

BALDOR • RELIANCE

Customer information packet

EM3311T-5

7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3734M, OPSB, F

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	213T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV 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	8.010 A @ 575.0 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 Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	L
Type	AC
Mech. spec.	37F614
Base	
Status	PRD/A
Elec. spec.	37WGZ312
Layout	37LYF614
Eff. date	06-11-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	03-14-2016

High Voltage Full Load Amps	8.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 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	77
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 Extension Location	Pulley End
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

NP3553L									
CAT.NO.	EM3311T-5								
SPEC	37F614Z312G1								
HP	7.5								
VOLTS	575								
AMPS	8.01								
RPM	1770								
FRAME	213T		HZ	60		PH	3		
SF	1.15	CODE	J	DES	A	CLASS	F		
NEMA NOM. EFF	91	PF	77						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SER							
DE	6307		ODE	6206					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									

Parts list

Part number	Description	Quantity
SA317331	SA 37F614Z312G1	1.000 ea
RA304943	RA 37F614Z312G1	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 ea
51XW2520A10	.25-20 X .62, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3203A00	MASTER,ODE,206 BRG,GREASER	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3204D00	MASTER,DE,307 BRG,GREASER	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.028 ga
HA3104A39	THRUBOLT-5/16-18 X 12.250	4.000 ea
37AD2001A01	BAFFLE PLATE, PLASTIC 0.63" WIDTH	2.000 ea
LC0006	CONNECTION LABEL	1.000 ea
NP3553L	ALUM SUPER-E,VPWM INV READY,UL EV,CC,NEM	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

Accessories

Part number	Description	Multiplier
37-1404	C FACE KIT	A8

AC Induction Motor Performance Data

Record # 77178

Typical performance - not guaranteed values

Winding: 37WGZ312-R001		Type: 3734M		Enclosure: OPSB	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	7.5	Full Load Torque	22.4 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	8.01	Breakdown Torque	79.1 LB-FT		
R.P.M.	1770	Pull-up Torque	39.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	47.3 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	59.1 A
Service Factor (S.F.)	1.15	No-load Current	4.13 A		
NEMA Nom. Eff.	91	Power Factor	77	Line-line Res. @ 25°C	2.39 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	37°C	
S.F. Amps			Temp. Rise @ S.F. Load	45°C	
			Locked-rotor Power Factor	39.5	
			Rotor inertia	0.836 LB-FT ²	

Load Characteristics 575 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	37	59	71	77	81	83	79
Efficiency	84.6	90.3	91.2	91.2	90.4	89.2	90.7
Speed	1792	1785	1778	1770	1761	1750	1765
Line amperes	4.45	5.34	6.54	8.01	9.6	11.4	8.96

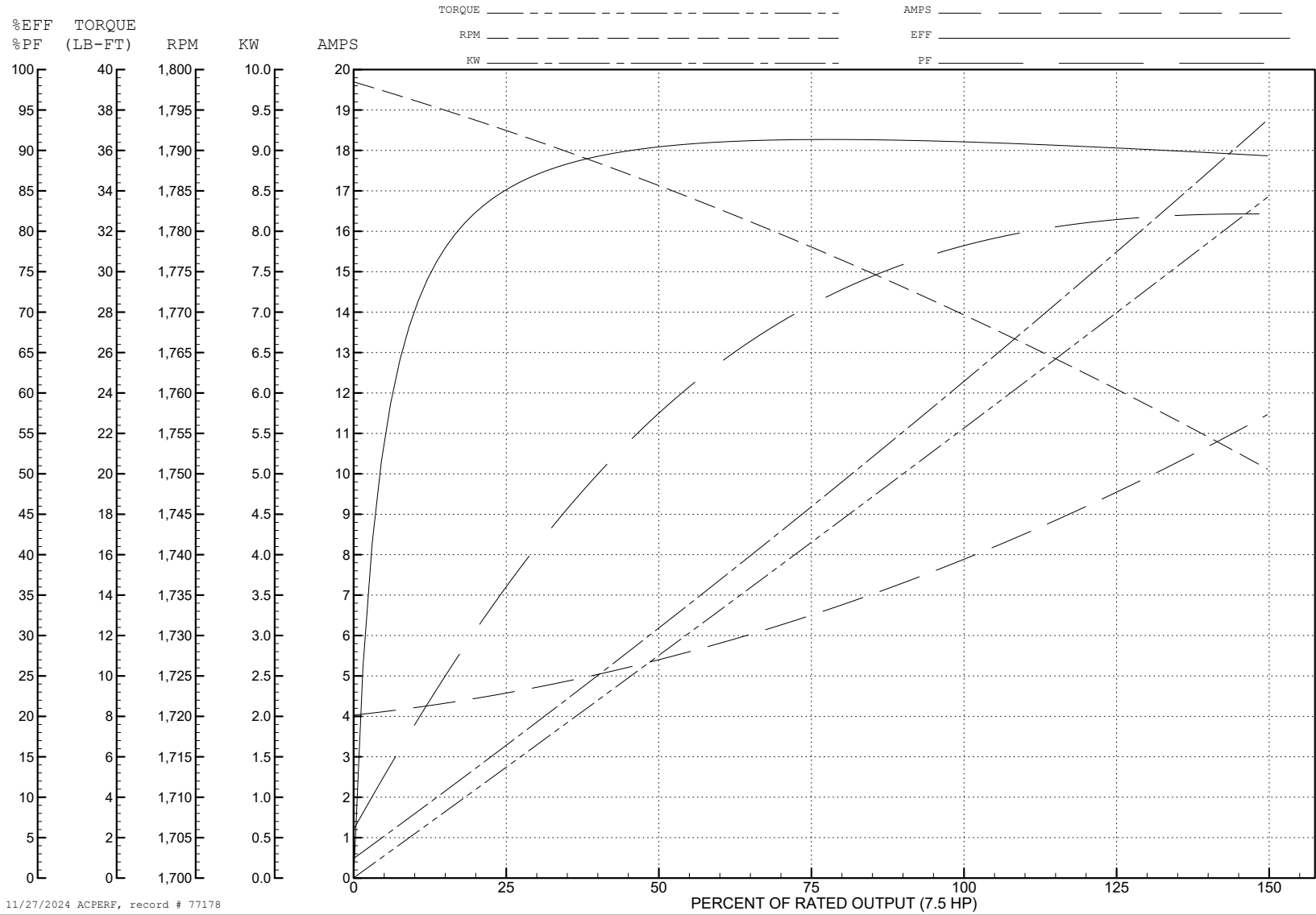
ABB Motors and Mechanical Inc.

WINDING # 37WGZ312

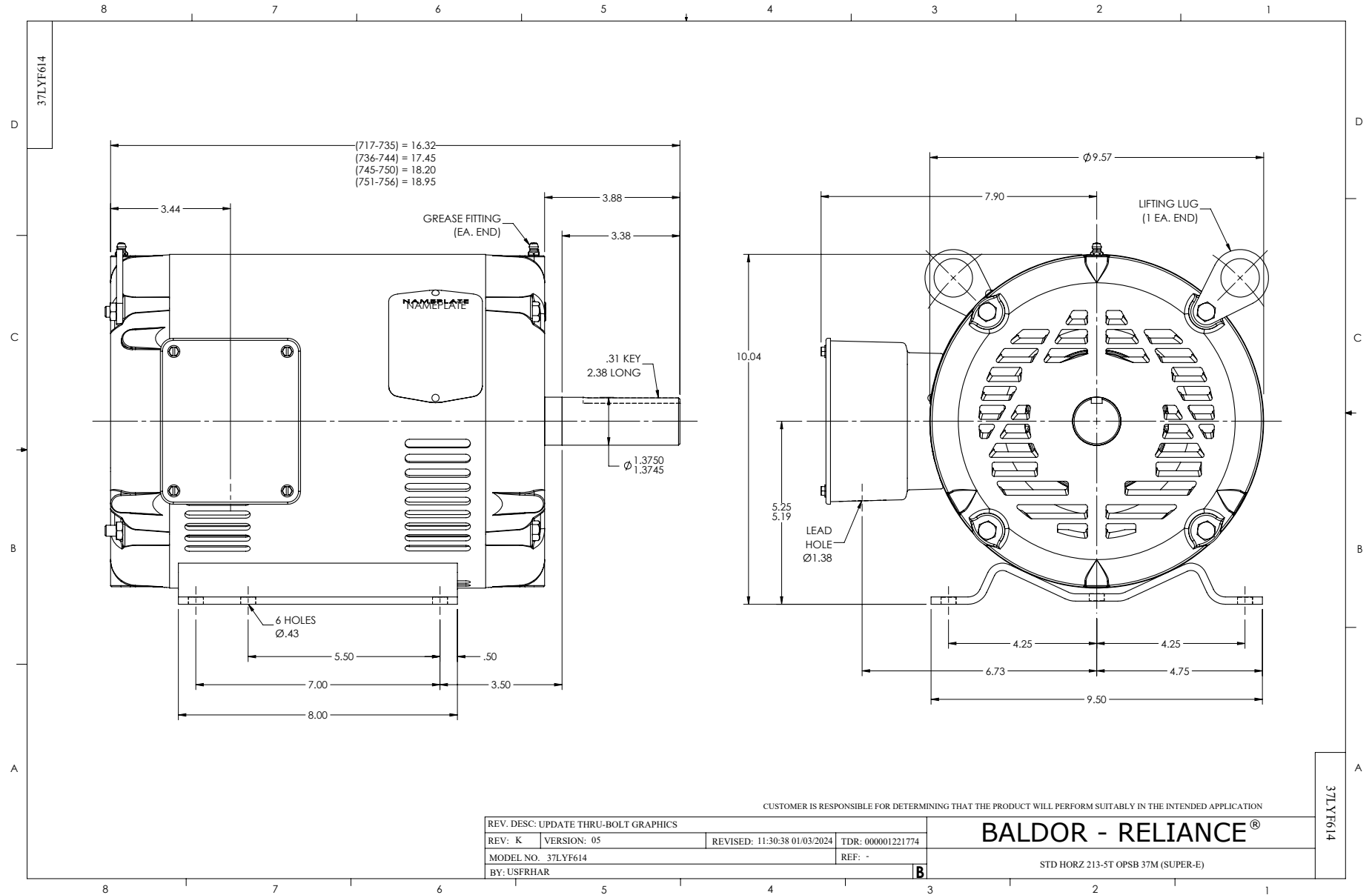
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 575 V 3734M

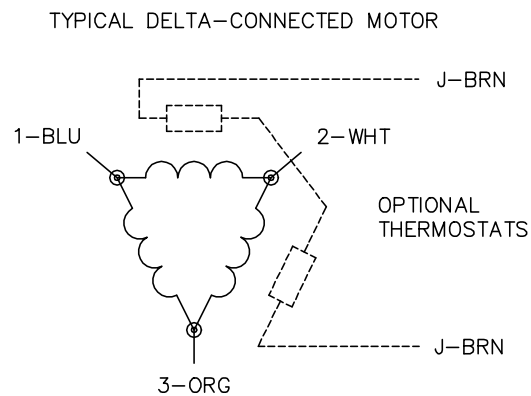
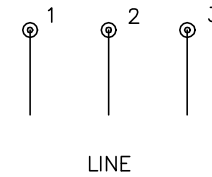
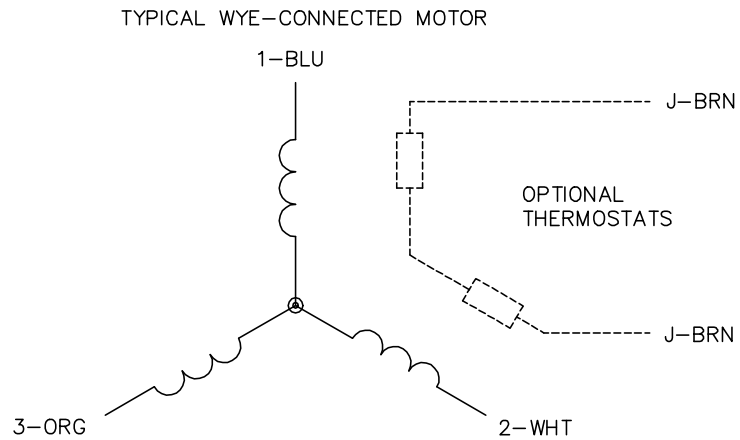
TORQUES (LB-FT): PO=79.1 PU=39.5 LR=47.3 LRA=59.1



11/27/2024 ACPERF, record # 77178



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -		© □

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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