BALDOR • RELIANCE

Customer information packet

EM3311T

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3734M, OPSB, F
Class - None
Division - Not Applicable

5/22/2024 4:18:24 PM

Specifications

Enclosure	OPSB
Frame	213T
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA EEV
	NEMA PREMIUM
	NEMA_PREMIUM
	UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	9.800 A @ 460.0 V
	20.600 A @ 208.0 V
	19.600 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

Part detail

Revision	E
Type	AC
Mech. spec.	37F614
Base	
Status	PRD/A
Elec. spec.	37WGL863
Layout	37LYF614
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	11-10-2020

Heater Indicator	No Heater
High Voltage Full Load Amps	9.8 a
Insulation Class	F
Inverter Code	Inverter Ready
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	3734M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.32 IN
Power Factor	79
Product Family	General Purpose
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 Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3553LUA								
CAT.NO.	EM3311T							
SPEC.	37F614L863G1							
HP	7.5							
VOLTS	230/460							
AMPS	19.6/9.8							
RPM	1770							
FRAME	213T	**HZ**	60	**PH**	3			
SF	1.15	**CODE**	J	**DES**	A	**CLASS**	F	
NEMA NOM. EFF	91	**PF**	79					
RATING	40C AMB-CONT							
CC	010A	**USABLE AT 208V**	N/A					
DE	6307	**ODE**	6206					
ENCL	OPSB	**SN**						
VPWM INVERTER READY								
CT30-60(2:1) VT3-60(20:1)								
USABLE AT	50HZ 7.5HP 190/380V 23.2/11.6A							SF1.0

Accessories

Part number	Description	Multiplier
37-1404	C FACE KIT	A8

AC Induction Motor Performance Data
Record # 85452
Preliminary Data Sheet

Winding: 37WGL863-R001	**Type:** 3734M	**Enclosure:** OPSB

Nameplate Data			**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)		7.5	**Full Load Torque**	22.2 LB-FT
Volts		230/460	**Start Configuration**	direct on line
Full Load Amps		19.6/9.8	**Breakdown Torque**	74.8 LB-FT
R.P.M.		1770	**Pull-up Torque**	37.1 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	45.4 LB-FT
NEMA Design Code	A **KVA Code**	J	**Starting Current**	72 A
Service Factor (S.F.)		1.15	**No-load Current**	4.87 A
NEMA Nom. Eff.	91 **Power Factor**	79	**Line-line Res. @ 25ºC**	1.67 Ω
Rating - Duty		40C AMB-CONT	**Temp. Rise @ Rated Load**	35°C
S.F. Amps		22.0/11.0	**Temp. Rise @ S.F. Load**	47°C
			Locked-rotor Power Factor	45.8
			Rotor inertia	0.836 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	39	60	73	79	82	83	81
Efficiency	85	90.1	91.1	90.9	90.1	89	90.3
Speed	1793	1786	1779	1772	1764	1755	1766
Line amperes	5.34	6.47	7.99	9.87	11.9	14.2	11.1

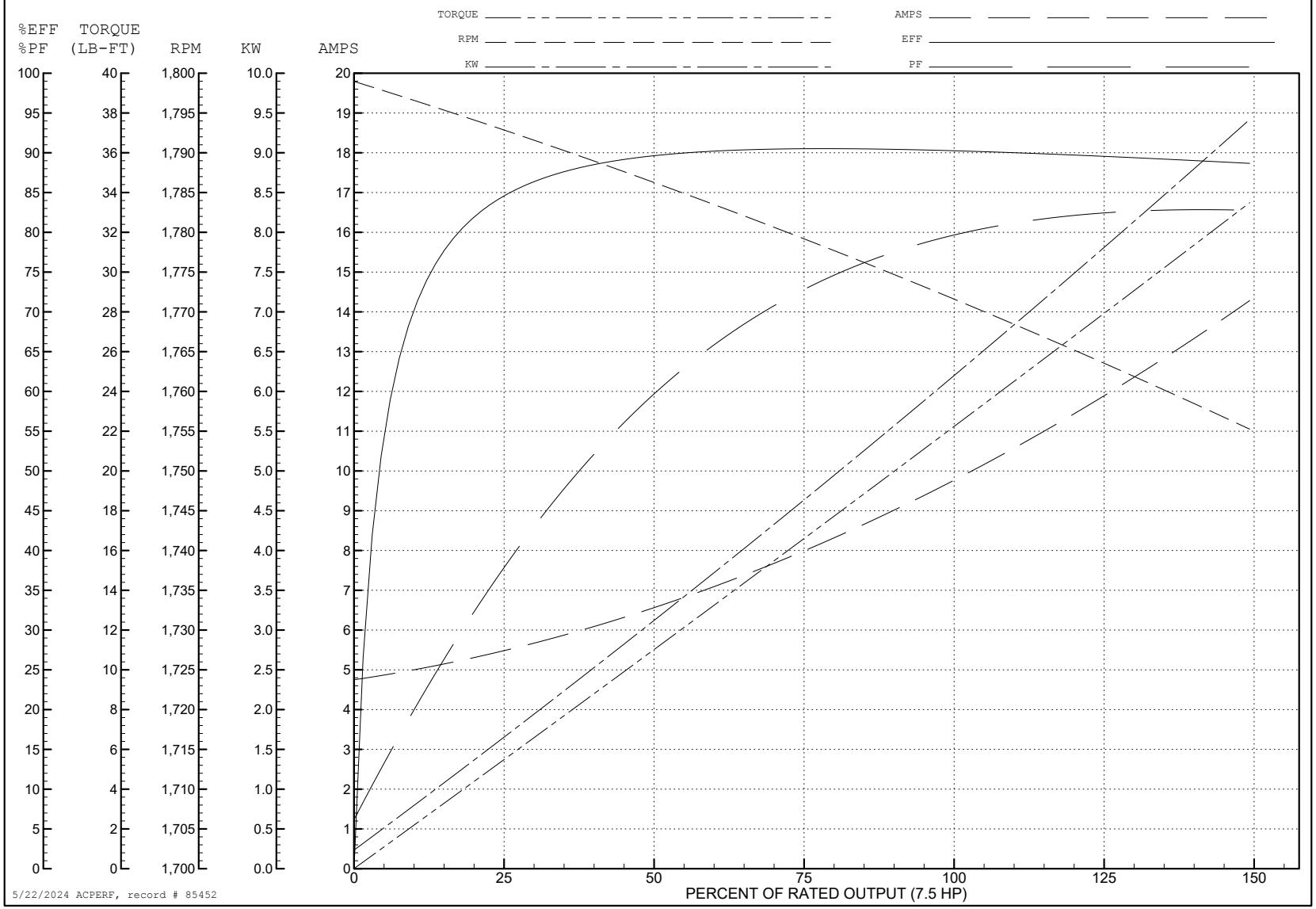
ABB Motors and Mechanical Inc.

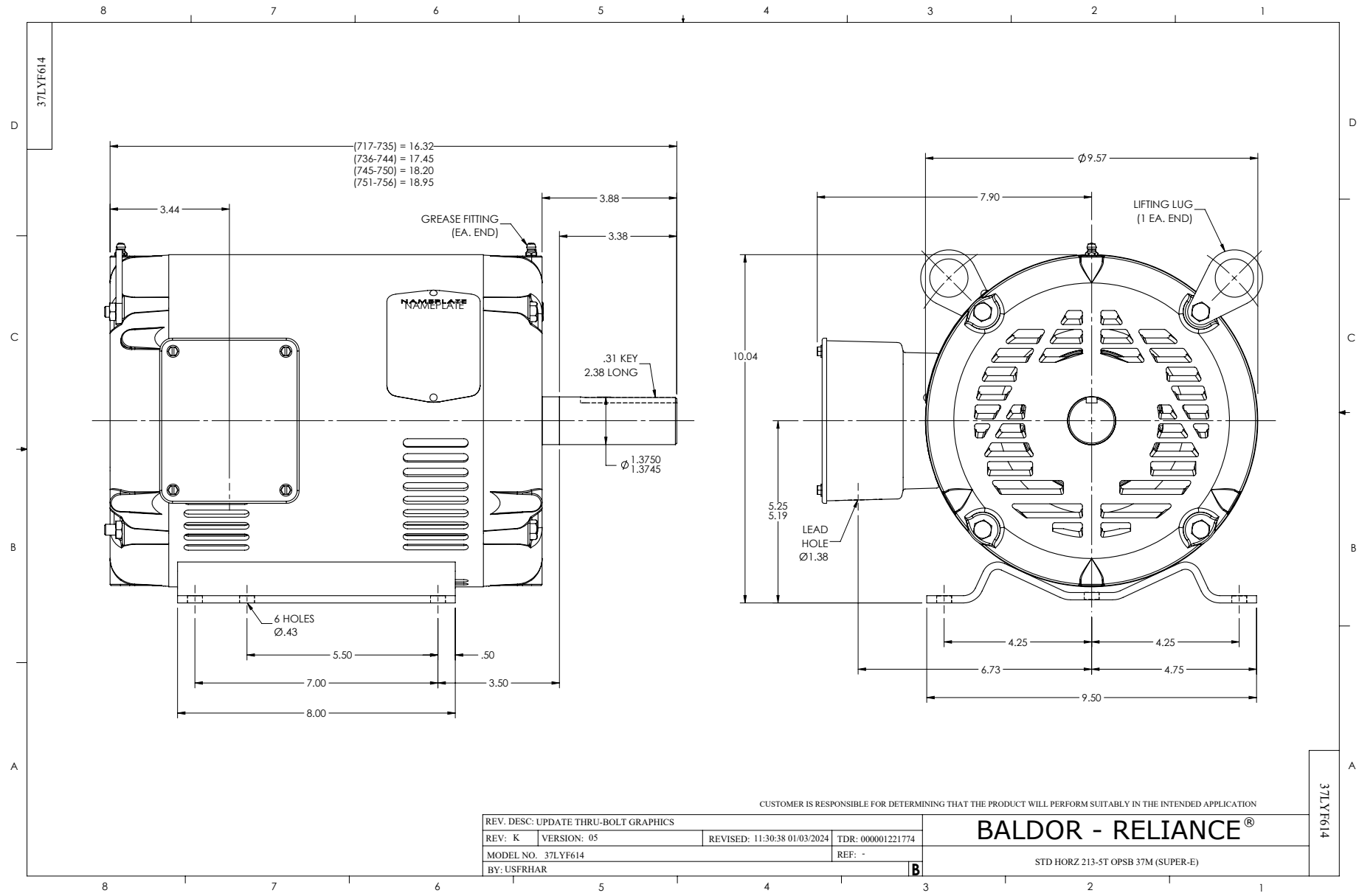
WINDING # 37WGL863

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M

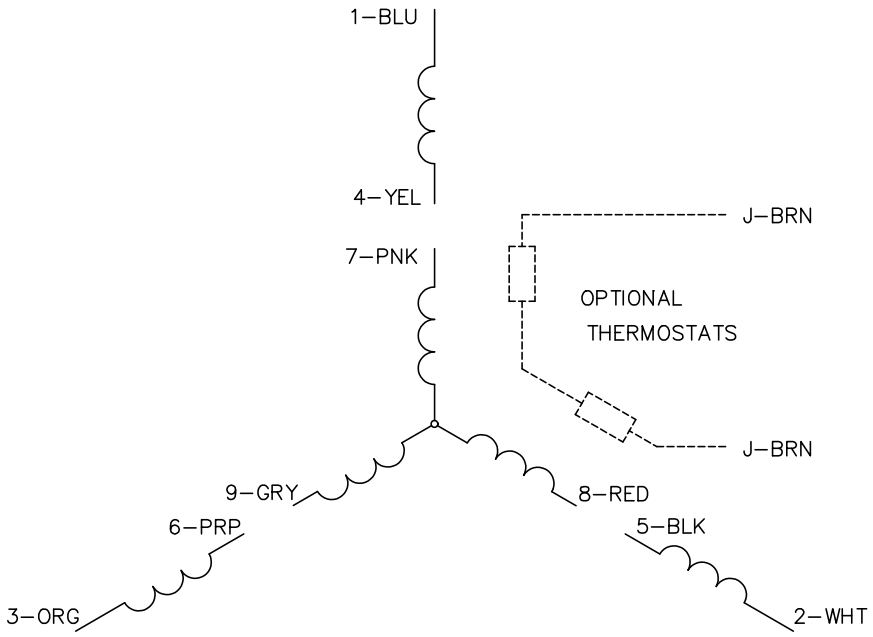
Typical performance - not guaranteed values.

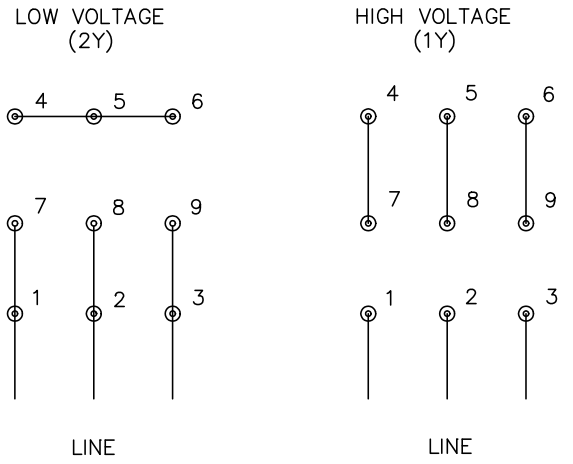
TORQUES(LB-FT): PO=74.8 PU=37.1 LR=45.4 LRA=72




37LYF614
(717-735) = 16.32
(736-744) = 17.45
(745-750) = 18.20
(751-756) = 18.95
3.44
3.88
3.38
GREASE FITTING
(EA. END)
NAMEPLATE
.31 KEY
2.38 LONG
Ø 1.3750
1.3745
6 HOLES
Ø.43
5.50
.50
7.00
3.50
8.00
Ø9.57
7.90
LIFTING LUG
(1 EA. END)
10.04
5.25
5.19
LEAD
HOLE
Ø1.38
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: UPDATE THRU-BOLT GRAPHICS
REV: K
VERSION: 05
REVISED: 11:30:38 01/03/2024
TDR: 000001221774
MODEL NO. 37LYF614
REF: -
BY: USFRHAR
B
BALDOR - RELIANCE®
STD HORZ 213-5T OPSB 37M (SUPER-E)
37LYF614

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