

**BALDOR • RELIANCE**

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# Customer information packet

## VEM3770T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 0738M, TEFC

Class - None

Division - Not Applicable

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6/9/2025 4:15:26 AM

## Specifications

Enclosure	TEFC
Frame	213TC
Frame Material	Iron
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	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	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	9.500 A @ 460.0 V 20.000 A @ 208.0 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	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None

## Part detail

Revision	G
Type	AC
Mech. spec.	07G082
Base	
Status	PRD/A
Elec. spec.	07WGT510
Layout	07LYG082
Eff. date	05-28-2025
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-08-2021

<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	9.5 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	J
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Quantity/Wire Size</b>	9 @ 14 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	0738M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	19.20 IN
<b>Power Factor</b>	81
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.375 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	No Slinger
<b>Speed</b>	1770 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3441LUA**

<b>CAT.NO.</b>	VEM3770T						
<b>SPEC</b>	07G082T510						
<b>HP</b>	7.5						
<b>VOLTS</b>	230/460						
<b>AMPS</b>	19/9.5						
<b>RPM</b>	1770						
<b>FRAME</b>	213TC	<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>	81				
<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>	SFA 21.4/10.7						
<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 # 85534

Preliminary Data Sheet

Winding: 07WGT510-R001		Type: 0738M	Enclosure: TEFC		
<b>Nameplate Data</b>		<b>460 V, 60 Hz: High Voltage Connection</b>			
Rated Output (HP)	7.5	Full Load Torque	22.3 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	19/9.5	Breakdown Torque	69.1 LB-FT		
R.P.M.	1770	Pull-up Torque	28.7 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	39.1 LB-FT	
NEMA Design Code	A	KVA Code	J	Starting Current	67.4 A
Service Factor (S.F.)	1.15	No-load Current	4.07 A		
NEMA Nom. Eff.	91.7	Power Factor	81	Line-line Res. @ 25°C	1.55 Ω
Rating - Duty	40C	AMB-CONT		Temp. Rise @ Rated Load	48°C
S.F. Amps	21.4/10.7			Temp. Rise @ S.F. Load	62°C
				Locked-rotor Power Factor	41.2
				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	44	66	76	81	84	85	83
Efficiency	88	91.7	92.2	91.7	90.7	89.3	90.9
Speed	1792	1785	1777	1769	1759	1749	1761
Line amperes	4.61	5.85	7.48	9.43	11.6	13.9	10.7

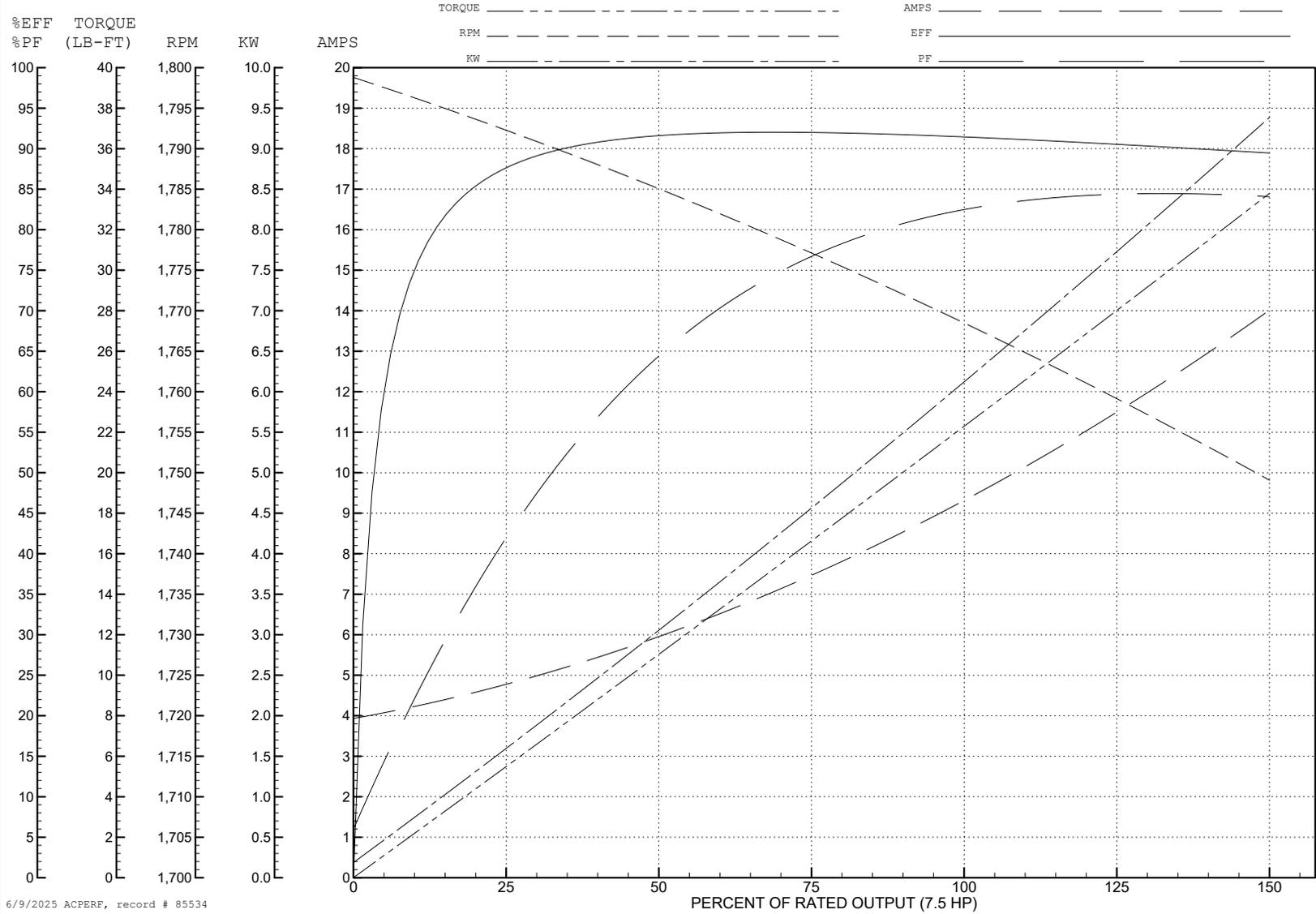
ABB Motors and Mechanical Inc.

WINDING # 07WGT510

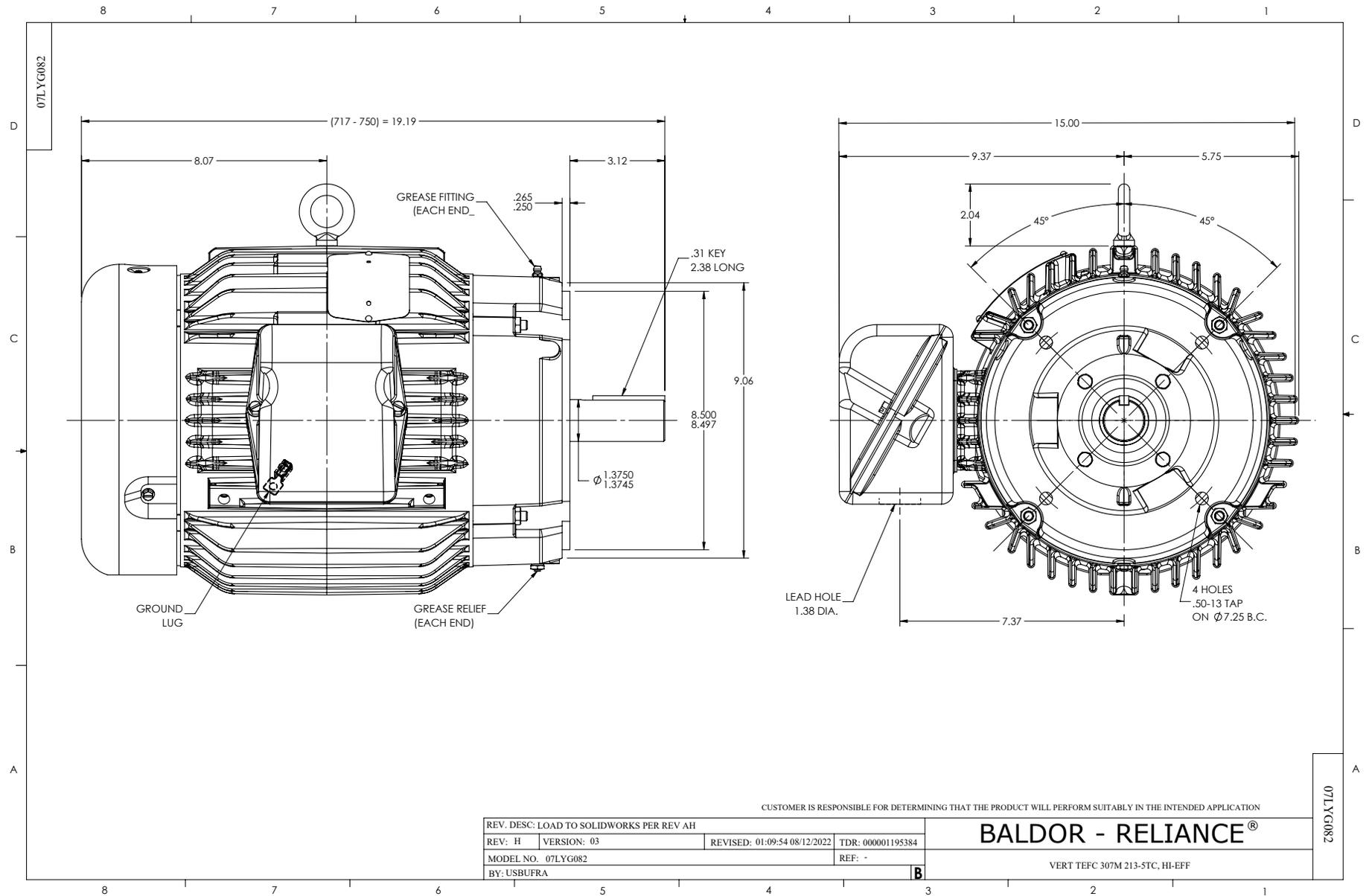
Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 0738M

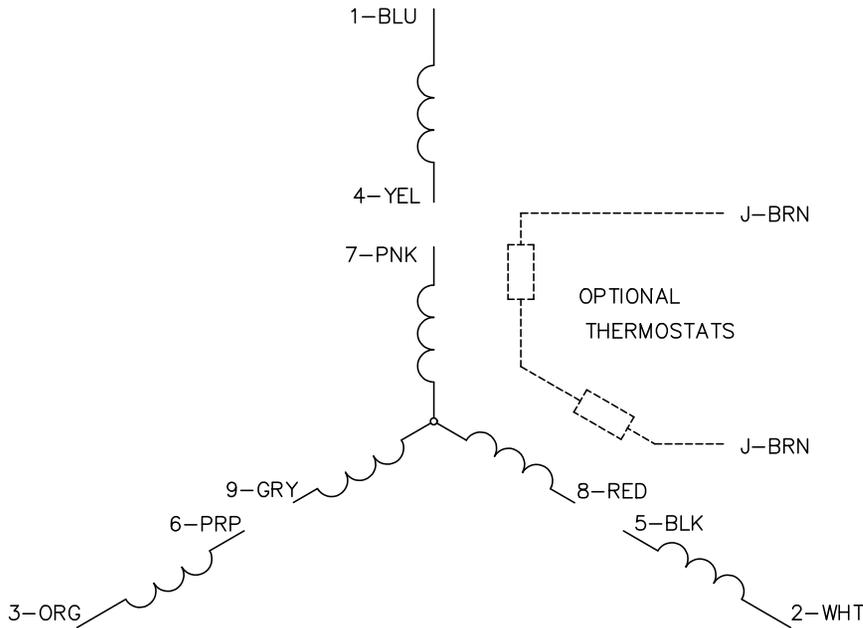
TORQUES (LB-FT): PO=69.1 PU=28.7 LR=39.1 LRA=67.4



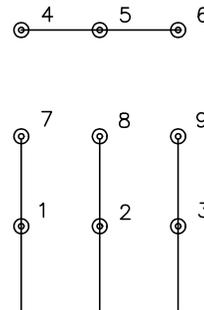
6/9/2025 ACPERF, record # 85534



CD0005

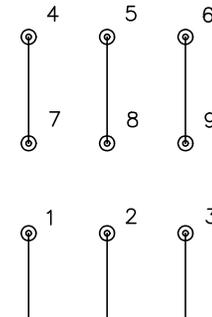


LOW VOLTAGE  
(2Y)



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