

**BALDOR • RELIANCE**

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# Customer information packet

## VDRX14244T

2/1.5HP, 1765//1455RPM, 3PH, 60//50HZ, 145TC

Class - CLI GP C,D

Division - Division I

## Specifications

Enclosure	XPFC
Frame	145TC
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	1.500 HP @ 60 HZ 2.000 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	5.600 A @ 230.0 V 5.800 A @ 208.0 V 5.200 A @ 190.0 V 2.800 A @ 460.0 V 2.600 A @ 380.0 V
Design Code	B
Drip Cover	No Drip Cover

## Part detail

Revision	E
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGG073
Layout	35LYX734
Eff. date	05-23-2023
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	10-28-2021

<b>Duty Rating</b>	CONT
<b>Efficiency @ 100% Load</b>	86.5 %
<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>	2.6 a
<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Duty
<b>KVA Code</b>	K
<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>	3528M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	4
<b>Overall Length</b>	15.21 IN
<b>Power Factor</b>	77
<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>	1760 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**

NP1401XPSLEV										
<b>NO.</b>		<b>CC</b>	010A							
<b>S/N</b>		<b>TEMP CODE</b>	T3C							
<b>SPEC.</b>	35-0000-1350		<b>INV.TYPE</b>	PWM						
<b>CAT.NO.</b>	VDRX14244T		<b>C HP FR</b>	60	<b>C HP TO</b>	90				
<b>HP</b>	2/1.5		<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>	5.6/2.8//5.2/2.6		<b>MAG CUR</b>	3.2/1.6						
<b>RPM</b>	1760//1465		<b>MX RPM</b>	2700						
<b>HZ</b>	60//50	<b>PH</b>	3	<b>CL</b>	F	<b>NOM.EFF.</b>	86.5			
<b>SER.F.</b>	1.00	<b>DES</b>	B	<b>SL HZ</b>	1.3	<b>WK2</b>	0.202			
<b>FRAME</b>	145TC	<b>RATING</b>	40C AMB-CONT							
	55C AMB @ 1.0 SF									
	1.15 SF SINEWAVE									

**AC Induction Motor Performance Data**

Record # 87414

Typical performance - not guaranteed values

Winding: 35WGG073-R008		Type: 3528M	Enclosure: XPFC			
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>			
Rated Output (HP)	2//1.5		Full Load Torque	5.99 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	5.6/2.8//5/2.5		Breakdown Torque	20.5 LB-FT		
R.P.M.	1760//1456		Pull-up Torque	13.8 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	15 LB-FT	
NEMA Design Code	B		KVA Code	L	Starting Current	22.5 A
Service Factor (S.F.)	1		No-load Current	1.62 A		
NEMA Nom. Eff.	86.5	Power Factor	74	Line-line Res. @ 25°C	9.54 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	64°C		
			Locked-rotor Power Factor	57.9		
			Rotor inertia	0.202 lb-ft <sup>2</sup>		

**Load Characteristics 460 V, 60 Hz, 2 HP**

% of Rated Load	25	50	75	100	125	150
Power Factor	35	55	68	76	81	84
Efficiency	78.2	85.3	86.8	86.5	85.4	83.6
Speed	1791	1782	1771	1760	1748	1734
Line amperes	1.71	1.97	2.34	2.82	3.36	3.97

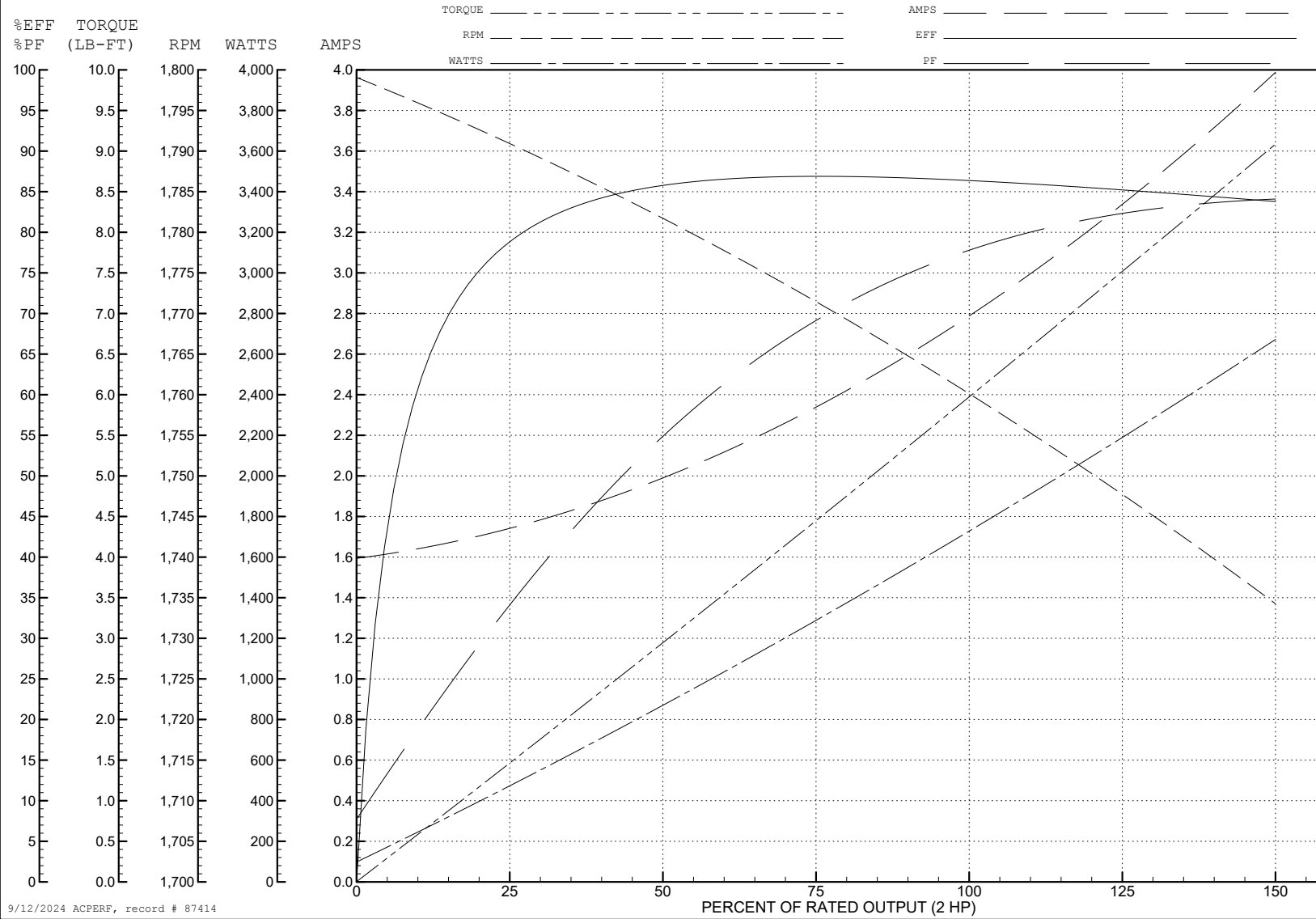
ABB Motors and Mechanical Inc.

WINDING # 35WGG073

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1760 RPM 460 V 3528M

TORQUES (LB-FT): PO=20.5 PU=13.8 LR=15 LRA=22.5



9/12/2024 ACPERF, record # 87414

**AC Induction Motor Performance Data**

Record # 87415

Typical performance - not guaranteed values

Winding: 35WGG073-R008		Type: 3528M	Enclosure: XPFC			
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>			
Rated Output (HP)	2//1.5		Full Load Torque	5.4 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	5.6/2.8//5/2.5		Breakdown Torque	18.6 LB-FT		
R.P.M.	1760//1456		Pull-up Torque	13.3 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	14.4 LB-FT	
NEMA Design Code	B		KVA Code	L	Starting Current	21 A
Service Factor (S.F.)	1				No-load Current	1.58 A
NEMA Nom. Eff.	86.5	Power Factor	74		Line-line Res. @ 25°C	9.54 Ω
Rating - Duty	40C AMB-CONT				Temp. Rise @ Rated Load	58°C
					Locked-rotor Power Factor	63.3
					Rotor inertia	0.202 lb-ft <sup>2</sup>

**Load Characteristics 380 V, 50 Hz, 1.5 HP**

% of Rated Load	25	50	75	100	125	150
Power Factor	33	53	67	75	81	84
Efficiency	75.7	83.6	85.4	85.3	84.1	82.2
Speed	1492	1484	1474	1464	1453	1440
Line amperes	1.66	1.88	2.2	2.63	3.12	3.68



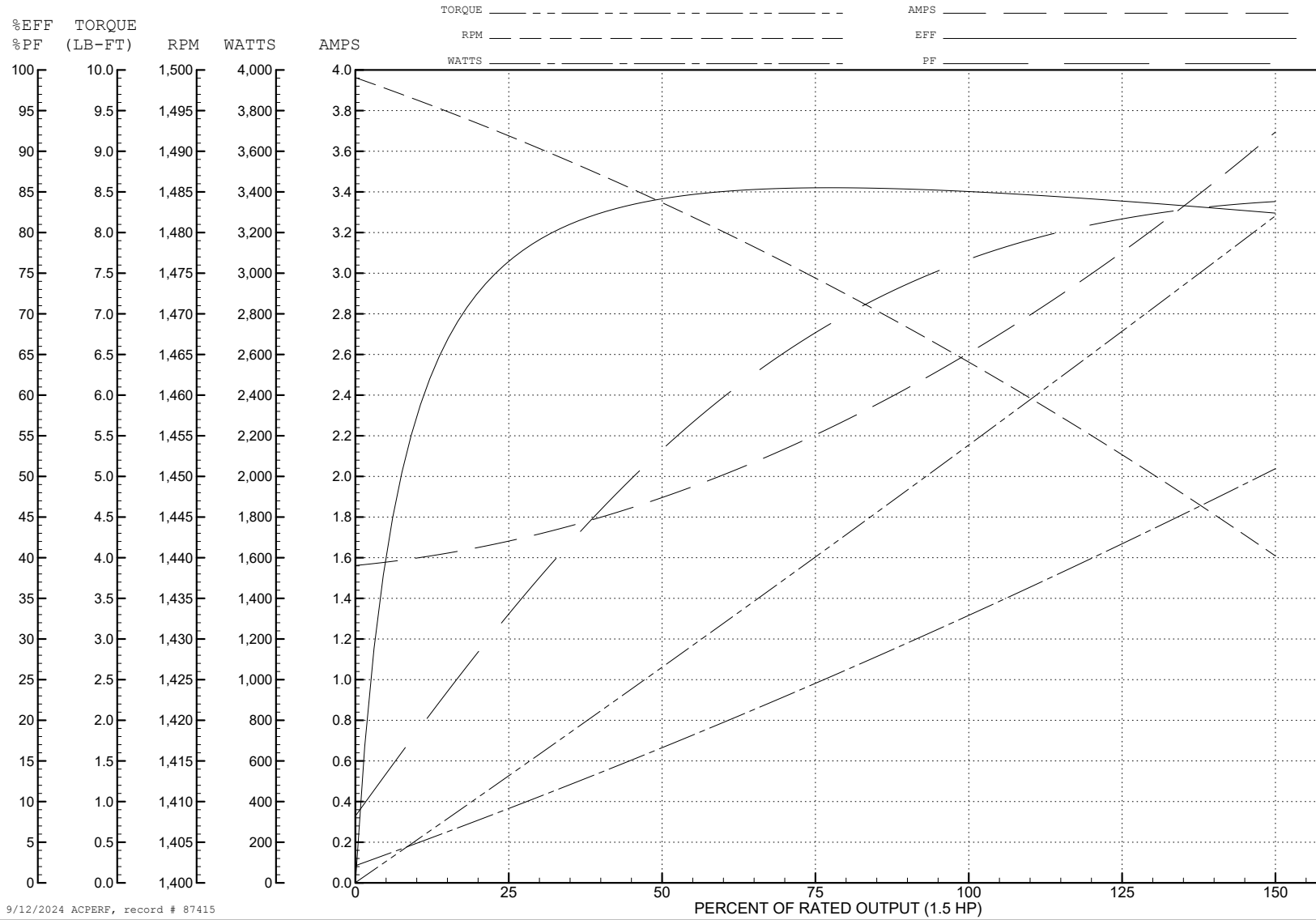
ABB Motors and Mechanical Inc.

WINDING # 35WGG073

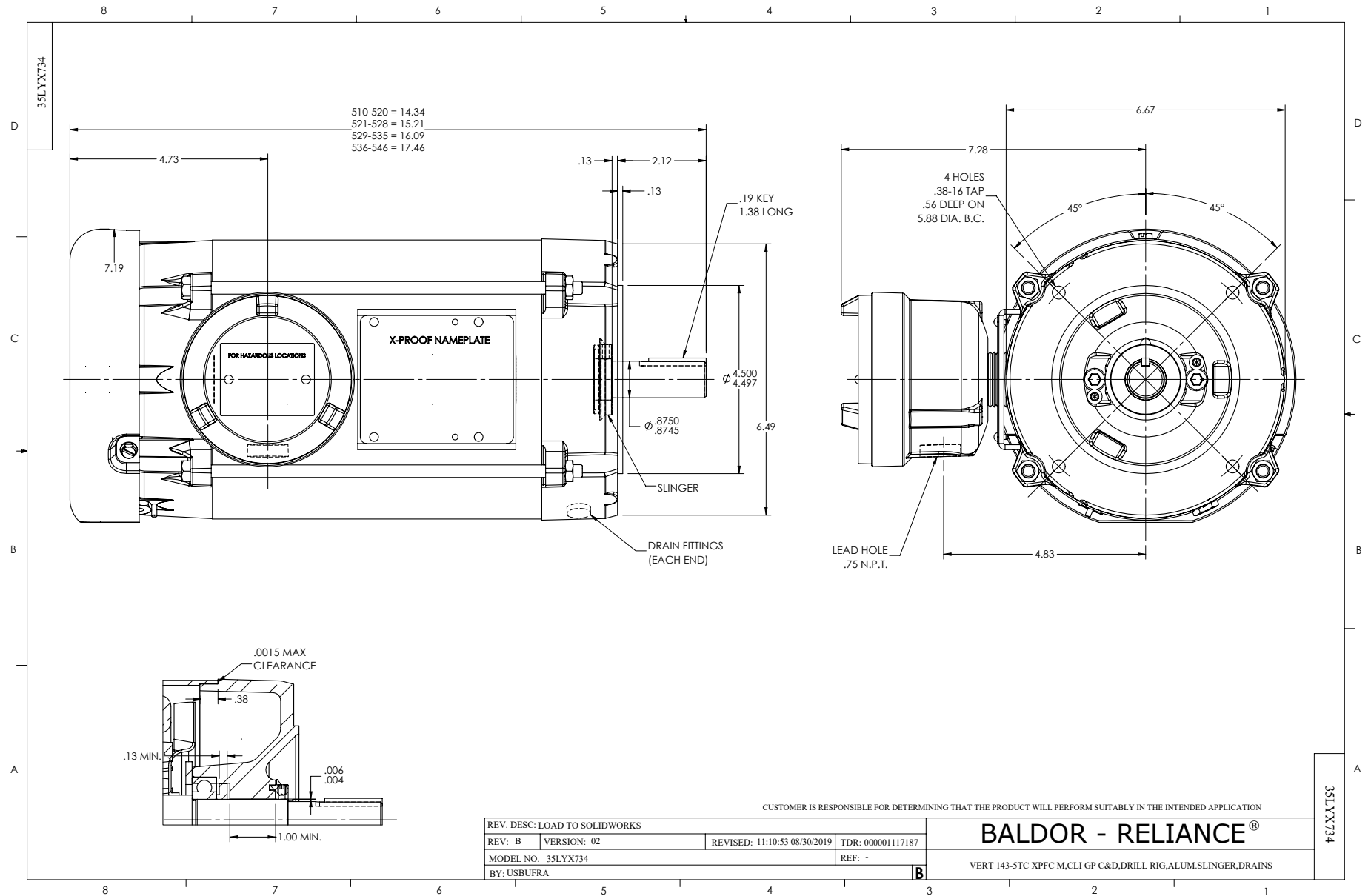
Typical performance - not guaranteed values.

1.5 HP 3 PH 50 HZ 1464 RPM 380 V 3528M

TORQUES (LB-FT): PO=18.6 PU=13.3 LR=14.4 LRA=21



9/12/2024 ACPERF, record # 87415



CD0005

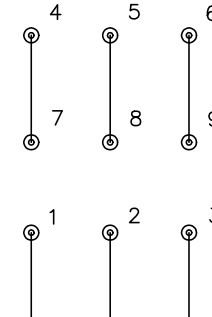


LOW VOLTAGE  
(2Y)



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