

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3710T-BG**

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

Part Detail							
Revision:	B	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGL864	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37N339	Layout:	37LYN339	Poles:	04	Created Date:	02-01-2021
Base:	RG	Eff. Date:	12-28-2021	Leads:	9#14		

Specs			
Catalog Number:	EM3710T-BG	Insulation Class:	H
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	213T	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 14 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 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:	UR	Power Factor:	80
	CSA EEV	Product Family:	General Purpose
	CSA	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

<b>Current @ Voltage:</b>	19.000 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	Shaft Grounding
	20.000 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	9.500 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>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

Nameplate NP3441LUA	
CAT.NO.	EM3710T-BG
SPEC	37N339L864G1
HP	7.5
VOLTS	230/460
AMPS	19/9.5
RPM	1770
FRAME	213T
	HZ 60
	PH 3
SF	1.15
	CODE J
	DES A
	CLASS H
NEMA NOM. EFF	91.7
	PF 80
RATING	40C AMB-CONT
CC	010A
	USABLE AT 208V 20
ENCL	TEFC
	SER
DE	6307
	ODE 6206
VPWM INVERTER READY	SFA 21.6/10.8
CT6-60H(10:1)VT3-60H(20:1)	
	50HZ 7.5HP 190/380V 22.4/11.2A
	SF1.0

Parts List		
Part Number	Description	Quantity
SA390578	SA 37N339L864G1	1.000 EA
RA381030	RA 37N339L864G1	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
37EP3100B06	PU EP 307 LOCK BRG,GRSR,DRAIN,2 RET HLS	1.000 EA
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 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

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1508	LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.028 GA
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 EA
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

**AC Induction Motor Performance Data**

Record # 86486

Preliminary Data Sheet

<b>Winding:</b> 37WGL864-R002		<b>Type:</b> 3738M		<b>Enclosure:</b> TEFC	
<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>	22.2 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	19.0/9.5	<b>Breakdown Torque</b>	69.8 LB-FT		
<b>R.P.M.</b>	1770	<b>Pull-up Torque</b>	31.5 LB-FT		
<b>Hz</b>	60 Phase	<b>Locked-rotor Torque</b>	41 LB-FT		
<b>NEMA Design Code</b>	A KVA Code	<b>Starting Current</b>	70.7 A		
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	4.32 A		
<b>NEMA Nom. Eff.</b>	91.7 Power Factor	<b>Line-line Res. @ 25°C</b>	1.48 Ω		
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	64°C		
<b>S.F. Amps</b>	21.4/10.7	<b>Temp. Rise @ S.F. Load</b>	84°C		
		<b>Locked-rotor Power Factor</b>	41.9		
		<b>Rotor inertia</b>	0.934 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>	42	64	75	80	83	84	83
<b>Efficiency</b>	87.1	91.4	92	91.7	90.7	89.6	90.7
<b>Speed</b>	1793	1786	1778	1770	1760	1750	1761
<b>Line amperes</b>	4.83	6.03	7.64	9.5	11.6	13.9	10.7

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

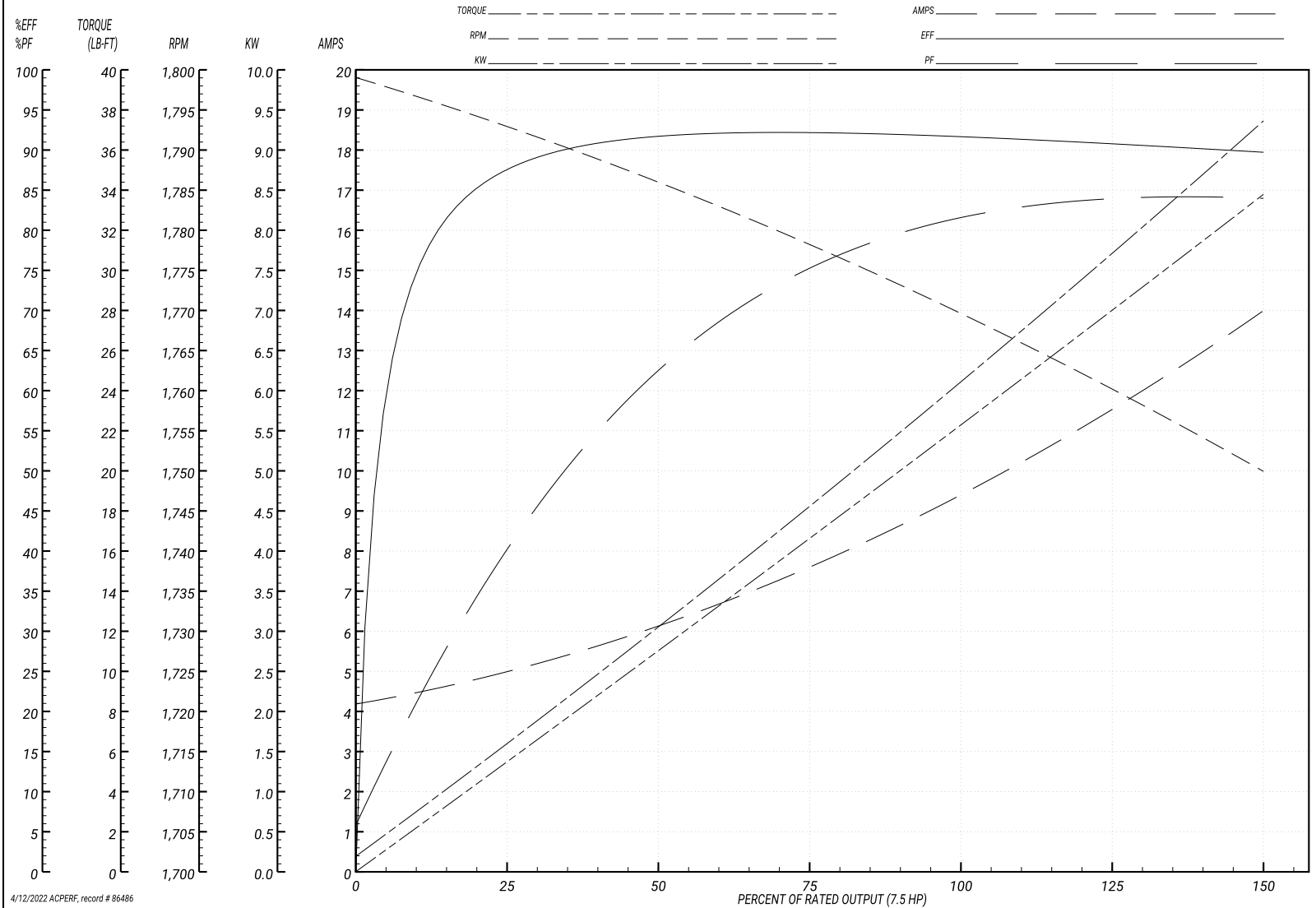
**BALDOR ELECTRIC COMPANY**

WINDING # 37WGL864

Typical performance - not guaranteed values.

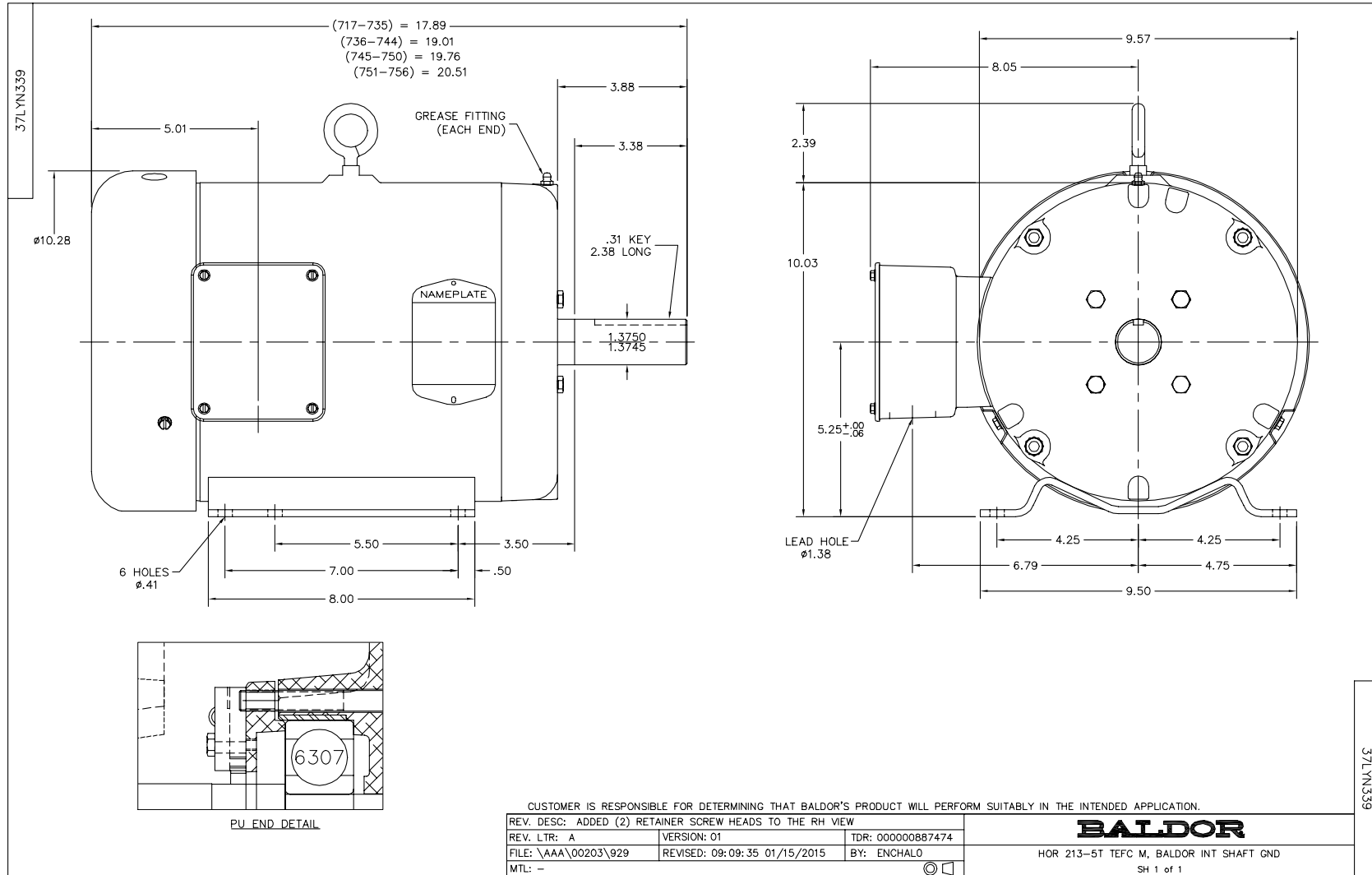
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

TORQUES(LB-FT): PO=69.8 PU=31.5 LR=41 LRA=70.7



4/12/2022 ACPERF, record # 86486





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