

**BALDOR • RELIANCE**

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# Customer information packet

## EM3710T-5G

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

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	575.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA 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	7.600 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.6 a
Insulation Class	H

## Part detail

Revision	Q
Type	AC
Mech. spec.	37J838
Base	
Status	PRD/A
Elec. spec.	37WGR907
Layout	37LYJ838
Eff. date	09-23-2024
CD Diagram	CD0006
Poles	04
Leads	3#14
Proprietary	False
Created date	12-07-2015

Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.01 IN
Power Factor	82
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 Extension Location	Pulley End
Shaft Ground Indicator	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****NP3441L**

<b>CAT.NO.</b>	EM3710T-5G						
<b>SPEC.</b>	37J838R907G1						
<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>	H
<b>NEMA-NOM-EFF</b>	91.7	<b>PF</b>	82				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>DE</b>	6307	<b>ODE</b>	6206				
<b>ENCL</b>	TEFC	<b>SN</b>					

**VPWM INVERTER READY****CT6-60H(10:1)VT3-60H(20:1)**

**AC Induction Motor Performance Data**

Record # 54305

Typical performance - not guaranteed values

<b>Winding:</b> 37WGR907-R002		<b>Type:</b> 3738M		<b>Enclosure:</b> TEFC	
<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

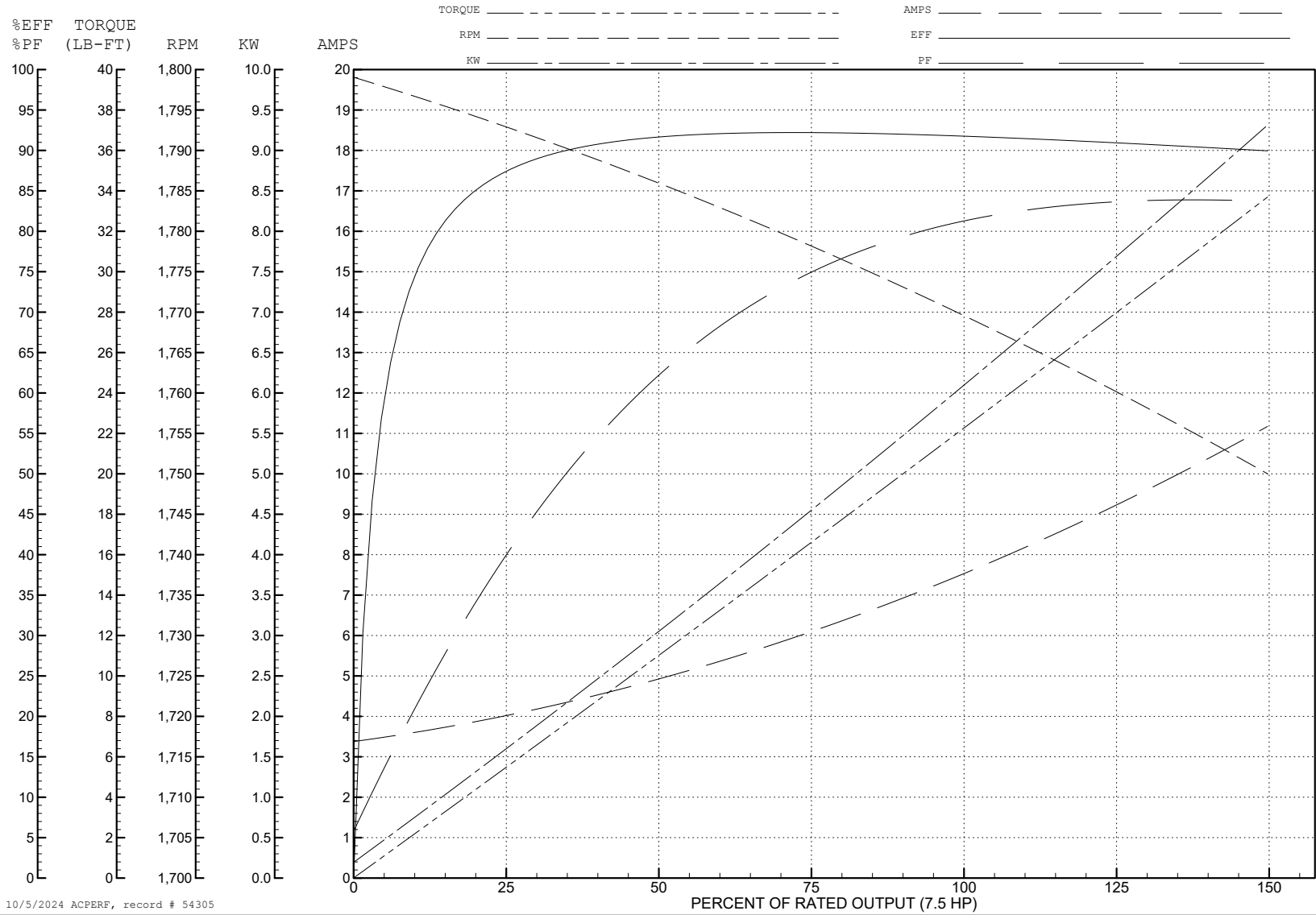
ABB Motors and Mechanical Inc.

WINDING # 37WGR907

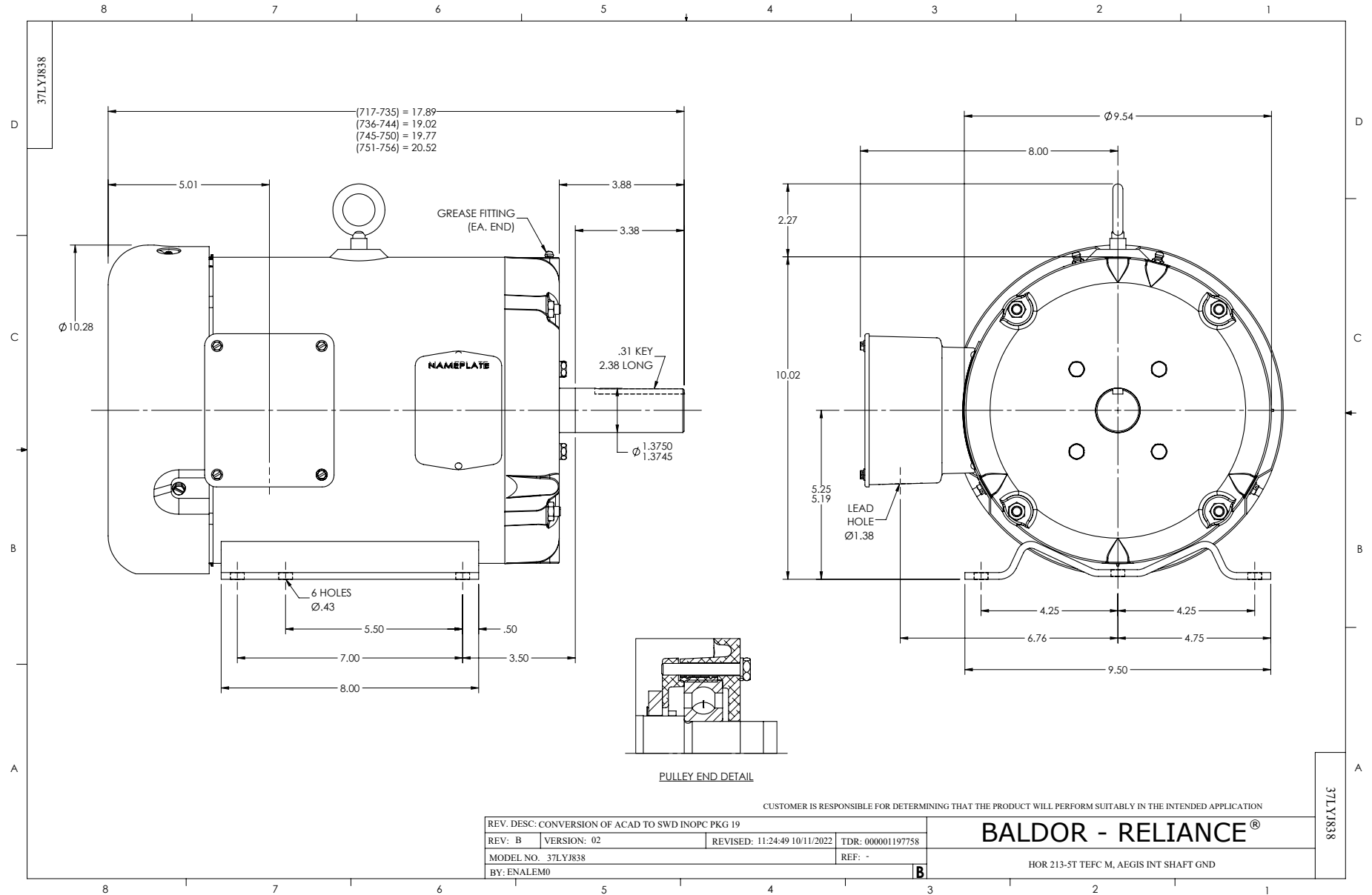
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 575 V 3738M

TORQUES (LB-FT): PO=71 PU=32.6 LR=43 LRA=56.9



10/5/2024 ACPERF, record # 54305



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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**BALDOR - RELIANCE®**

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

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