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# Customer information packet

## EM3311T

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
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	D
Type	AC
Mech. spec.	37F614
Base	
Status	PRD/A
Elec. spec.	37WGL863
Layout	37LYF614
Eff. date	06-19-2023
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**

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

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
37-1404	C FACE KIT	A8

**AC Induction Motor Performance Data**

Record # 85452

Preliminary Data Sheet

Winding: 37WGL863-R001		Type: 3734M	Enclosure: OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
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. @ 25°C	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-ft <sup>2</sup>

**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

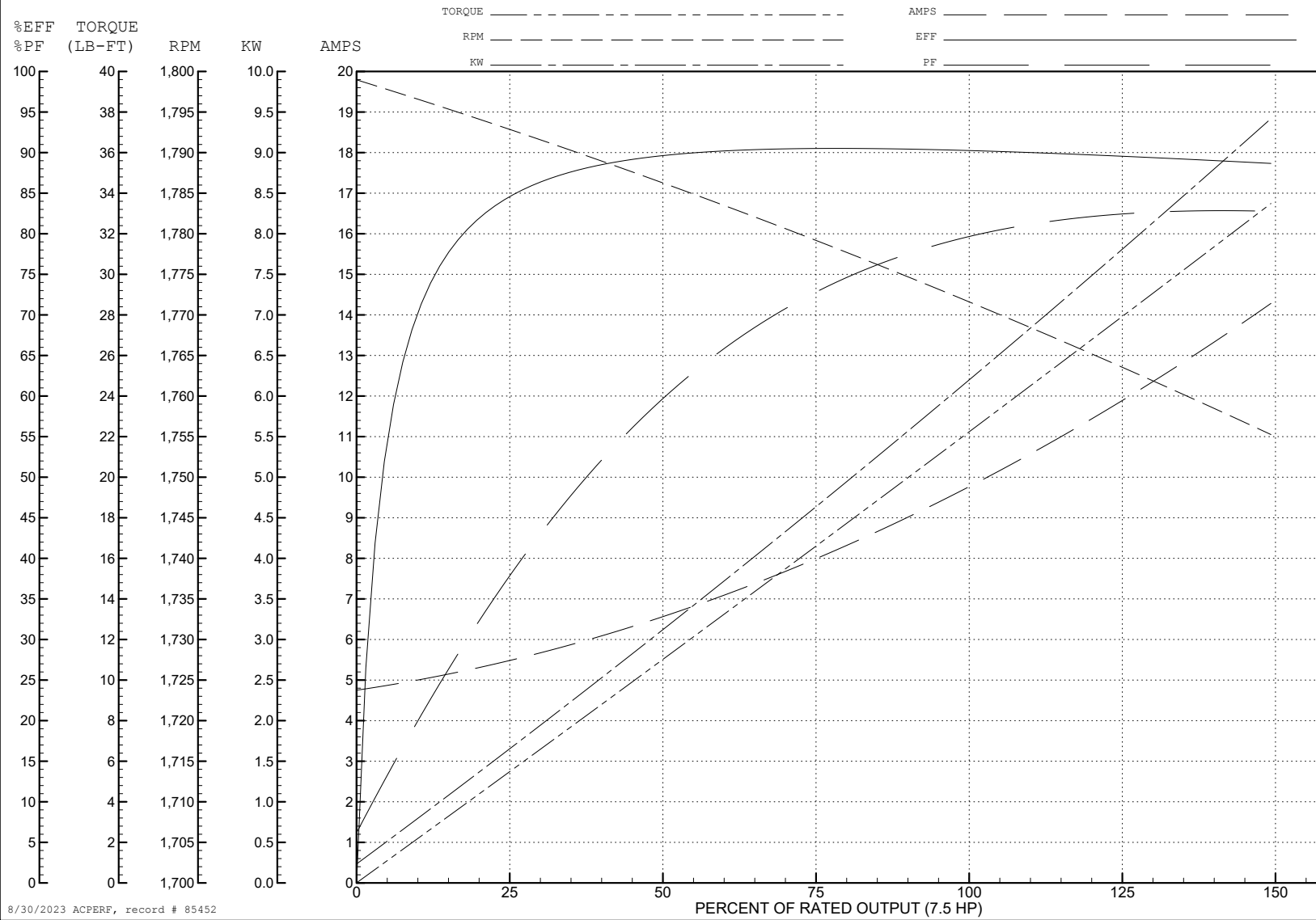
ABB Motors and Mechanical Inc.

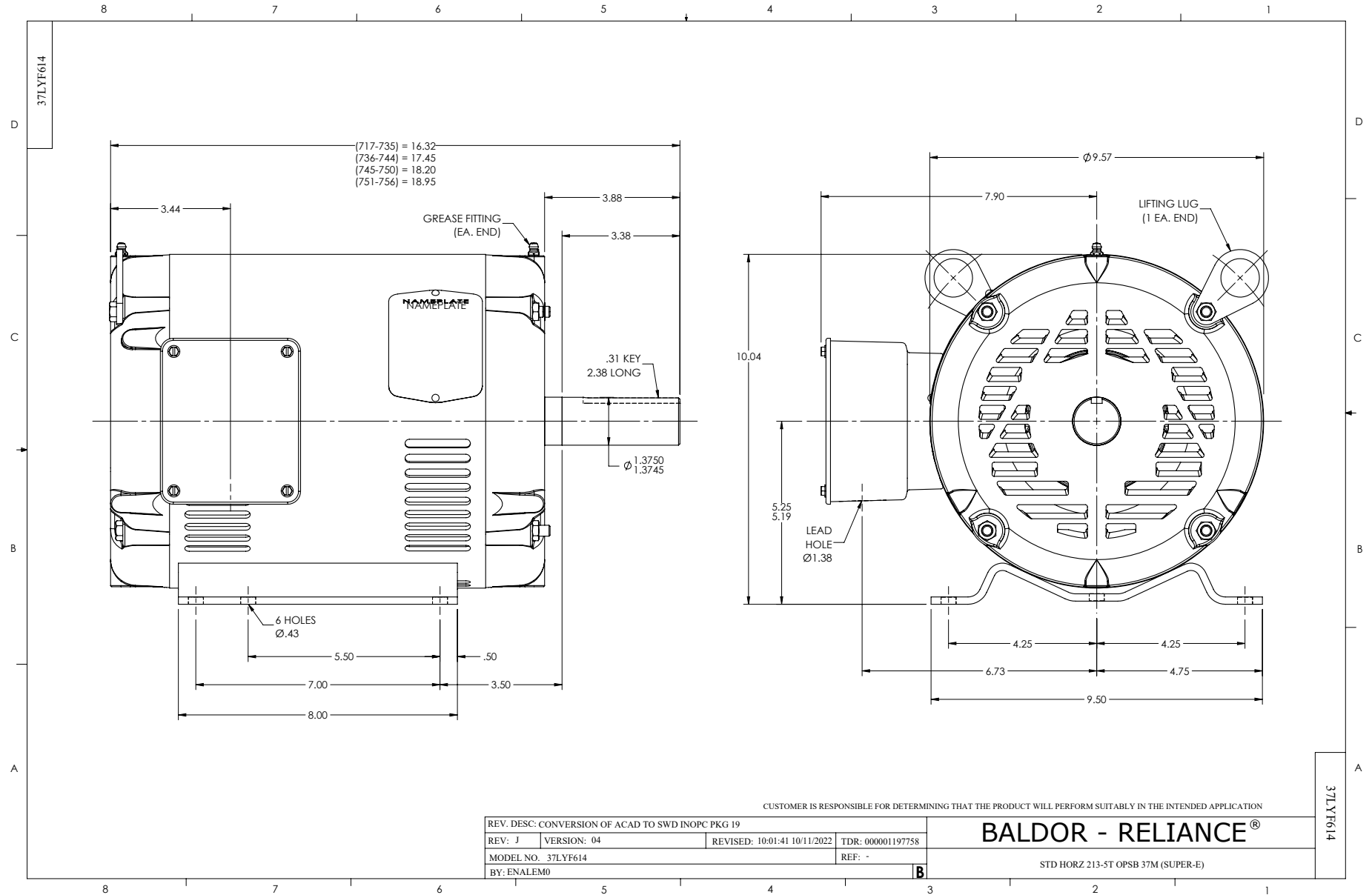
WINDING # 37WGL863

Typical performance - not guaranteed values.

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

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







CD0005

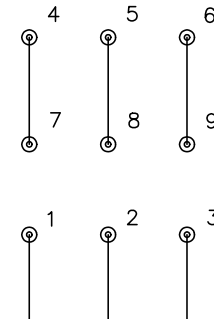


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS