

**BALDOR • RELIANCE**

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# Customer information packet

## XM21742T

7.5HP, 1770//1470RPM, 3PH, 60HZ, 213T, XPFC, F  
Class - CLI GP D; CLII GP F,G  
Division - Division I

## Specifications

Enclosure	XPFC
Frame	213T
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	190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV UL
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
Constant Torque Speed Range	6
Current @ Voltage	9.400 A @ 460.0 V 7.800 A @ 380.0 V 18.800 A @ 230.0 V 15.600 A @ 190.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

## Part detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	37WGR374
Layout	37LYN517
Eff. date	01-13-2021
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	04-04-2019

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	7.8 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	3744M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.32 IN
Power Factor	83
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
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

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

**NP0887XPSLEV**

<b>NO.</b>		<b>CC</b>	010A		
<b>S/N</b>		<b>TEMP CODE</b>	T3C		
<b>SPEC.</b>	37-0000-0043	<b>INV.TYPE</b>	PWM		
<b>CAT.NO.</b>	XM21742T	<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>	18.8/9.4//15.6/7.8	<b>MAG CUR</b>	8.4/4.2		
<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>	1.08		
<b>FRAME</b>	213T	<b>RATING</b>	40C AMB-CONT		
	55C AMB @ 1.0 SF				
	1.15 SF SINEWAVE	NEMA MG-1 PT 5,IP54			

**AC Induction Motor Performance Data**

Record # 75486

Typical performance - not guaranteed values

<b>Winding: 37WGR374-R001</b>		<b>Type: 3744M</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//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>	18.8/9.4//15.6/7.8		<b>Breakdown Torque</b>	72.7 LB-FT		
<b>R.P.M.</b>	1770//1470		<b>Pull-up Torque</b>	34.3 LB-FT		
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	43.3 LB-FT	
<b>NEMA Design Code</b>	A		<b>KVA Code</b>	J	<b>Starting Current</b>	74.2 A
<b>Service Factor (S.F.)</b>				1	<b>No-load Current</b>	4.19 A
<b>NEMA Nom. Eff.</b>	91.7	<b>Power Factor</b>	83	<b>Line-line Res. @ 25°C</b>	1.25 Ω	
<b>Rating - Duty</b>			40C	<b>Temp. Rise @ Rated Load</b>	50°C	
<b>S.F. Amps</b>			AMB-CONT	<b>Temp. Rise @ S.F. Load</b>	61°C	
				<b>Locked-rotor Power Factor</b>	36	
				<b>Rotor inertia</b>	1.08 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>	41	65	76	83	85	85
<b>Efficiency</b>	88.3	91.7	92.9	92.4	91.7	90.4
<b>Speed</b>	1794	1787	1780	1772	1764	1755
<b>Line amperes</b>	4.84	5.92	7.41	9.18	11.3	13.6

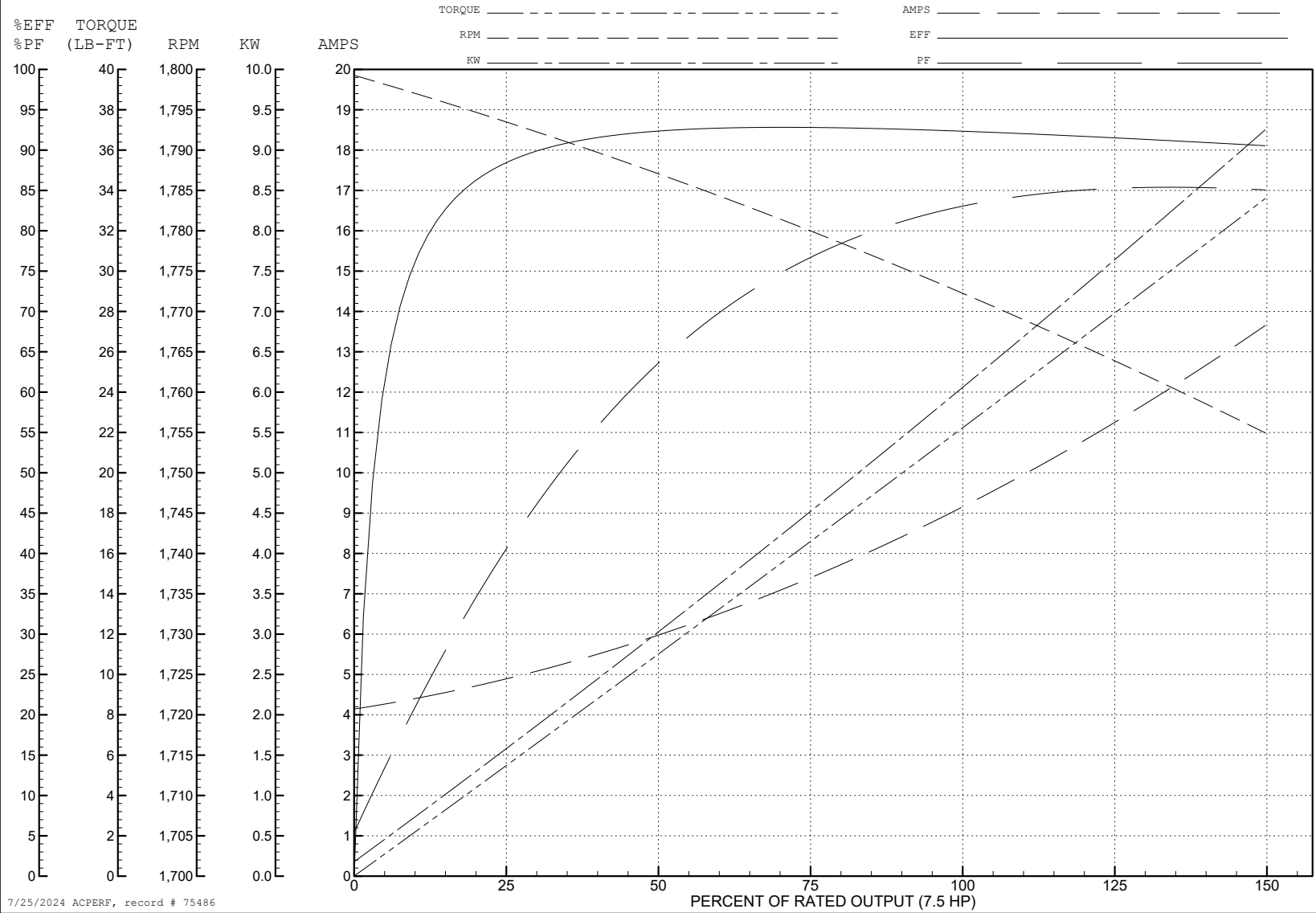
ABB Motors and Mechanical Inc.

WINDING # 37WGR374

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1772 RPM 460 V 3744M

TORQUES (LB-FT): PO=72.7 PU=34.3 LR=43.3 LRA=74.2



7/25/2024 ACPERF, record # 75486

**AC Induction Motor Performance Data**

Record # 75487

Typical performance - not guaranteed values

<b>Winding:</b> 37WGR374-R001		<b>Type:</b> 3744M		<b>Enclosure:</b> XPFC	
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	7.5//5		<b>Full Load Torque</b>	17.74 LB-FT	
<b>Volts</b>	230/460//190/380		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	18.8/9.4//15.6/7.8		<b>Breakdown Torque</b>	69.37 LB-FT	
<b>R.P.M.</b>	1770//1470		<b>Pull-up Torque</b>	35.44 LB-FT	
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	44.74 LB-FT
<b>NEMA Design Code</b>	A	<b>KVA Code</b>	J	<b>Starting Current</b>	72.03 A
<b>Service Factor (S.F.)</b>	1		<b>No-load Current</b>	4.13 A	
<b>NEMA Nom. Eff.</b>	91.7	<b>Power Factor</b>	83	<b>Line-line Res. @ 25°C</b>	1.25 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	39°C	
			<b>Locked-rotor Power Factor</b>	40.1	
			<b>Rotor inertia</b>	1.08 LB-FT <sup>2</sup>	

**Load Characteristics 380 V, 50 Hz, 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>	35	58	71	79	82	84
<b>Efficiency</b>	86.5	90.7	92.3	91.9	91.4	90.3
<b>Speed</b>	1495	1489	1484	1477	1471	1464
<b>Line amperes</b>	4.62	5.36	6.45	7.77	9.41	11.18



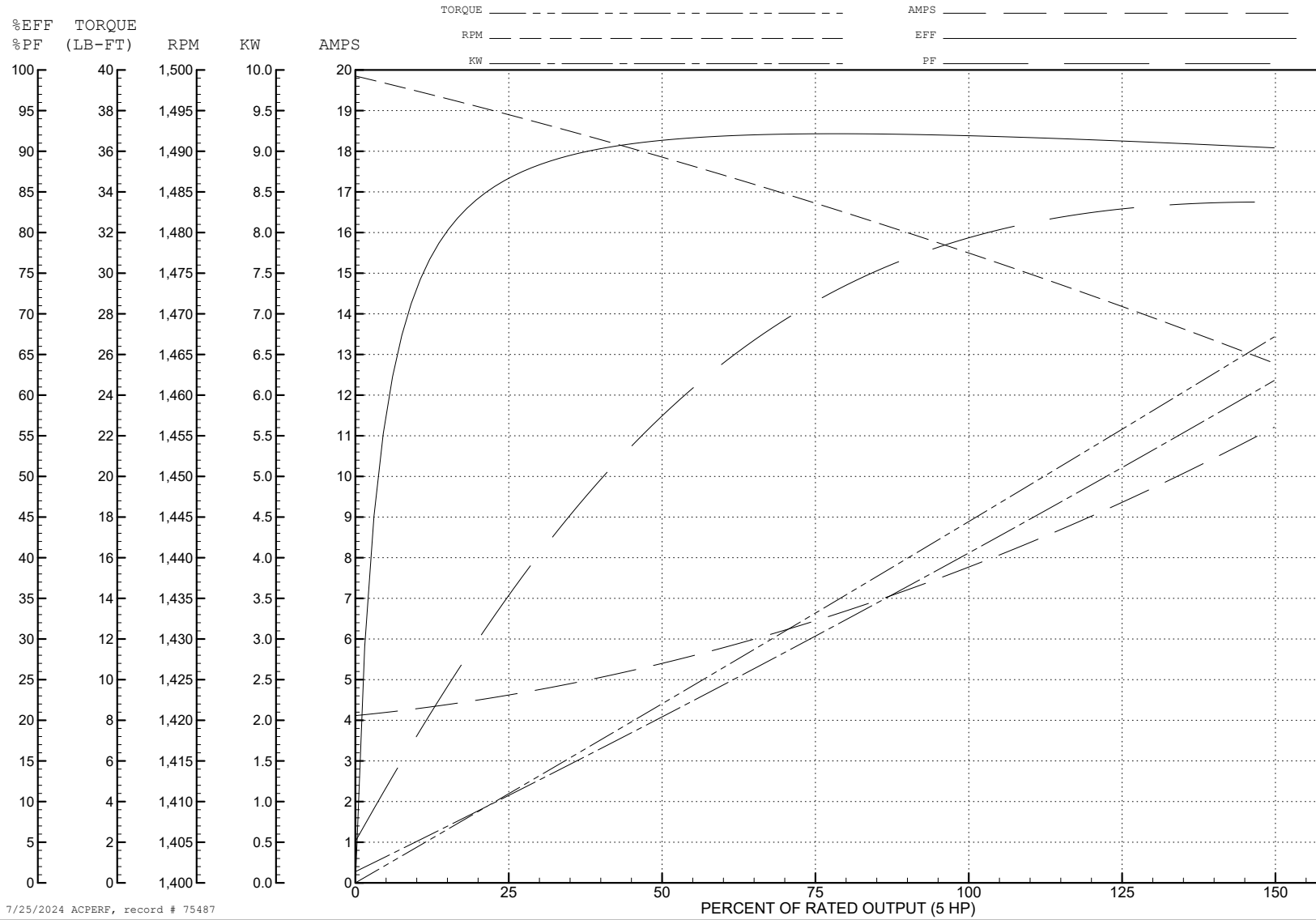
ABB Motors and Mechanical Inc.

WINDING # 37WGR374

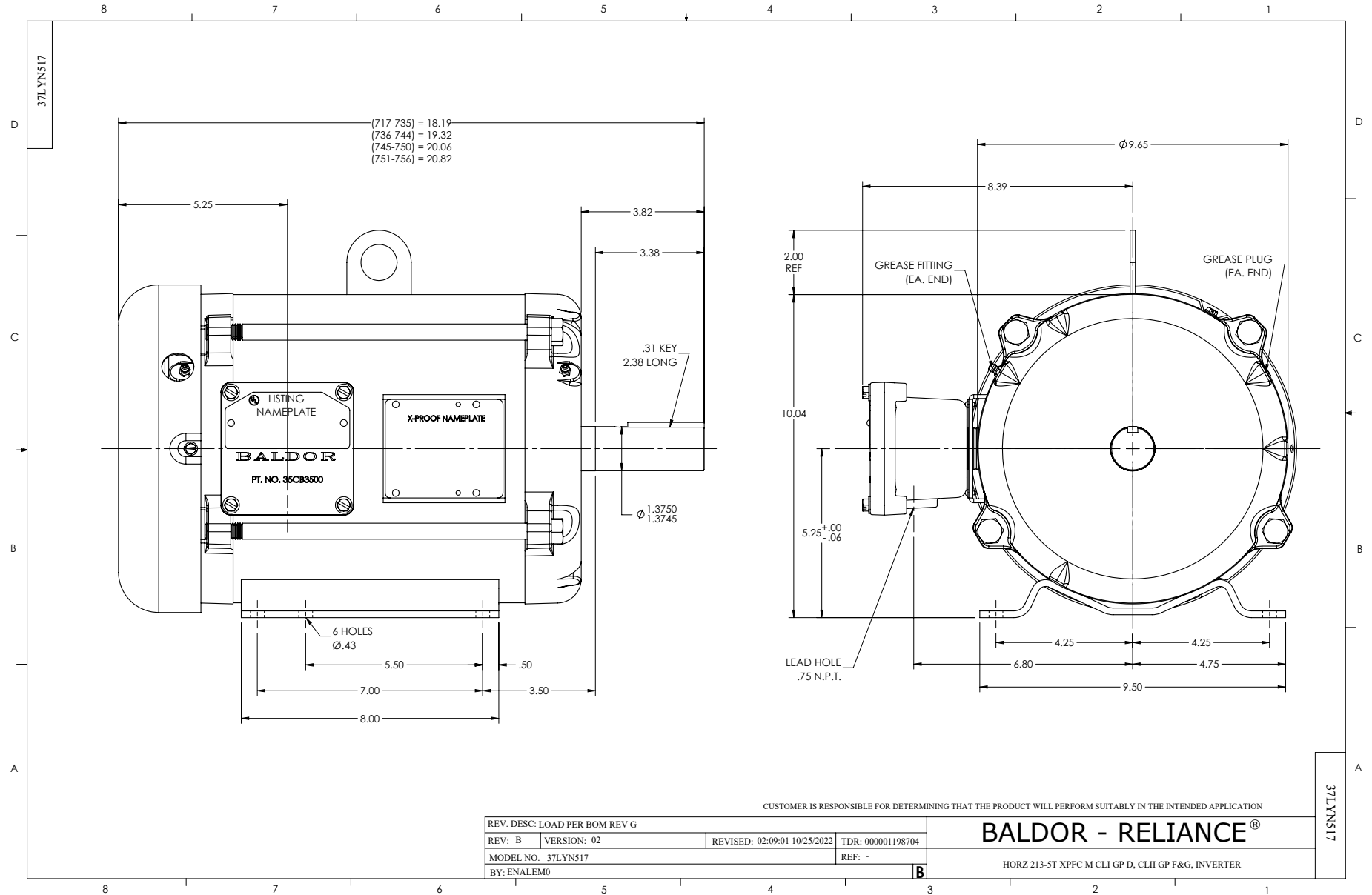
Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 1477 RPM 380 V 3744M

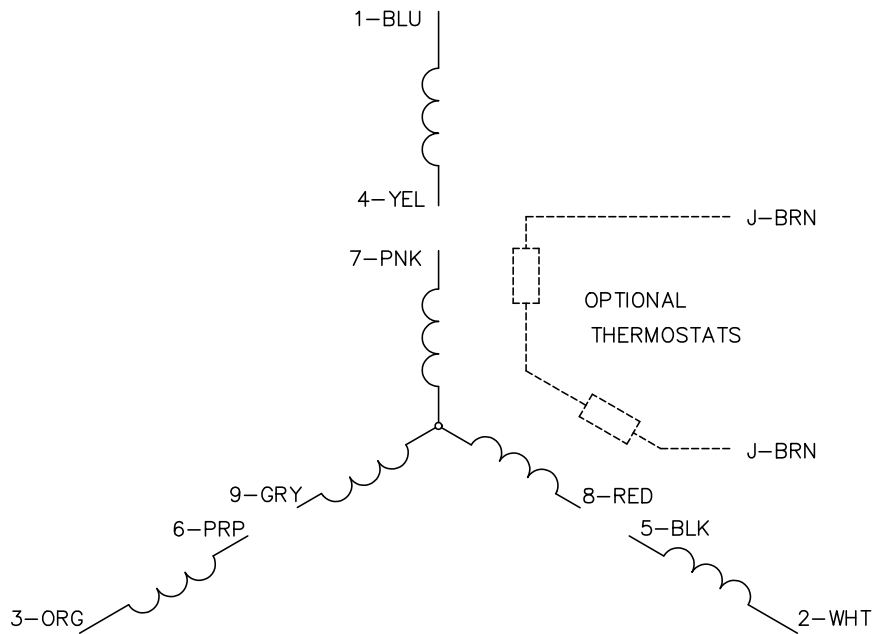
TORQUES (LB-FT): PO=69.37 PU=35.44 LR=44.74 LRA=72.03



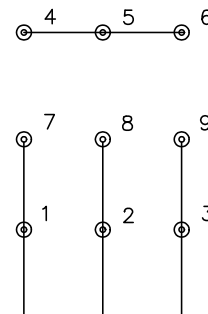
7/25/2024 ACPERF, record # 75487



CD0005

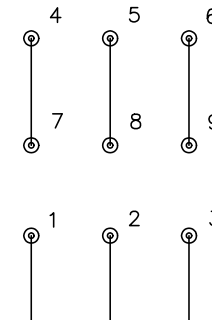


LOW VOLTAGE  
(2Y)



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.

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

CD0005