ABB BALDOR RELIANCE

Customer information packet

EM7045T-I

7.5//5HP, 3520//2935RPM, 3PH, 60//50HZ, 213T
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	213T
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	5.000 HP @ 50 HZ
	7.500 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
	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
Current @ Voltage	9.000 A @ 460.0 V
	7.800 A @ 380.0 V
	19.000 A @ 208.0 V
	18.000 A @ 230.0 V
	15.600 A @ 190.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	C
Type	AC
Mech. spec.	37H721
Base	
Status	PRD/A
Elec. spec.	37WGL869
Layout	37LYH721
Eff. date	04-16-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	01-28-2021

Efficiency @ 100% Load	89.5 %
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	7.8 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	X3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	19.57 IN
Power Factor	84
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2935 rpm
	3520 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.	37H721L869G1										
CAT.NO.	EM7045T-I										
HP	7.5//5										
VOLTS	230/460//190/380										
AMPS	18/9//15.6/7.8										
RPM	3520//2935				**MOTOR WEIGHT**		149				
HERTZ	60//50	**PH**	3	**CL**	F	**DE BRG**	6307				
SER.F.	1.15	**DES**	A	**CODE**	J	**ODE BRG**	6206				
FRAME	213T	**GREASE**	POLYREX EM								
RATING	40C AMB-CONT										
				NEMA-NOM-EFF			89.5	**PF**	84		
	NEMA MG-1 PT 5,IP55										

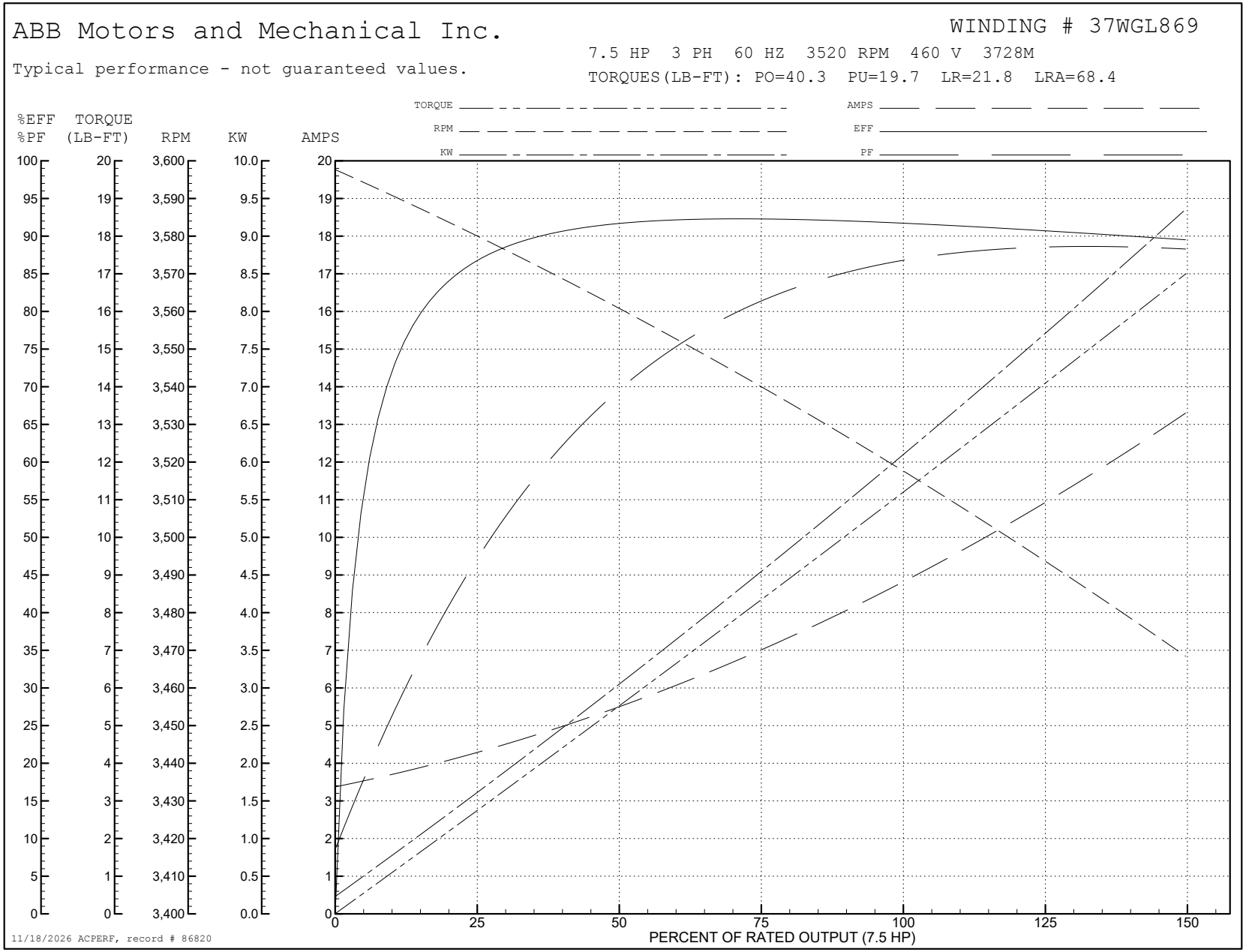
AC Induction Motor Performance Data
Record # 86820
Preliminary Data Sheet

Winding: 37WGL869-R004	**Type:** 3728M	**Enclosure:** XPFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	11.2 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			18/9	**Breakdown Torque**	40.3 LB-FT
R.P.M.			3520	**Pull-up Torque**	19.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	21.8 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	68.4 A
Service Factor (S.F.)			1.15	**No-load Current**	3.52 A
NEMA Nom. Eff.	89.5	**Power Factor**	84	**Line-line Res. @ 25ºC**	1.19 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	50°C
S.F. Amps			20/10	**Temp. Rise @ S.F. Load**	63°C
				Locked-rotor Power Factor	38.1
				Rotor inertia	0.255 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	49	71	81	86	88	89	87
Efficiency	83.9	89.7	91	90.9	90.2	89.2	90.3
Speed	3580	3560	3540	3518	3494	3468	3500
Line amperes	4.1	5.4	7.06	8.96	11	13.2	10.2


ABB Motors and Mechanical Inc.
WINDING # 37WGL869
7.5 HP 3 PH 60 HZ 3520 RPM 460 V 3728M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=40.3 PU=19.7 LR=21.8 LRA=68.4
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (7.5 HP)
11/18/2026 ACPERF, record # 86820

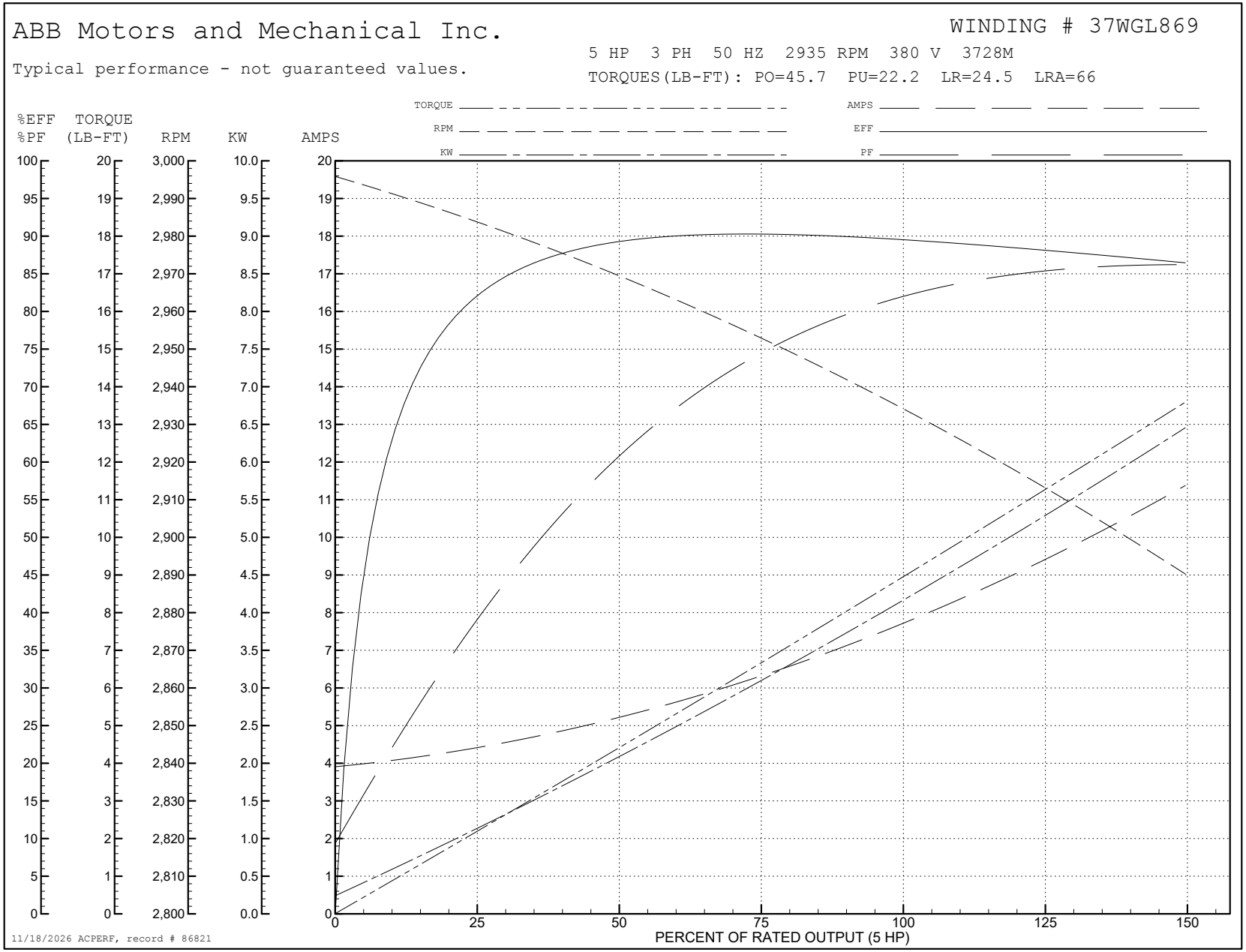
AC Induction Motor Performance Data
Record # 86821
Preliminary Data Sheet

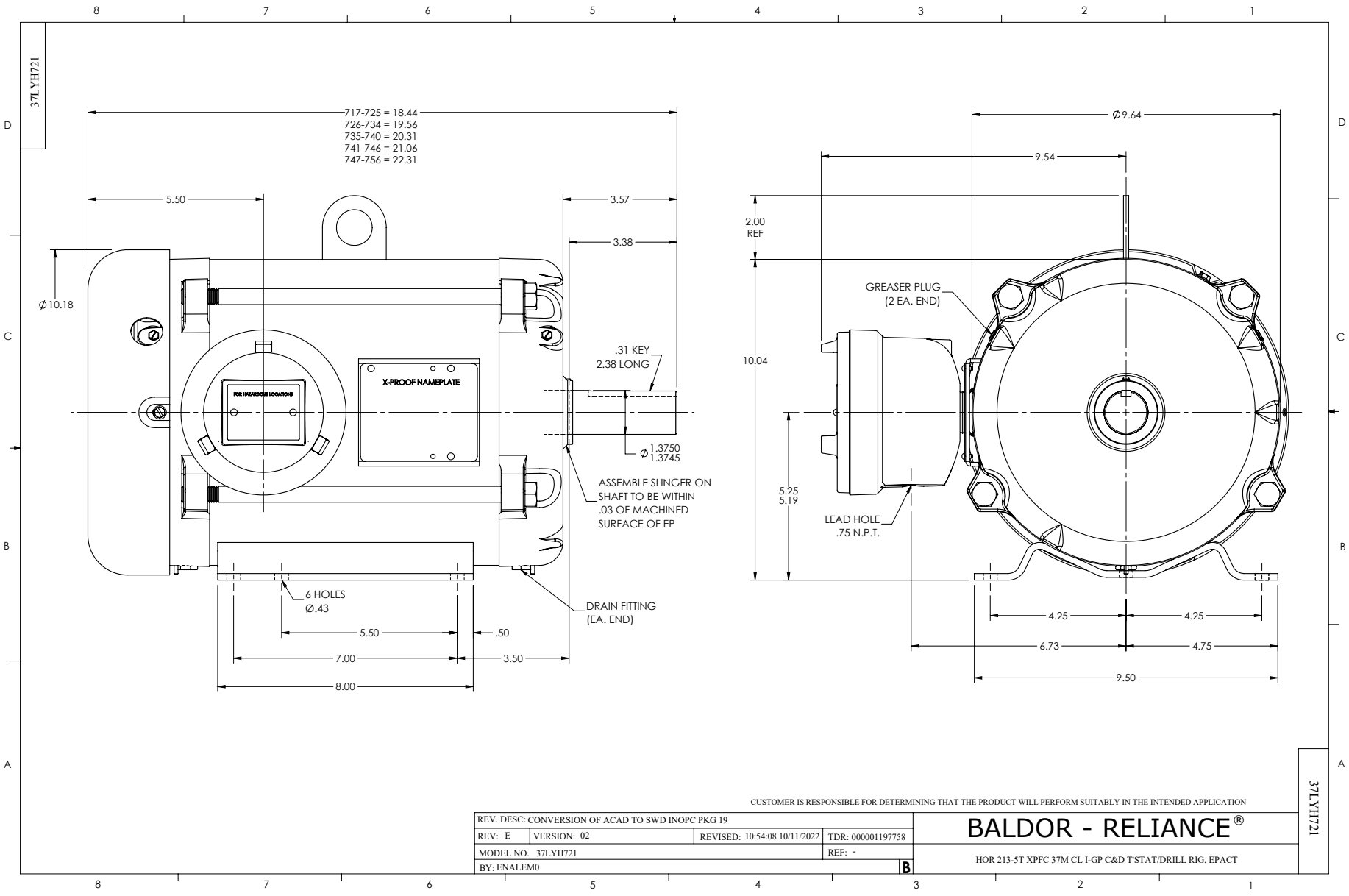
Winding: 37WGL869-R004	**Type:** 3728M	**Enclosure:** XPFC

Nameplate Data				**380 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	8.95 LB-FT
Volts			190/380	**Start Configuration**	direct on line
Full Load Amps			15.6/7.8	**Breakdown Torque**	45.7 LB-FT
R.P.M.			2935	**Pull-up Torque**	22.2 LB-FT
Hz	50	**Phase**	3	**Locked-rotor Torque**	24.5 LB-FT
NEMA Design Code	A	**KVA Code**	K	**Starting Current**	66 A
Service Factor (S.F.)			1	**No-load Current**	3.97 A
NEMA Nom. Eff.	89.5	**Power Factor**	81	**Line-line Res. @ 25ºC**	1.19 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	36°C
				Locked-rotor Power Factor	43.8
				Rotor inertia	0.255 lb-ft²

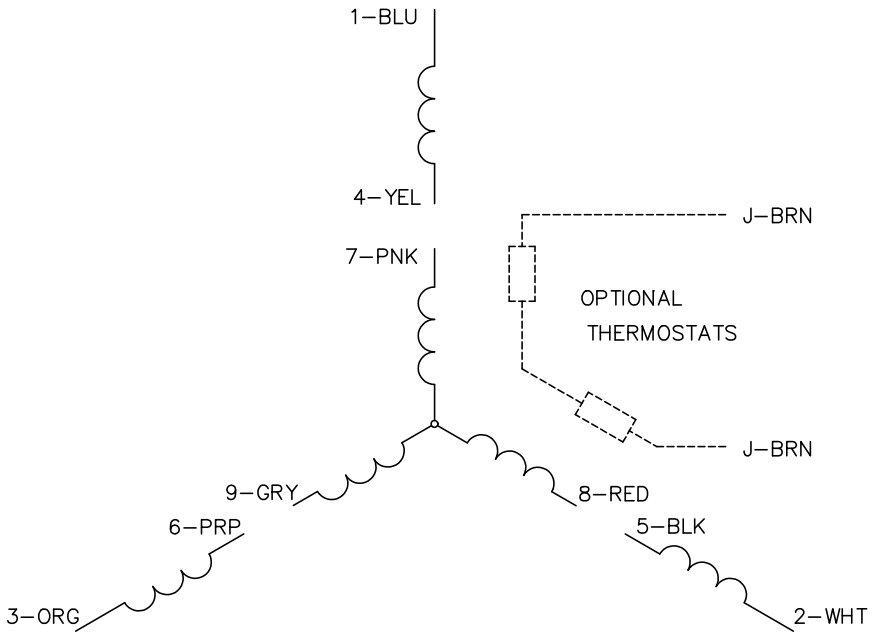
Load Characteristics 380 V, 50 Hz, 5 HP

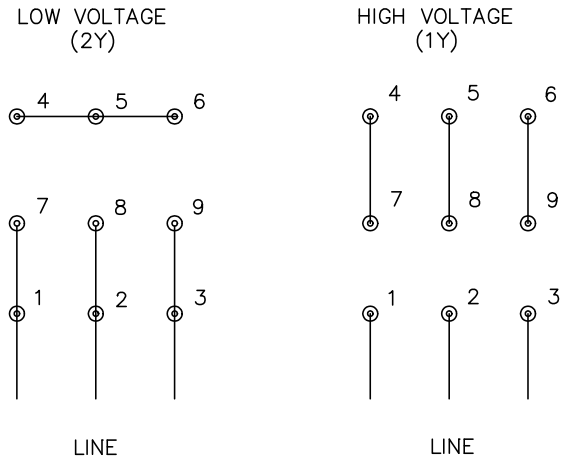
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	41	63	74	80	85	87
Efficiency	81.1	88	89.8	90.1	89.8	88.8
Speed	2984	2969	2952	2934	2915	2889
Line amperes	4.32	5.18	6.39	7.81	9.34	11.4


ABB Motors and Mechanical Inc.
WINDING # 37WGL869
Typical performance - not guaranteed values.
5 HP 3 PH 50 HZ 2935 RPM 380 V 3728M
TORQUES(LB-FT): PO=45.7 PU=22.2 LR=24.5 LRA=66
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (5 HP)
11/18/2026 ACPERF, record # 86821


37LYH721
717-725 = 18.44
726-734 = 19.56
735-740 = 20.31
741-746 = 21.06
747-756 = 22.31
5.50
3.57
3.38
Ø10.18
X-PROOF NAMEPLATE
FOR HAZARDOUS LOCATIONS
.31 KEY
2.38 LONG
Ø1.3750
1.3745
ASSEMBLE SLINGER ON SHAFT TO BE WITHIN .03 OF MACHINED SURFACE OF EP
6 HOLES
Ø.43
5.50
.50
7.00
3.50
8.00
DRAIN FITTING (EA. END)
Ø9.64
9.54
2.00
REF
GREASER PLUG
(2 EA. END)
10.04
5.25
5.19
LEAD HOLE
.75 N.P.T.
4.25
4.25
6.73
4.75
9.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERSION OF ACAD TO SWD INOPC PKG 19
REV: E
VERSION: 02
REVISED: 10:54:08 10/11/2022
TDR: 000001197758
MODEL NO. 37LYH721
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HOR 213-5T XPFC 37M CL I-GP C&D T'STAT/DRILL RIG, EPACT
37LYH721

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