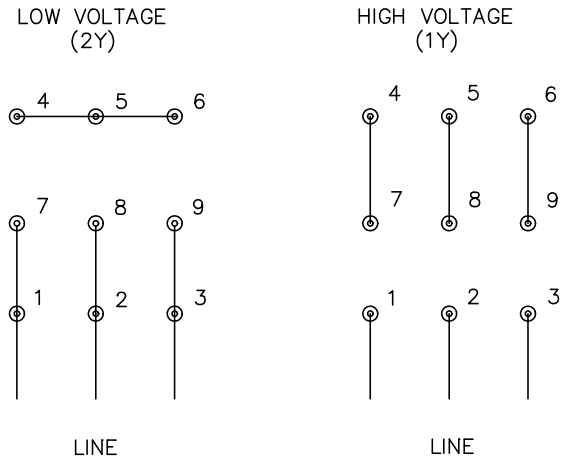
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	26	42	54	63	68	72	66
Efficiency	75.7	83.8	86.2	86.5	85.9	85.1	86.1
Speed	994	988	981	974	966	958	969
Line amperes	1.53	1.67	1.88	2.13	2.46	2.81	2.33


ABB Motors and Mechanical Inc.
WINDING # 36WGS916
Typical performance - not guaranteed values.
1 HP 3 PH 50 HZ 974 RPM 380 V 3632M
TORQUES(LB-FT): PO=22.8 PU=13.2 LR=16.1 LRA=15.4
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
PERCENT OF RATED OUTPUT (1 HP)
11/10/2026 ACPERF, record # 38405


36LYJ694
614-615 = 15.39
616-626 = 16.77
627-635 = 18.27
639-648 = 19.52
3.18
4.97
2.75
.25 KEY
1.75 LONG
Ø9.17
X-PROOF NAMEPLATE
FOR HAZARDOUS LOCATIONS
Ø 1.1250
1.1245
SLINGER
6 HOLES
.41 DIA.
4.50
2.74
5.50
.50
6.50
DRAIN FITTING
(EA. END)
7.98
7.86
4.01
8.48
4.50
4.44
LEAD HOLE
.75 N.P.T.
3.75
3.75
5.34
4.31
8.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD DRW
REV: H
VERSION: 02
REVISED: 11:37:34 02/22/2023
TDR: 000001203217
MODEL NO. 36LYJ694
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ 182-4T XPFC 36M CLI GP C&D DRILL RIG
36LYJ694

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