

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3311T**

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

Part Detail							
Revision:	AA	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGS520	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37F614	Layout:	37LYF614	Poles:	04	Created Date:	04-11-2008
Base:	RG	Eff. Date:	07-17-2019	Leads:	9#14		

Specs			
Catalog Number:	EM3311T	Heater Indicator:	No Heater
Enclosure:	OPSB	Insulation Class:	F
Frame:	213T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	J
Output @ Frequency:	7.500 HP @ 60 HZ	Lifting Lugs:	Standard Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	Motor Type:	3734M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	79
	CSA	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	19.400 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	20.400 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	9.700 A @ 460.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553LUA</b>										
<b>CAT.NO.</b>	EM3311T									
<b>SPEC.</b>	37F614S520G1									
<b>HP</b>	7.5									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	19.4/9.7									
<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>			20.4		
<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	

Parts List		
Part Number	Description	Quantity
SA170011	SA 37F614S520G1	1.000 EA
RA158267	RA 37F614S520G1	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
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
37AD2001A01	BAFFLE PLATE, PLASTIC 0.63" WIDTH	2.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A39	THRUBOLT-5/16-18 X 12.250	4.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
36PA1001	PKG GRP, PRINT PK1017A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

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

**AC Induction Motor Performance Data**

Record # 35207

Typical performance - not guaranteed values

<b>Winding:</b> 37WGS520-R002		<b>Type:</b> 3734M		<b>Enclosure:</b> OPSB	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	22.4 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	19.4/9.7	<b>Breakdown Torque</b>	77.6 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	38.7 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	46.3 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	J	<b>Starting Current</b>	72.2 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	4.94 A	
<b>NEMA Nom. Eff.</b>	91 <b>Power Factor</b>	79	<b>Line-line Res. @ 25°C</b>	1.53 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	37°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	45°C	
			<b>Locked-rotor Power Factor</b>	39.2	
			<b>Rotor inertia</b>	0.836 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	38	60	72	78	82	83	81
<b>Efficiency</b>	85.1	90.4	91.6	91.3	90.5	89.4	90.7
<b>Speed</b>	1792	1785	1778	1769	1760	1749	1766
<b>Line amperes</b>	5.35	6.5	8.01	9.89	11.9	14.2	11



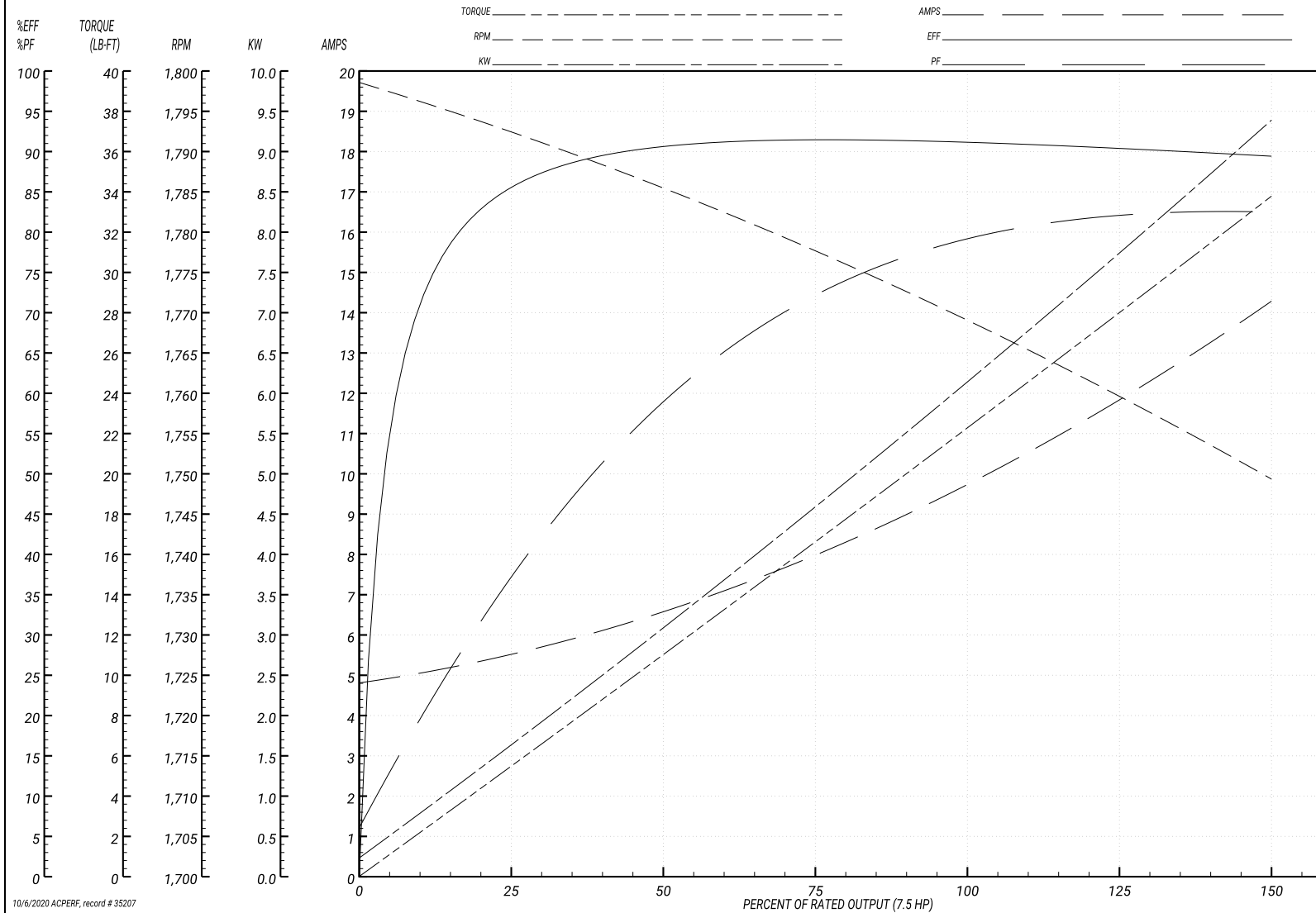
Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

WINDING # 37WGS520

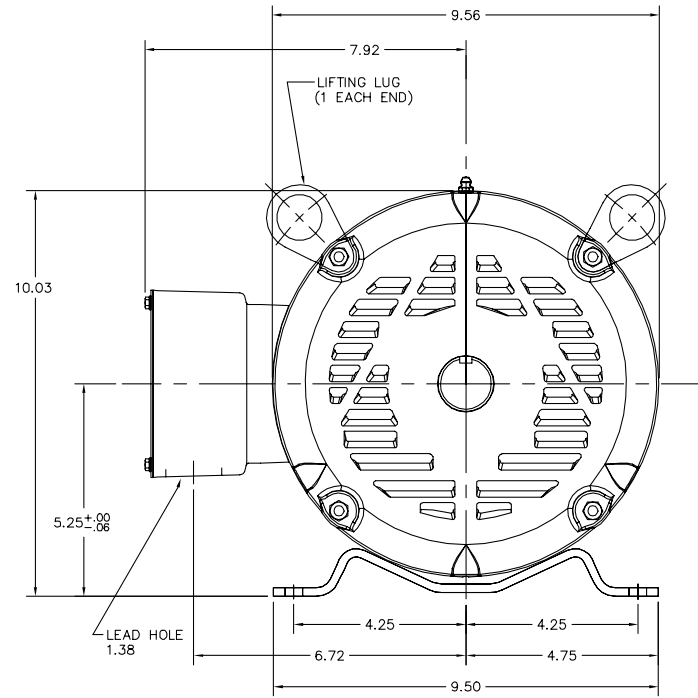
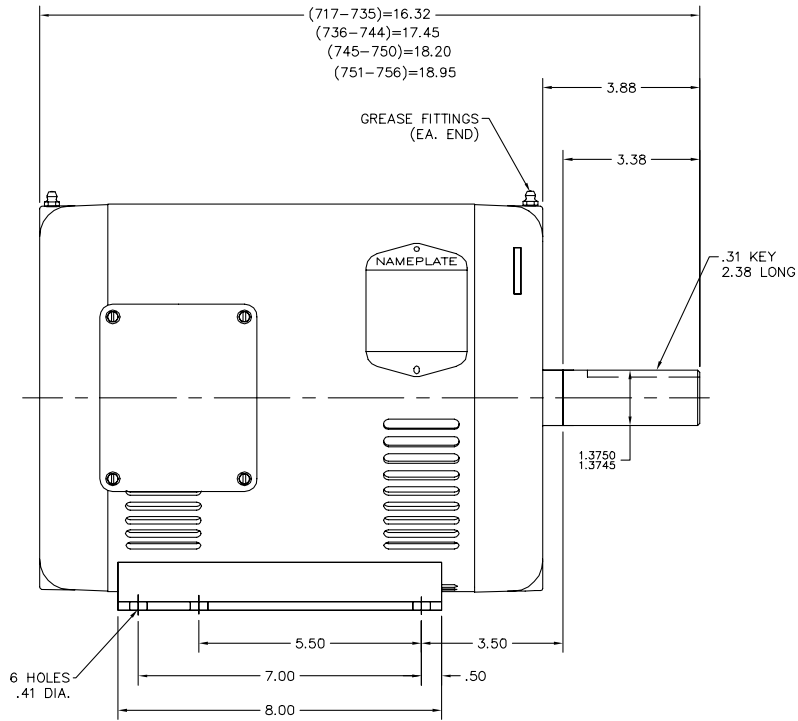
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M  
 TORQUES(LB-FT): PO=77.6 PU=38.7 LR=46.3 LRA=72.2



10/6/2020 ACPERF, record # 35207

37LYF614



37LYF614

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

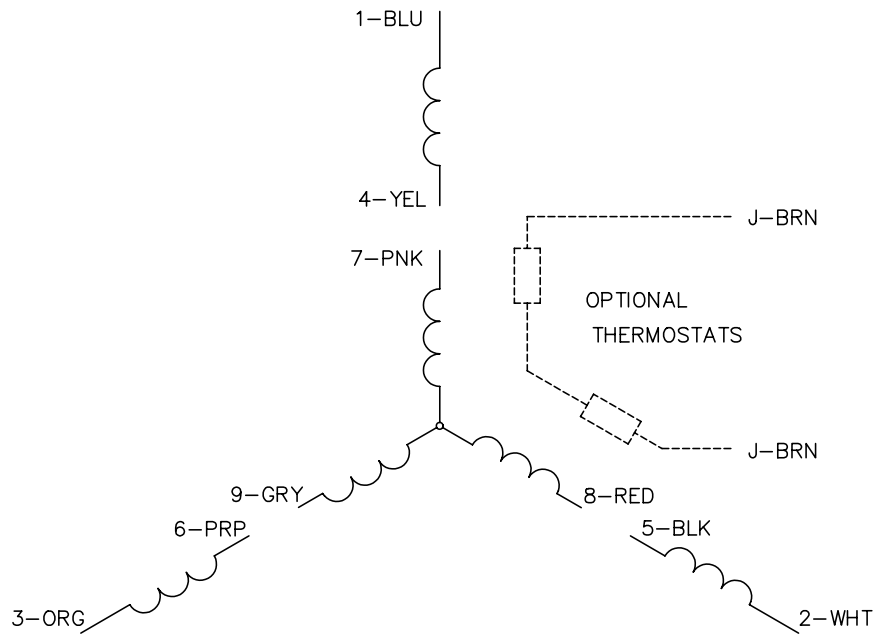
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REV. LTR: H	VERSION: 03	TDR: 000001018975
FILE: \AAA\00018\745	REVISED: 09:54:18 03/07/2017	BY: USZAHAR
MTL: -		

**BALDOR**

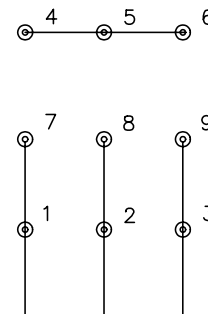
STD HORZ 213-5T OPSB 37M (SUPER-E)

SH 1 of 1

CD0005

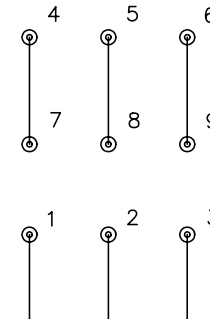


LOW VOLTAGE  
(2Y)



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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
90000		FILE: AAA00005140	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005