

**BALDOR • RELIANCE**

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# Customer information packet

## EM3709T

7.5HP, 3520RPM, 3PH, 60HZ, 213T, 3728M, TEFC, F

Class - None

Division - Not Applicable

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## 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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV NEMA PREMIUM NEMA_PREMIUM UR
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	9.000 A @ 460.0 V 19.000 A @ 208.0 V 18.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

## Part detail

Revision	D
Type	AC
Mech. spec.	37H244
Base	
Status	PRD/A
Elec. spec.	37WGL869
Layout	37LYH244
Eff. date	05-02-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	11-18-2020

Heater Indicator	No Heater
High Voltage Full Load Amps	9.0 a
Insulation Class	F
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	3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	17.89 IN
Power Factor	84
Product Family	General Purpose
Pulley End Bearing Type	Ball
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	3520 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**

**NP3441LUA**

<b>CAT.NO.</b>	EM3709T						
<b>SPEC</b>	37H244L869G1						
<b>HP</b>	7.5						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	18/9						
<b>RPM</b>	3520						
<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>	89.5	<b>PF</b>	84				
<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 22/11.0A						SF1.0

**Accessories**

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

**AC Induction Motor Performance Data**

Record # 86805

Preliminary Data Sheet

<b>Winding: 37WGL869-R002</b>		<b>Type: 3728M</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>	11.2 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	18/9	<b>Breakdown Torque</b>	40.3 LB-FT		
<b>R.P.M.</b>	3520	<b>Pull-up Torque</b>	19.7 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	21.8 LB-FT	
<b>NEMA Design Code</b>	A <b>KVA Code</b>	J	<b>Starting Current</b>	68.4 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	3.52 A		
<b>NEMA Nom. Eff.</b>	89.5 <b>Power Factor</b>	84	<b>Line-line Res. @ 25°C</b>	1.19 Ω	
<b>Rating - Duty</b>	40C AMB-CONT	<b>Temp. Rise @ Rated Load</b>	50°C		
<b>S.F. Amps</b>	20/10	<b>Temp. Rise @ S.F. Load</b>	63°C		
		<b>Locked-rotor Power Factor</b>	38.1		
		<b>Rotor inertia</b>	0.255 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>	49	71	81	86	88	89	87
<b>Efficiency</b>	83.9	89.7	91	90.9	90.2	89.2	90.3
<b>Speed</b>	3580	3560	3540	3518	3494	3468	3500
<b>Line amperes</b>	4.1	5.4	7.06	8.96	11	13.2	10.2

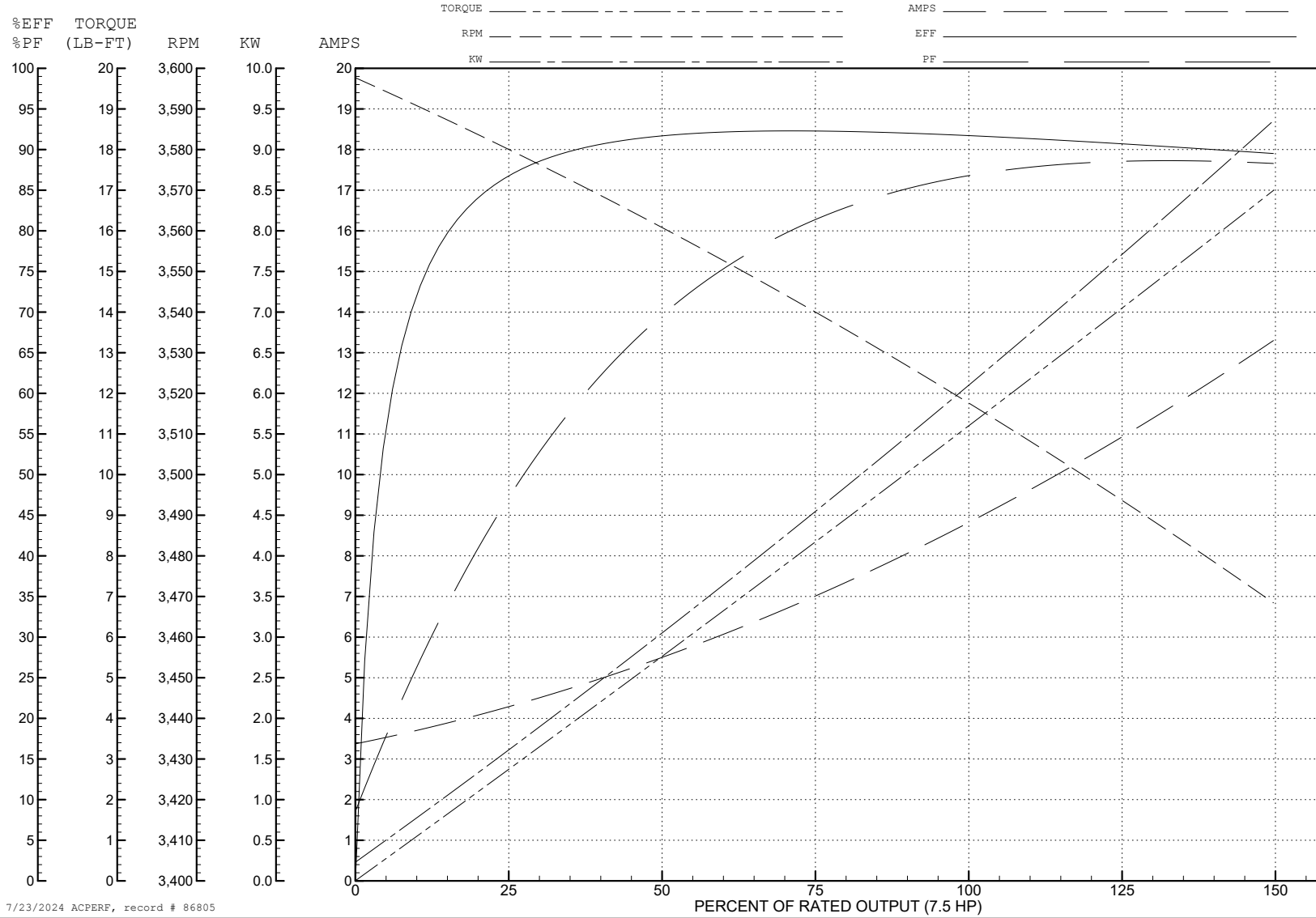
ABB Motors and Mechanical Inc.

WINDING # 37WGL869

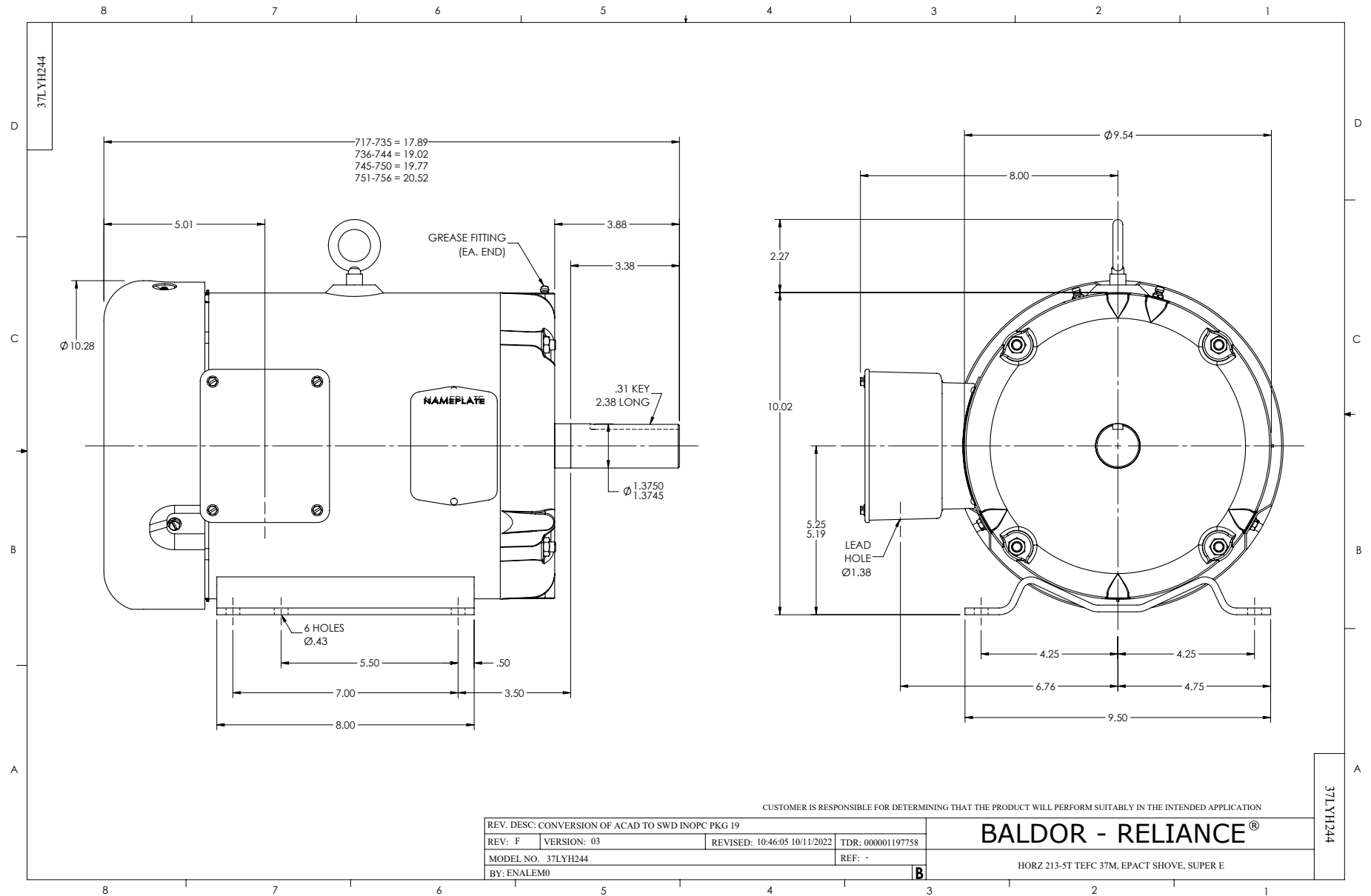
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3520 RPM 460 V 3728M

TORQUES (LB-FT): PO=40.3 PU=19.7 LR=21.8 LRA=68.4



7/23/2024 ACPERF, record # 86805

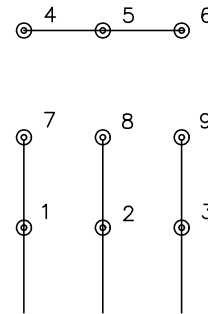




CD0005

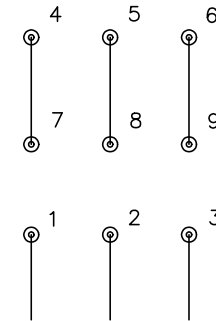


LOW VOLTAGE  
(2Y)



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