

**BALDOR • RELIANCE**

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# Customer information packet

## VXM21742T

7.5//5HP, 1770//1470RPM, 3PH, 60//50HZ, 213T

Class - CLI GP D; CLII GP F,G

Division - Division I

## Specifications

Enclosure	XPFC
Frame	213TC
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	7.500 HP @ 60 HZ 5.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
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
Constant Torque Speed Range	6
Current @ Voltage	16.200 A @ 190.0 V 19.000 A @ 230.0 V 8.100 A @ 380.0 V 9.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

## Part detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGR872
Layout	37LY-000-164
Eff. date	12-09-2021
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	03-05-2021

Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	8.1 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	20.32 IN
Power Factor	80
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1770 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None

**Winding Thermal 2**

**None**

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**Nameplate**

**NP0887XPSLEV**

<b>NO.</b>		<b>CC</b>	010A		
<b>S/N</b>		<b>TEMP CODE</b>	T3C		
<b>SPEC.</b>	37-0000-0327	<b>INV.TYPE</b>	PWM		
<b>CAT.NO.</b>	VXM21742T	<b>C HP FR</b>	60	<b>C HP TO</b>	90
<b>HP</b>	7.5//5	<b>CT HZ FROM</b>	6	<b>CT HZ TO</b>	60
<b>VOLTS</b>	230/460//190/380	<b>VT HZ FROM</b>	6	<b>VT HZ TO</b>	60
<b>AMPS</b>	19/9.5//16.2/8.1	<b>MAG CUR</b>	8.6/4.3		
<b>RPM</b>	1770//1470	<b>MX RPM</b>	2700		
<b>HZ</b>	60//50	<b>PH</b>	3	<b>CL</b>	F
		<b>NOM.EFF.</b>	91.7		
<b>SER.F.</b>	1.00	<b>DES</b>	A	<b>SL HZ</b>	1
		<b>WK2</b>	0.934		
<b>FRAME</b>	213TC	<b>RATING</b>	40C AMB-CONT		
	NEMA MG-1 PART 5, IP54				
	1.15 SF ON SINE WAVE				

**AC Induction Motor Performance Data**

Record # 73680

Typical performance - not guaranteed values

<b>Winding:</b> 37WGR872-R029		<b>Type:</b> 3738M		<b>Enclosure:</b> XPFC		
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>			
<b>Rated Output (HP)</b>	7.5//5		<b>Full Load Torque</b>	22.2 LB-FT		
<b>Volts</b>	230/460//190/380		<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	19/9.5//16.2/8.1		<b>Breakdown Torque</b>	70.9 LB-FT		
<b>R.P.M.</b>	1770//1470		<b>Pull-up Torque</b>	32.6 LB-FT		
<b>Hz</b>	60//50	<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>	70.9 A
<b>Service Factor (S.F.)</b>			1	<b>No-load Current</b>	4.31 A	
<b>NEMA Nom. Eff.</b>	91.7	<b>Power Factor</b>	80	<b>Line-line Res. @ 25°C</b>	1.41 Ω	
<b>Rating - Duty</b>	40C AMB-CONT			<b>Temp. Rise @ Rated Load</b>	63°C	
				<b>Locked-rotor Power Factor</b>	37.2	
				<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>Power Factor</b>	42	64	75	80	83	84
<b>Efficiency</b>	87.1	91.5	91.9	91.9	91	89.8
<b>Speed</b>	1793	1786	1778	1770	1760	1750
<b>Line amperes</b>	4.83	6.02	7.6	9.5	11.6	13.9

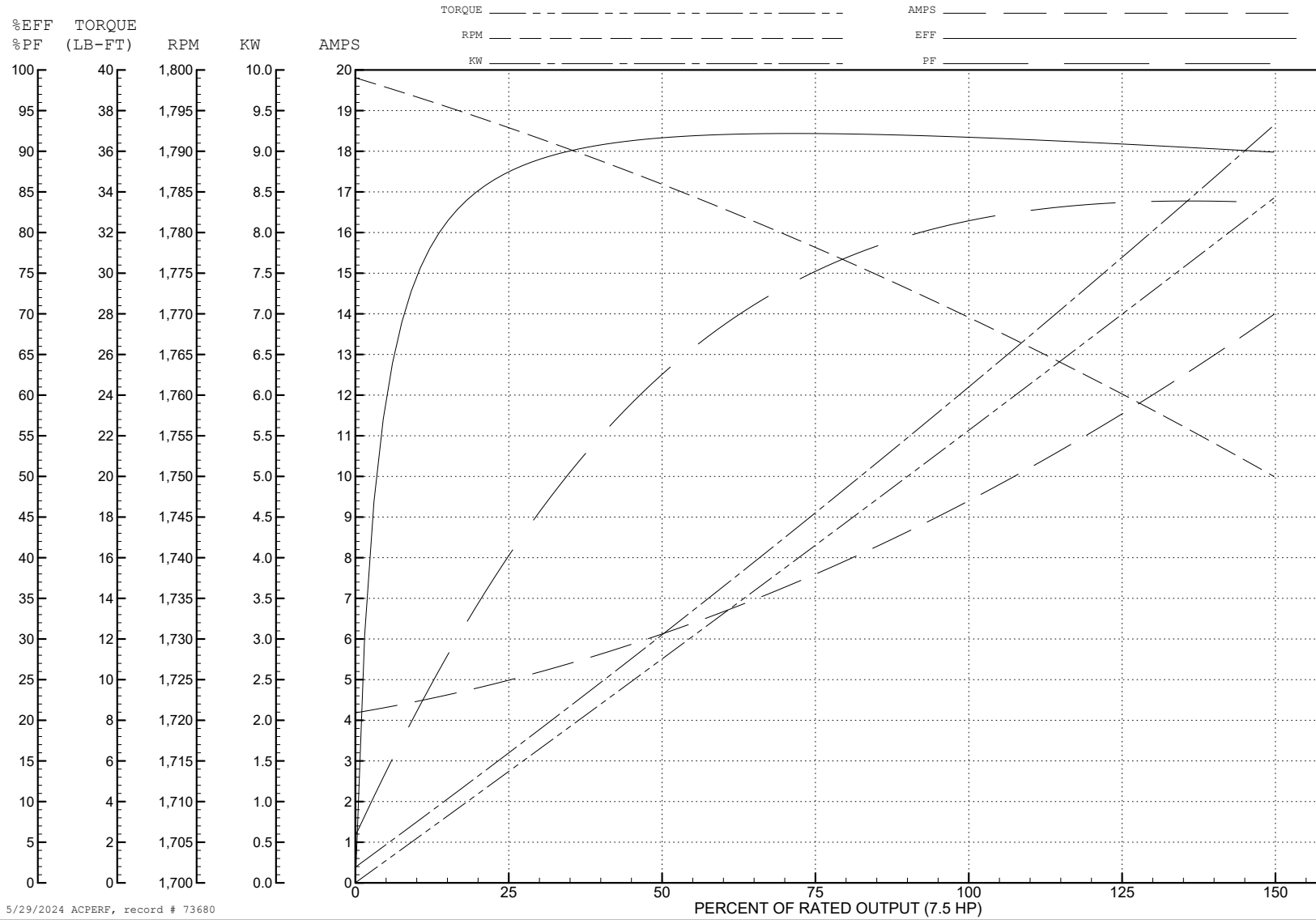
ABB Motors and Mechanical Inc.

WINDING # 37WGR872

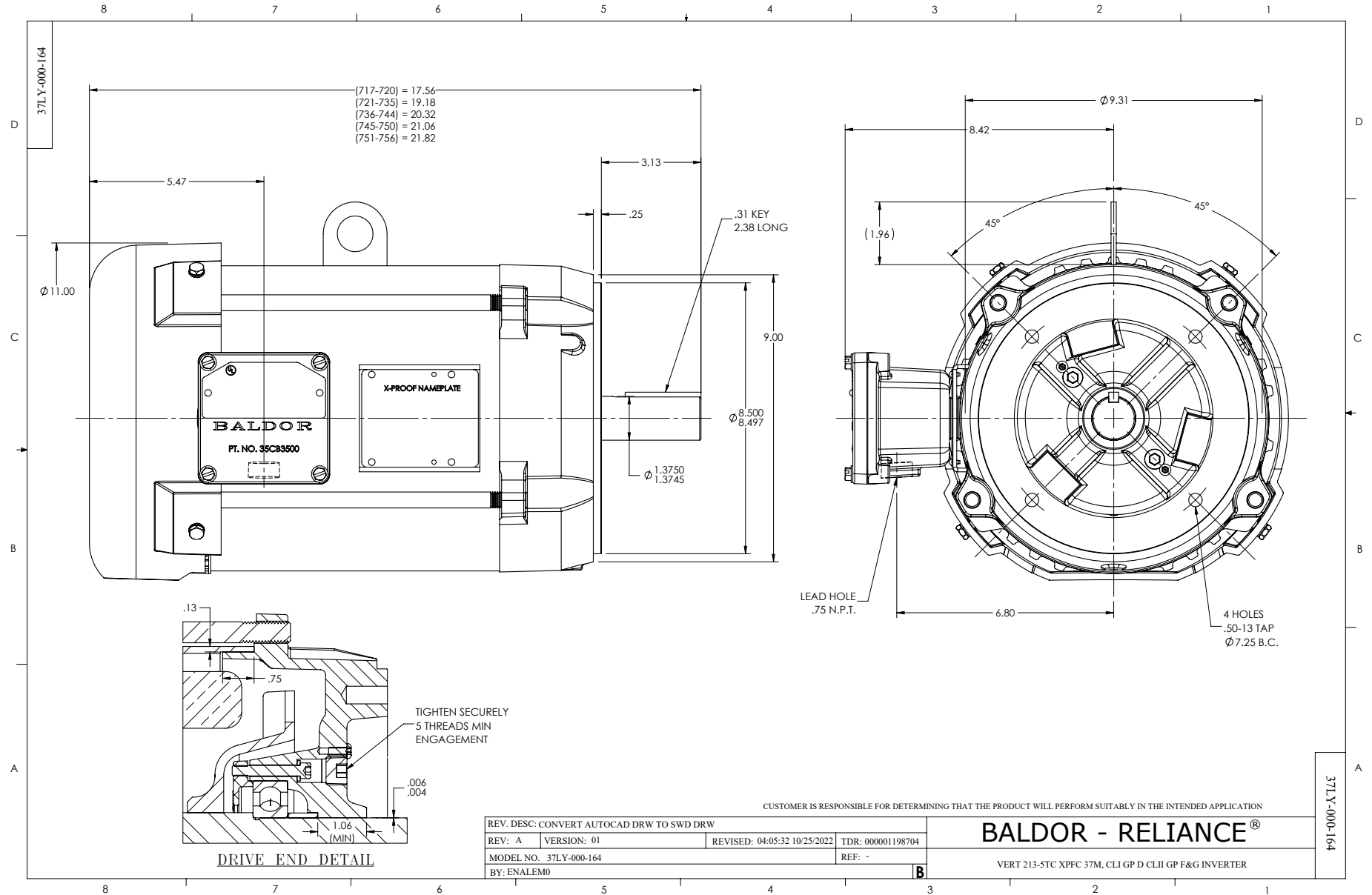
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3738M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=70.9 PU=32.6 LR=43 LRA=70.9

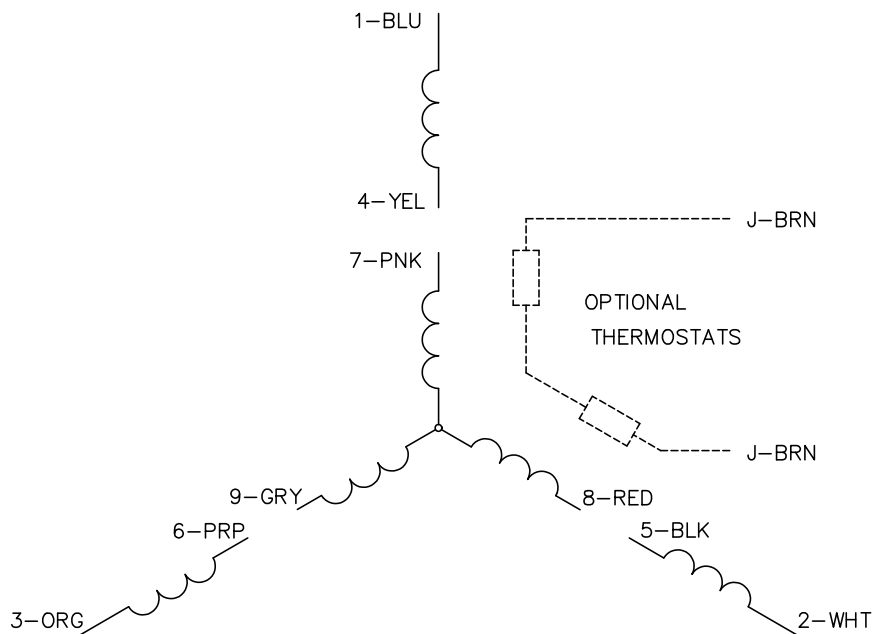


5/29/2024 ACPERF, record # 73680

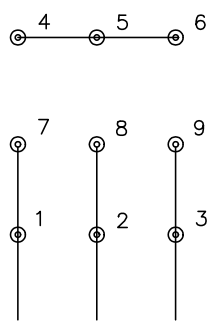




CD0005

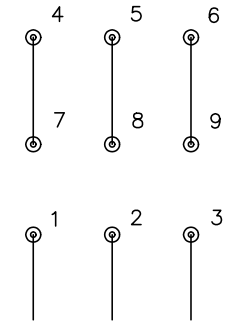


LOW VOLTAGE (2Y)



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