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# Customer information packet

## VDRX14144T

1//.75HP, 1770//1475RPM, 3PH, 60//50HZ, 143T

Class - CLI GP C,D

Division - Division I

## Specifications

Enclosure	XPFC
Frame	143TC
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	.750 HP @ 50 HZ 1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	CSA EEV UL
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	3.200 A @ 208.0 V 3.200 A @ 230.0 V 3.080 A @ 190.0 V 1.600 A @ 460.0 V 1.540 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

## Part detail

Revision	B
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYX734
Eff. date	01-10-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-21-2022

<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	85.5 %
<b>Electrically Isolated Bearing</b>	Not Electrically Isolated
<b>Feedback Device</b>	NO FEEDBACK
<b>Haz Area Temp Code</b>	T3C
<b>Heater Indicator</b>	No Heater
<b>High Voltage Full Load Amps</b>	1.5 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Duty
<b>KVA Code</b>	N
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Max Speed</b>	2700 rpm
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3520M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	14.34 IN
<b>Power Factor</b>	69
<b>Product Family</b>	General Purpose
<b>Pulley Face Code</b>	C-Face
<b>Rodent Screen</b>	None
<b>Service Factor</b>	1.00
<b>Shaft Diameter</b>	0.875 IN
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<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>	Normally Closed Thermostat
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None

**Winding Thermal 2**

**None**

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**Nameplate**

<b>NP1401XPSLEV</b>										
<b>NO.</b>		<b>CC</b>	010A							
<b>S/N</b>		<b>TEMP CODE</b>	T3C							
<b>SPEC.</b>	35-0000-1331		<b>INV.TYPE</b>	PWM						
<b>CAT.NO.</b>	VDRX14144T		<b>C HP FR</b>	60	<b>C HP TO</b>	90				
<b>HP</b>	1//.75		<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>	3.2/1.6//3.08/1.54		<b>MAG CUR</b>	2.2/1.1						
<b>RPM</b>	1770//1475		<b>MX RPM</b>	2700						
<b>HZ</b>	60//50	<b>PH</b>	3	<b>CL</b>	F	<b>NOM.EFF.</b>	85.5			
<b>SER.F.</b>	1.00	<b>DES</b>	B	<b>SL HZ</b>	1	<b>WK2</b>	0.144			
<b>FRAME</b>	143TC	<b>RATING</b>	40C AMB-CONT							
	55C AMB @ 1.0 SF									
	1.15 SF SINEWAVE									

**AC Induction Motor Performance Data**

Record # 86931

Typical performance - not guaranteed values

<b>Winding:</b> 35WGG004-R010		<b>Type:</b> 3520M		<b>Enclosure:</b> XPFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	1//.75		<b>Full Load Torque</b>	2.97 LB-FT	
<b>Volts</b>	230/460//190/380		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	3.26/1.63//3.08/1.54		<b>Breakdown Torque</b>	13.68 LB-FT	
<b>R.P.M.</b>	1760//1475		<b>Pull-up Torque</b>	7.85 LB-FT	
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	9.01 LB-FT
<b>NEMA Design Code</b>	<b>B KVA Code</b>		N	<b>Starting Current</b>	14.13 A
<b>Service Factor (S.F.)</b>			1	<b>No-load Current</b>	1.08 A
<b>NEMA Nom. Eff.</b>	85.5	<b>Power Factor</b>	67	<b>Line-line Res. @ 25°C</b>	16.9 Ω
<b>Rating - Duty</b>	40C AMB-CONT			<b>Temp. Rise @ Rated Load</b>	24°C
				<b>Locked-rotor Power Factor</b>	61.5
				<b>Rotor inertia</b>	0.144 lb-ft <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 1 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>	30	47	60	69	76	79
<b>Efficiency</b>	72.1	81.7	84.7	85.7	85.5	84.7
<b>Speed</b>	1791	1784	1776	1768	1759	1750
<b>Line amperes</b>	1.11	1.22	1.38	1.59	1.82	2.09

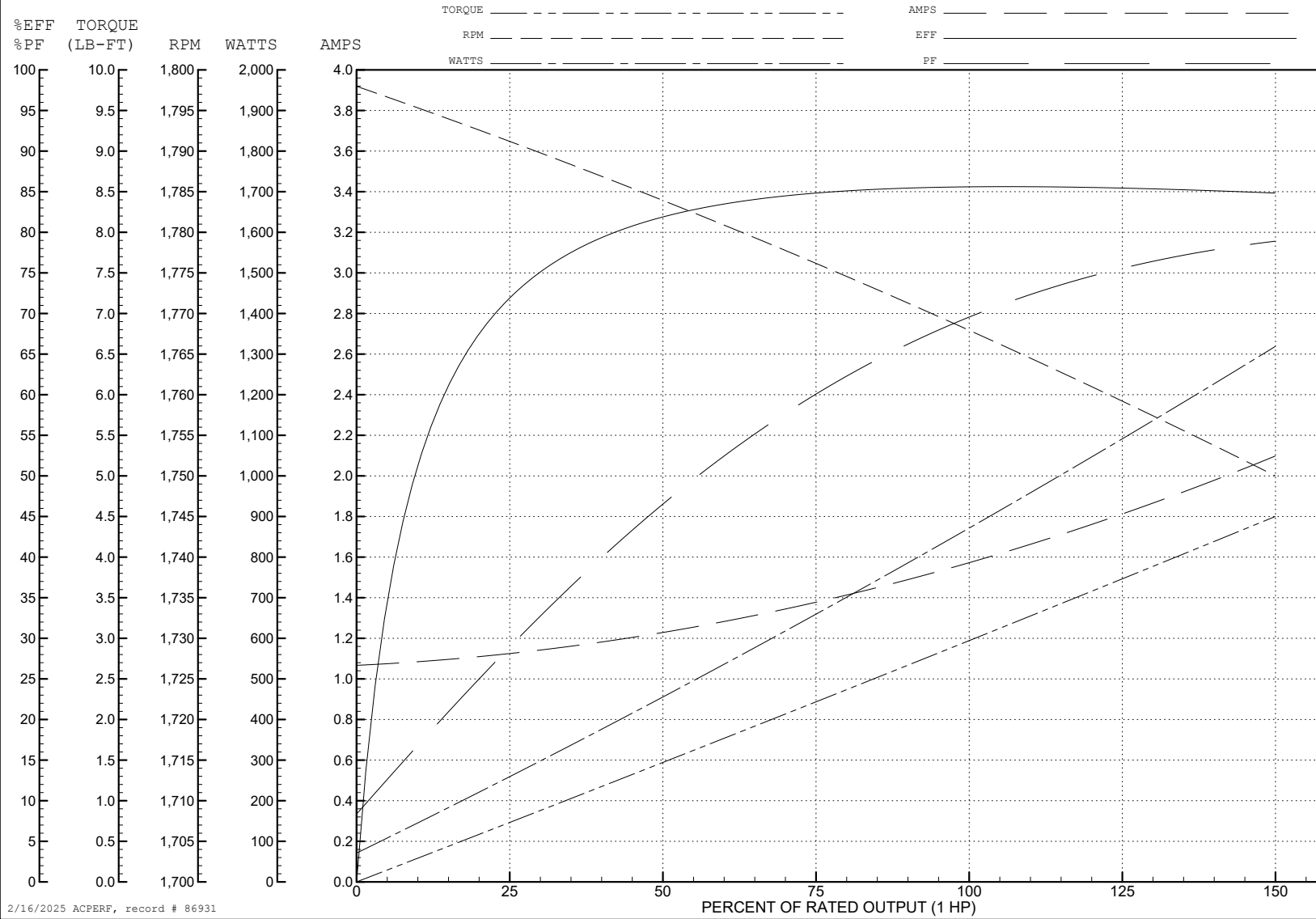
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

1 HP 3 PH 60 HZ 1768 RPM 460 V 3520M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=13.68 PU=7.85 LR=9.01 LRA=14.13



2/16/2025 ACPERF, record # 86931

**AC Induction Motor Performance Data**

Record # 86932

Typical performance - not guaranteed values

Winding: 35WGG004-R010		Type: 3520M		Enclosure: XPFC		
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>			
Rated Output (HP)	1//.75		Full Load Torque	2.68 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	3.26/1.63//3.08/1.54		Breakdown Torque	12.31 LB-FT		
R.P.M.	1760//1475		Pull-up Torque	7.45 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	8.55 LB-FT	
NEMA Design Code	B		KVA Code	N	Starting Current	13.12 A
Service Factor (S.F.)	1			No-load Current	1.06 A	
NEMA Nom. Eff.	85.5	Power Factor	67	Line-line Res. @ 25°C	16.9 Ω	
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	22°C	
				Locked-rotor Power Factor	67.1	
				Rotor inertia	0.144 lb-ft <sup>2</sup>	

**Load Characteristics 380 V, 50 Hz, 0.75 HP**

% of Rated Load	25	50	75	100	125	150
Power Factor	29	46	58	67	74	79
Efficiency	68.3	79	82.7	84	83.7	83.2
Speed	1492	1486	1479	1471	1463	1455
Line amperes	1.08	1.18	1.32	1.5	1.71	1.95

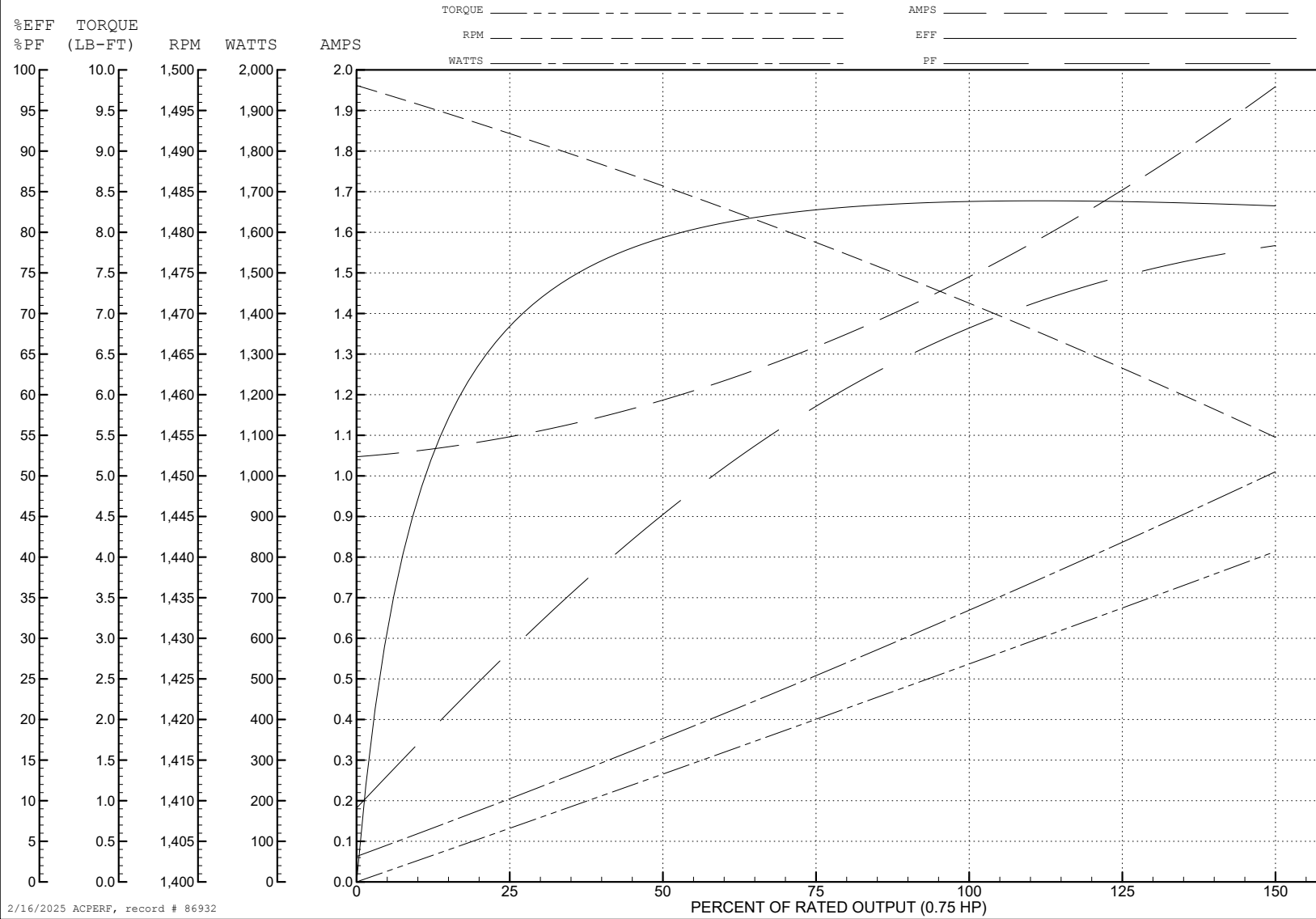
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

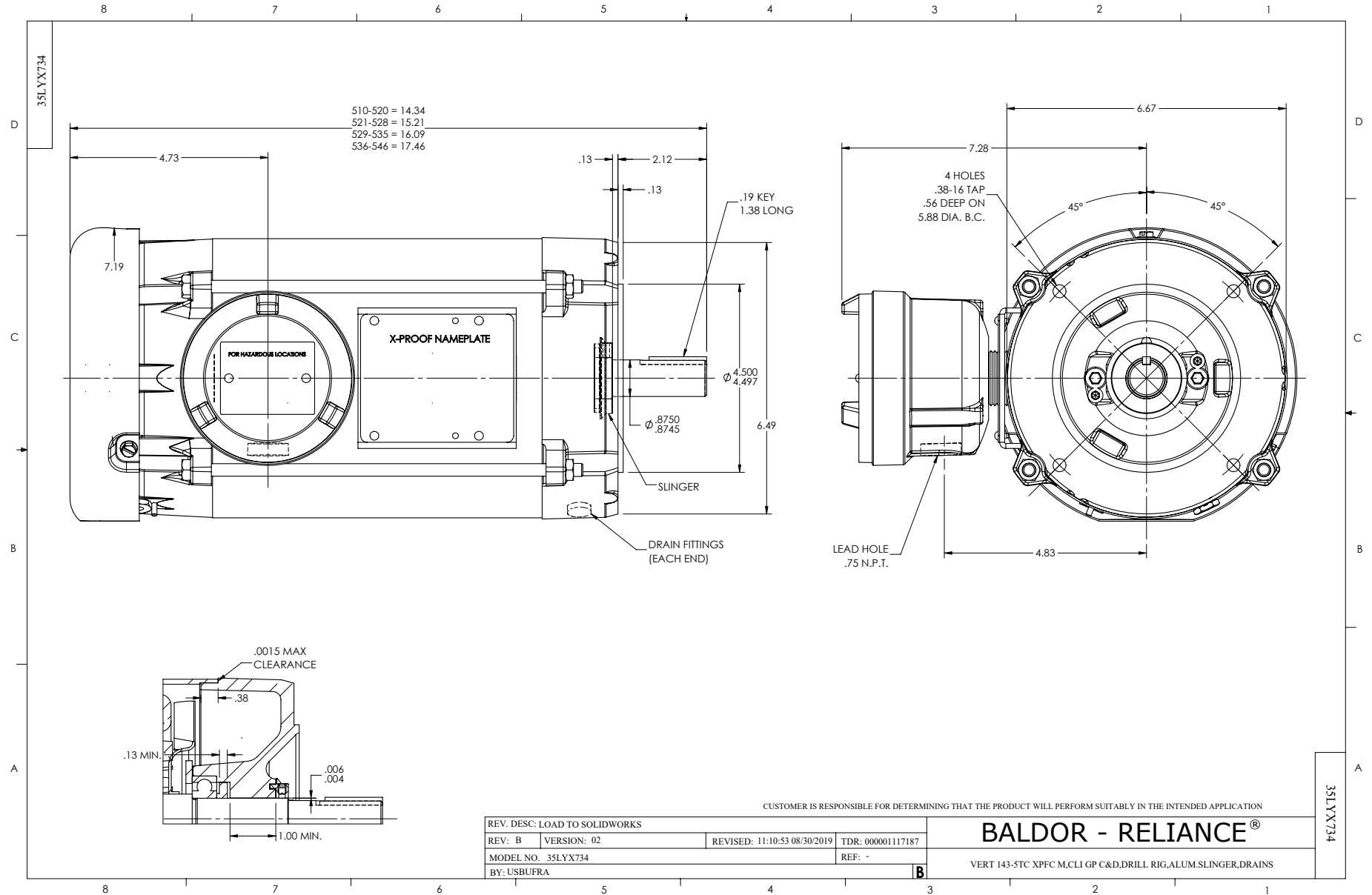
Typical performance - not guaranteed values.

0.75 HP 3 PH 50 HZ 1471 RPM 380 V 3520M

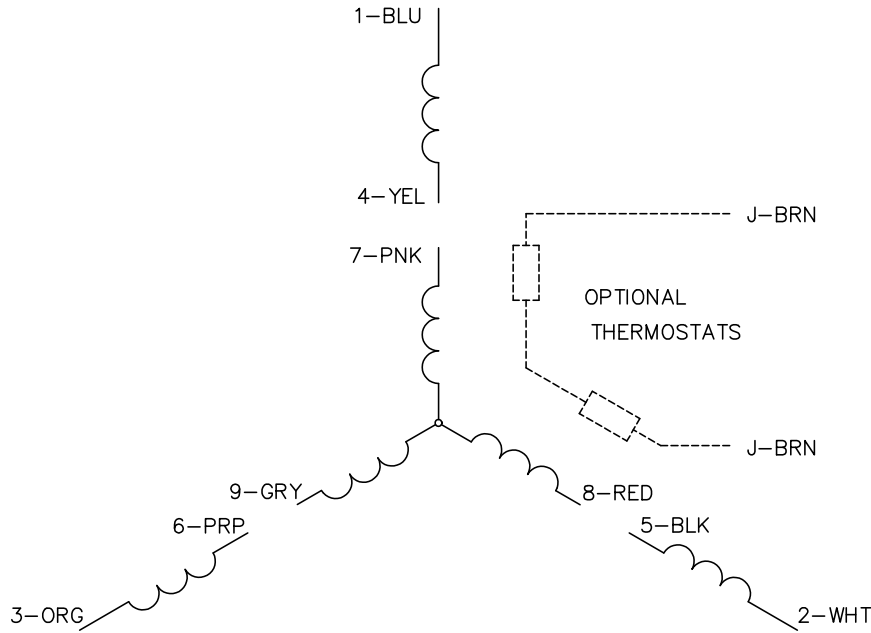
TORQUES (LB-FT): PO=12.31 PU=7.45 LR=8.55 LRA=13.12



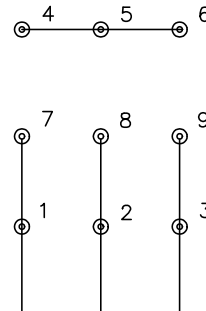
2/16/2025 ACPERF, record # 86932



CD0005

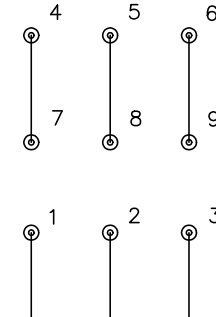


LOW VOLTAGE (2Y)



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