

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3710T**

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

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	37WGL864	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	37H244	Layout:	37LYH244	Poles:	04	Created Date:	11-11-2020
Base:	RG	Eff. Date:	05-02-2024	Leads:	9#14		

Specs			
Catalog Number:	EM3710T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	213T	Inverter Code:	Inverter Ready
Frame Material:	Steel	KVA Code:	J
Motor Letter Type:	Three Phase	Lifting Lugs:	Standard Lifting Lugs
Output @ Frequency:	7.500 HP @ 60 HZ	Locked Bearing Indicator:	No 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:	NEMA_PREMIUM	Power Factor:	80
	UR	Product Family:	General Purpose
	NEMA PREMIUM	Pulley End Bearing Type:	Ball
	CSA EEV	Pulley Face Code:	Standard
Auxillary Box:	No Auxillary Box	Pulley Shaft Indicator:	Standard
Auxillary Box Lead Termination:	None	Rodent Screen:	None
Base Indicator:	Rigid	RoHS Status:	ROHS COMPLIANT

<b>Bearing Grease Type:</b>	Polyrex EM (-20F +300F)	<b>Shaft Extension Location:</b>	Pulley End
<b>Blower:</b>	None	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Current @ Voltage:</b>	20.000 A @ 208.0 V	<b>Shaft Rotation:</b>	Reversible
	9.500 A @ 460.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
	19.000 A @ 230.0 V	<b>Speed Code:</b>	Single Speed
<b>Design Code:</b>	A	<b>Motor Standards:</b>	NEMA
<b>Drip Cover:</b>	No Drip Cover	<b>Starting Method:</b>	Direct on line
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Bearing:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Winding:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 1:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3441LUA</b>										
<b>CAT.NO.</b>	EM3710T									
<b>SPEC</b>	37H244L864G1									
<b>HP</b>	7.5									
<b>VOLTS</b>	230/460									
<b>AMPS</b>	19/9.5									
<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>	91.7		<b>PF</b>	80						
<b>RATING</b>	40C AMB-CONT									
<b>CC</b>	010A									
<b>ENCL</b>	TEFC		<b>SER</b>							
<b>DE</b>	6307			<b>ODE</b>	6206					
<b>VPWM INVERTER READY</b>										
<b>CT6-60H(10:1)VT3-60H(20:1)</b>										
	50HZ 7.5HP 190/380V 22.4/11.2A								SF1.0	

**AC Induction Motor Performance Data**

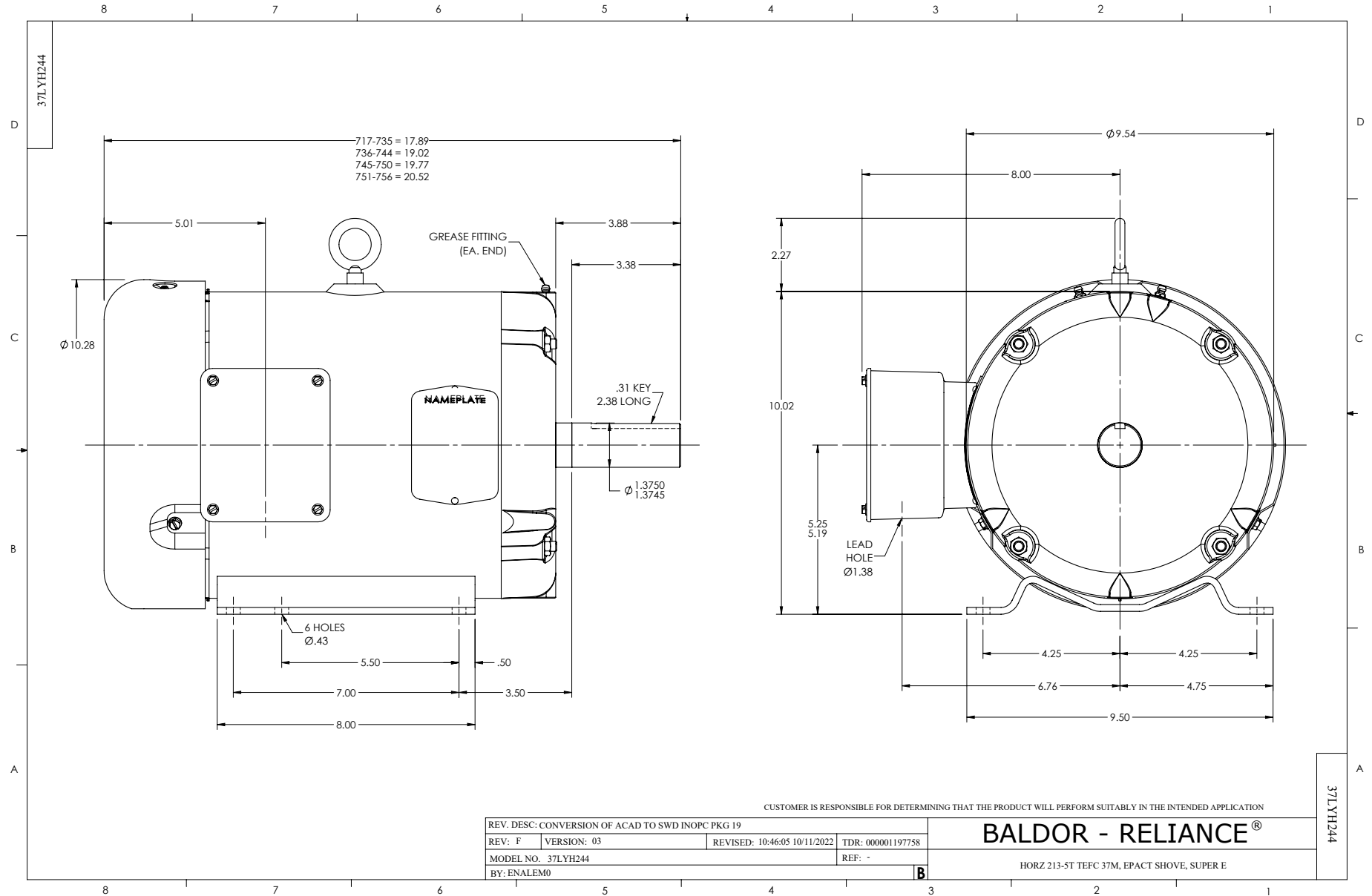
Record # 85467

Preliminary Data Sheet

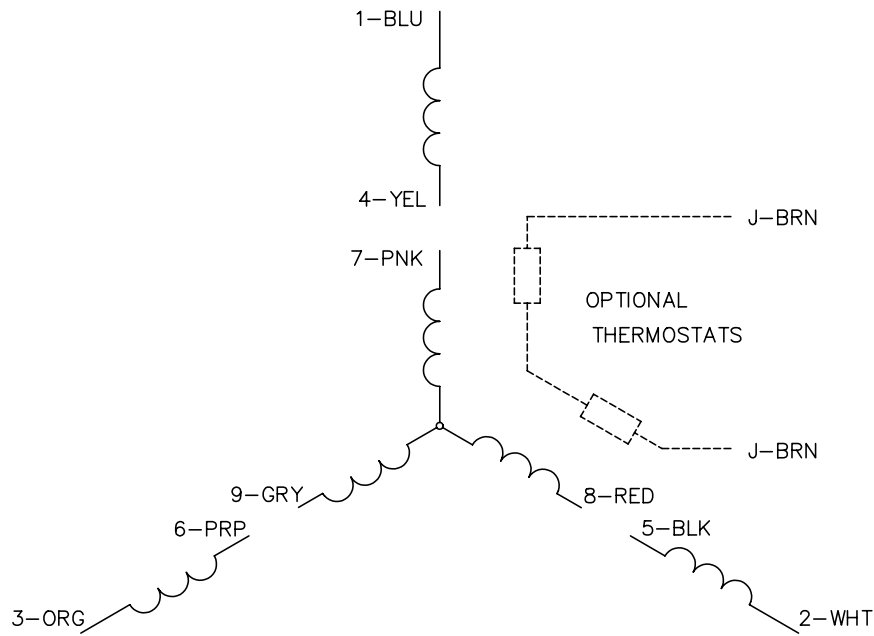
<b>Winding: 37WGL864-R001</b>		<b>Type: 3738M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5	<b>Full Load Torque</b>	22.2 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	19.0/9.5	<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**

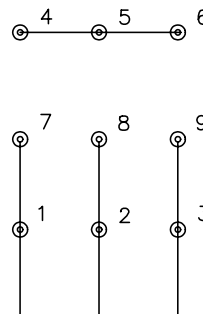
<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	42	64	75	80	83	84	83
<b>Efficiency</b>	87.1	91.4	92	91.7	90.7	89.6	90.7
<b>Speed</b>	1793	1786	1778	1770	1760	1750	1761
<b>Line amperes</b>	4.83	6.03	7.64	9.5	11.6	13.9	10.7



CD0005

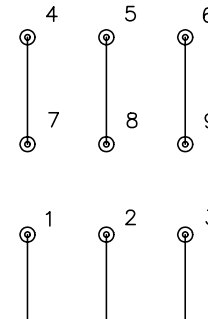


LOW VOLTAGE  
(2Y)



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