

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3710T-5**

**7.5HP, 1770RPM, 3PH, 60HZ, 213T, 3738M, TEFC, F**

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGR907	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	37H244	Layout:	37LYH244	Poles:	04	Created Date:	12-10-2015
Base:	RG	Eff. Date:	03-07-2022	Leads:	3#14		

Specs			
Catalog Number:	EM3710T-5	Inverter Code:	Inverter Ready
Enclosure:	TEFC	KVA Code:	J
Frame:	213T	Lifting Lugs:	Standard Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	7.500 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 14 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3738M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	82
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	7.600 A @ 575.0 V	Shaft Ground Indicator:	No Shaft Grounding

<b>Design Code:</b>	A	<b>Shaft Rotation:</b>	Reversible
<b>Drip Cover:</b>	No Drip Cover	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Duty Rating:</b>	CONT	<b>Speed Code:</b>	Single Speed
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Motor Standards:</b>	NEMA
<b>Feedback Device:</b>	NO FEEDBACK	<b>Starting Method:</b>	Direct on line
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Bearing:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Thermal Device - Winding:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Insulation Class:</b>	F	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3441L</b>										
<b>CAT.NO.</b>	EM3710T-5									
<b>SPEC.</b>	37H244R907G1									
<b>HP</b>	7.5									
<b>VOLTS</b>	575									
<b>AMP</b>	7.6									
<b>RPM</b>	1770									
<b>FRAME</b>	213T				<b>HZ</b>	60			<b>PH</b>	3
<b>SER.F.</b>	1.15		<b>CODE</b>	J	<b>DES</b>	A		<b>CL</b>	F	
<b>NEMA-NOM-EFF</b>	91.7		<b>PF</b>	82						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A				<b>USABLE AT 208V</b>					
<b>DE</b>	6307				<b>ODE</b>	6206				
<b>ENCL</b>	TEFC		<b>SN</b>							
<b>VPWM INVERTER READY</b>										
CT6-60H(10:1)VT3-60H(20:1)										

Parts List		
Part Number	Description	Quantity
SA311798	SA 37H244R907G1	1.000 EA
RA299231	RA 37H244R907G1	1.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
HW3200A01	3/8-16X3/4 I-BLT WELDED F/S	1.000 EA
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 EA
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	1.000 EA
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
37EP3100A01	PUEP ASSEMBLY - ROUTING PUPROSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
07FH4007SP	PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 EA
37GS1008	37 GS FOR CB LID - LEXIDE	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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
G0PA1000	PKG GRP, PRINT PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
37-3301	C FACE KIT	P1

**AC Induction Motor Performance Data**

Record # 54313

Typical performance - not guaranteed values

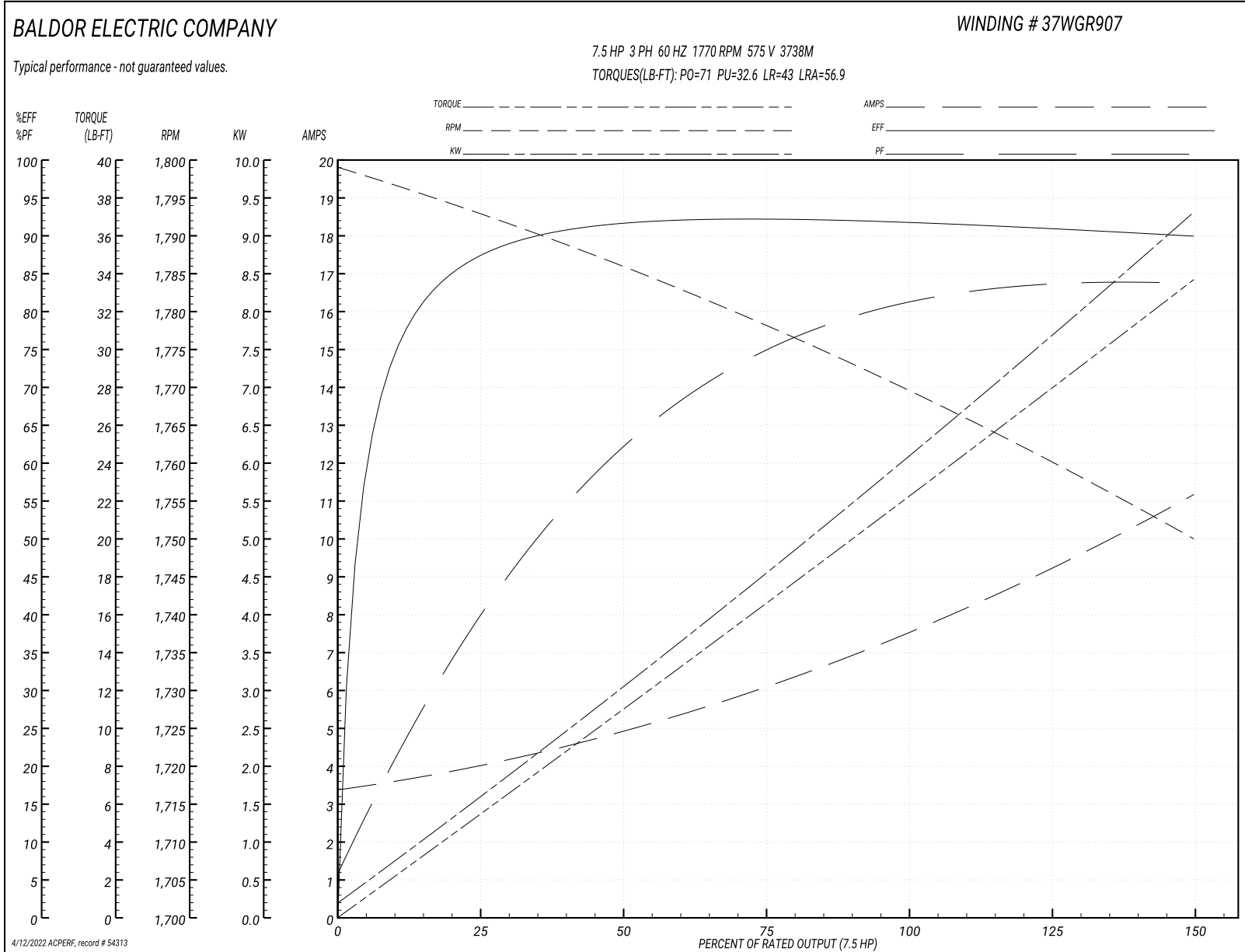
<b>Winding: 37WGR907-R004</b>		<b>Type: 3738M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	22.2 LB-FT		
<b>Volts</b>	575	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	7.6	<b>Breakdown Torque</b>	71 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	32.6 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	43 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	J	<b>Starting Current</b>	56.9 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	3.48 A		
<b>NEMA Nom. Eff.</b>	91.7 <b>Power Factor</b>	82	<b>Line-line Res. @ 25°C</b>	2.22 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	63°C		
<b>S.F. Amps</b>		<b>Temp. Rise @ S.F. Load</b>	77°C		
		<b>Locked-rotor Power Factor</b>	37.3		
		<b>Rotor inertia</b>	0.934 LB-FT <sup>2</sup>		

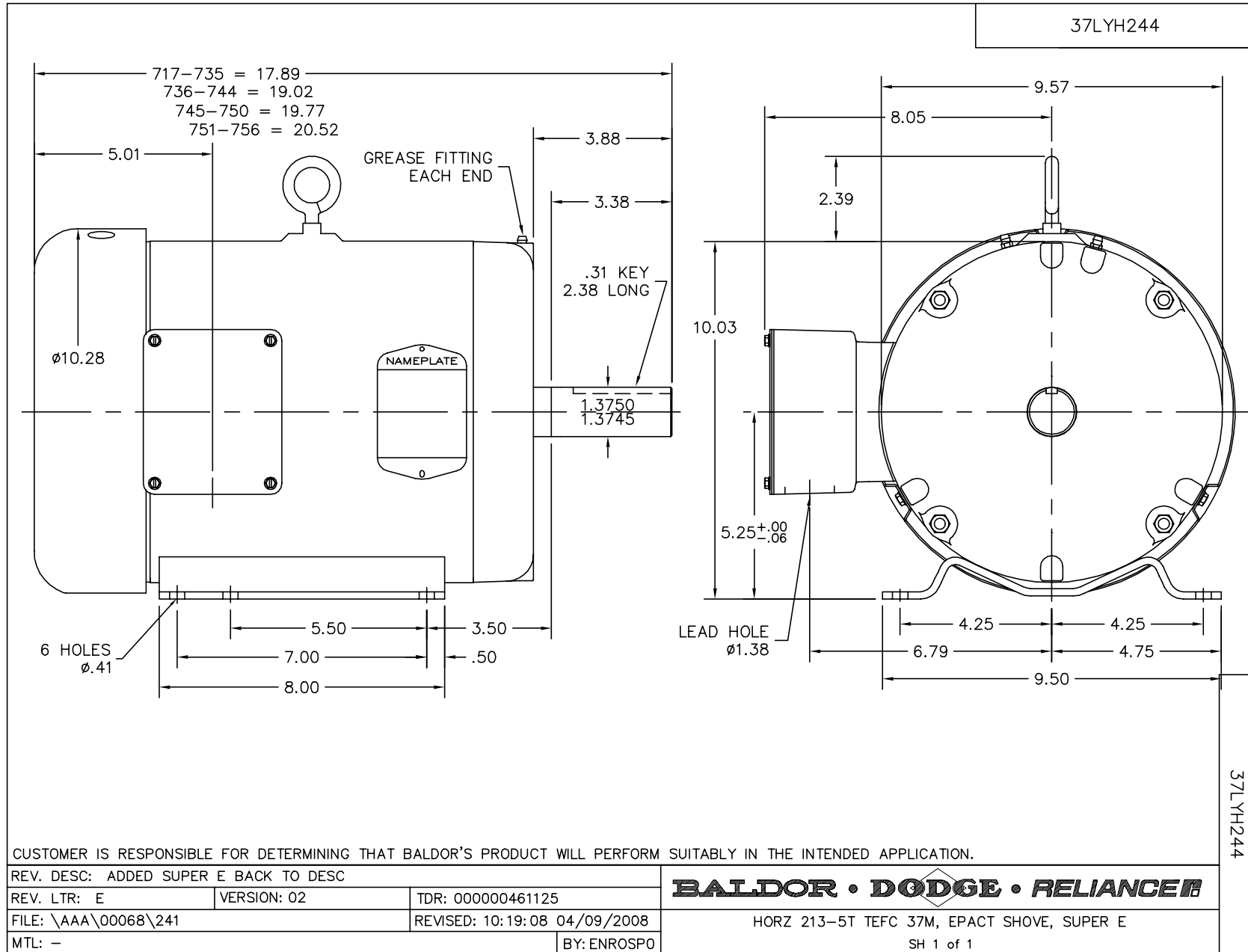
**Load Characteristics 575 V, 60 Hz, 7.5 HP**

<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>	42	63	75	80	83	84	82
<b>Efficiency</b>	87.1	91.7	91.9	92.1	91	89.9	91.4
<b>Speed</b>	1793	1786	1778	1770	1760	1750	1764
<b>Line amperes</b>	3.9	4.84	6.1	7.61	9.29	11.1	8.62



Performance Graph at 575V, 60Hz, 7.5HP Typical performance - Not guaranteed values





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

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MTL: -	© □	

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

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