

**BALDOR • RELIANCE**

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# Customer information packet

## HBEM3710T

38M 4P TEFC HOR 213T

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	213T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM WEEE
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	20.000 A @ 208.0 V 9.500 A @ 460.0 V 19.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	C
Type	AC
Mech. spec.	37T556
Base	
Status	PRD/A
Elec. spec.	37WGL864
Layout	37LYT556
Eff. date	07-28-2023
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	01-05-2022

High Voltage Full Load Amps	9.5 a
Insulation Class	H
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	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.02 IN
Power Factor	80
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
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**

**NP4246A01A01**

<b>CAT #</b>	HBEM3710T									
<b>SPEC</b>	37T556L864G1									
<b>SER #</b>		<b>CC</b>	010A	<b>WT</b>	198	<b>LBS</b>				
<b>RATING</b>	40C AMB-CONT									
<b>HP</b>	7.5	<b>MAG CUR</b>			8.6/4.3					
<b>VOLTS</b>	230/460									
<b>AMPS</b>	19/9.5									
<b>RPM</b>	1770			<b>MAX RPM</b>						
<b>FRAME</b>	213T	<b>HZ</b>	60	<b>PH</b>	3	<b>DES</b>	A	<b>IP</b>	54	
<b>SER.F.</b>	1.15	<b>CODE</b>	J	<b>CLASS</b>	H	<b>ENCL</b>	TEFC			
<b>USABLE AT 208V</b>	N/A									
<b>EFF</b>	91.7	<b>% (100%)</b>		<b>PF</b>	80	<b>WK2</b>	0.934			
<b>INVERTER DUTY -</b>	<b>INVERTER TYPE</b>		<b>VPWM</b>	<b>CHP</b>	<b>60-90 HZ</b>					
<b>SL HZ</b>		<b>CT</b>	<b>6-60 HZ (10:1)</b>		<b>VT</b>	<b>3-60 HZ (20:1)</b>				
<b>DE</b>	6307		<b>ODE</b>	6206						
	SFA 21.6/10.8									
<b>YR</b>										

**AC Induction Motor Performance Data**

Record # 86486

Preliminary Data Sheet

Winding: 37WGL864-R002		Type: 3738M	Enclosure: TEFC	
<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	19.0/9.5	Breakdown Torque	69.8 LB-FT	
R.P.M.	1770	Pull-up Torque	31.5 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque	41 LB-FT
NEMA Design Code	A KVA Code	J	Starting Current	70.7 A
Service Factor (S.F.)		1.15	No-load Current	4.32 A
NEMA Nom. Eff.	91.7 Power Factor	80	Line-line Res. @ 25°C	1.48 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	64°C
S.F. Amps		21.4/10.7	Temp. Rise @ S.F. Load	84°C
			Locked-rotor Power Factor	41.9
			Rotor inertia	0.934 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	42	64	75	80	83	84	83
Efficiency	87.1	91.4	92	91.7	90.7	89.6	90.7
Speed	1793	1786	1778	1770	1760	1750	1761
Line amperes	4.83	6.03	7.64	9.5	11.6	13.9	10.7

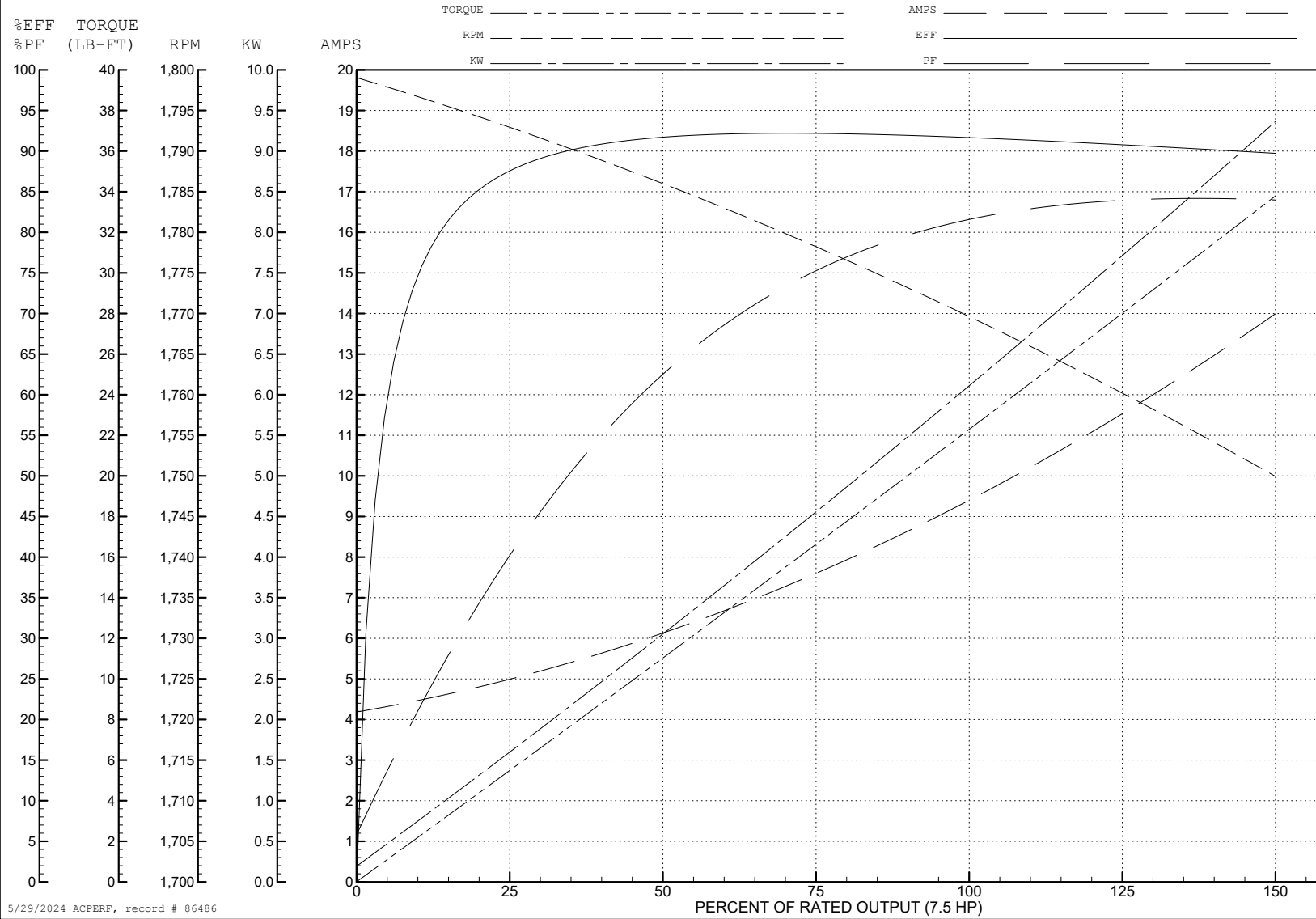
ABB Motors and Mechanical Inc.

WINDING # 37WGL864

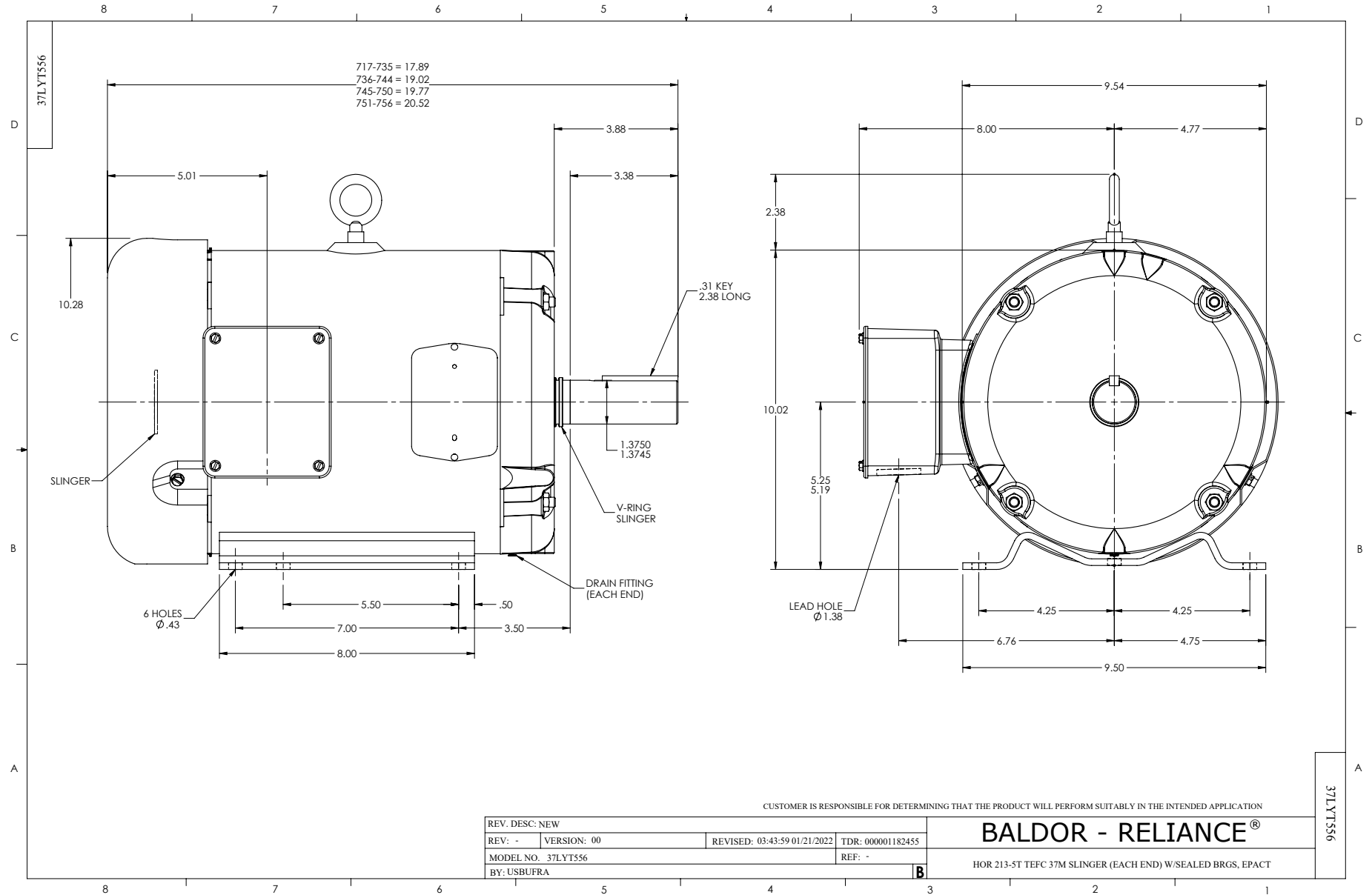
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

Typical performance - not guaranteed values.

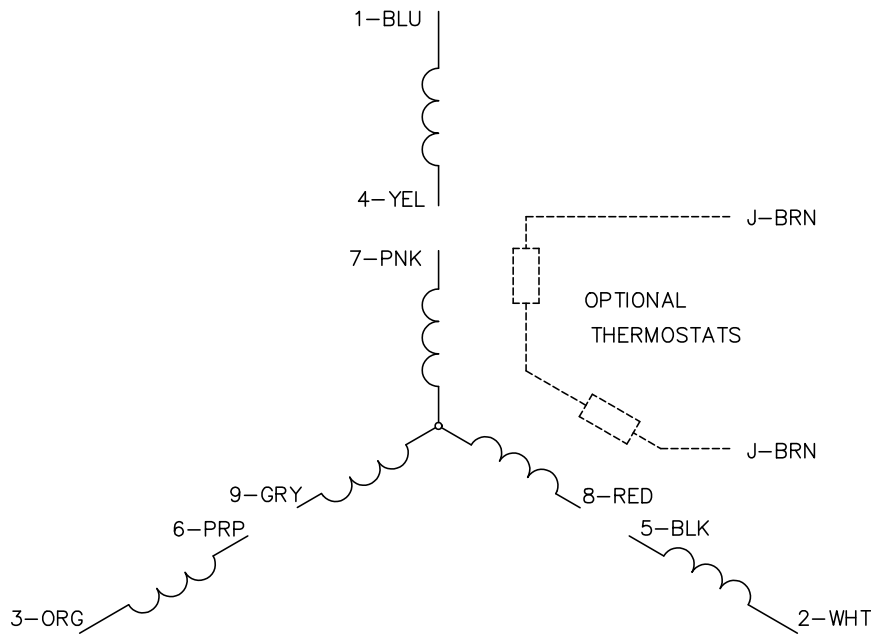
TORQUES (LB-FT): PO=69.8 PU=31.5 LR=41 LRA=70.7



5/29/2024 ACPERF, record # 86486



CD0005

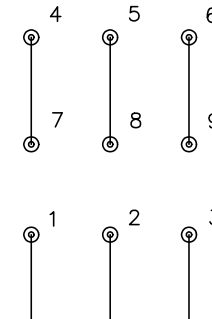


LOW VOLTAGE  
(2Y)



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.

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