

BALDOR® • RELIANCE 

Product Information Packet

VDRX21744T

7.5HP,1770//1470RPM,3PH,60/50HZ,213TC,XP

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	07WGR561	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:		Layout:	07LYK484	Poles:	04	Created Date:	06-21-2019
Base:		Eff. Date:	09-25-2020	Leads:	9#14		

Specs			
Catalog Number:	VDRX21744T	Duty Rating:	CONT
Enclosure:	XPFC	Electrically Isolated Bearing:	Not Electrically Isolated
Frame:	213TC	Feedback Device:	NO FEEDBACK
Frame Material:	Iron	Heater Indicator:	No Heater
Output @ Frequency:	5.000 HP @ 50 HZ	Insulation Class:	F
	7.500 HP @ 60 HZ	Inverter Code:	Inverter Duty
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	IP Rating:	NONE
Voltage @ Frequency:	230.0 V @ 60 HZ	KVA Code:	K
	190.0 V @ 50 HZ	Lifting Lugs:	Standard Lifting Lugs
	380.0 V @ 50 HZ	Locked Bearing Indicator:	Locked Bearing
	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	CLI GP C,D	Motor Type:	0738M
XP Division:	Division I	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	75
	CSA EEV	Product Family:	Hazardous Location Motor
	CSA	Pulley Face Code:	C-Face
Auxillary Box:	No Auxillary Box	Rodent Screen:	None
Auxillary Box Lead Termination:	None	RoHS Status:	ROHS NON-COMPLIANT

Base Indicator:	No Mounting	Shaft Ground Indicator:	No Shaft Grounding
Bearing Grease Type:	Polyrex EM (-20F +300F)	Shaft Rotation:	Reversible
Blower:	None	Speed Code:	Single Speed
Constant Torque Speed Range:	6	Motor Standards:	NEMA
Current @ Voltage:	8.700 A @ 380.0 V	Starting Method:	Direct on line
	20.200 A @ 230.0 V	Thermal Device - Bearing:	None
	17.400 A @ 190.0 V	Thermal Device - Winding:	Normally Closed Thermostat
	10.100 A @ 460.0 V	Vibration Sensor Indicator:	No Vibration Sensor
Design Code:	A	Winding Thermal 1:	None
Drip Cover:	No Drip Cover	Winding Thermal 2:	None
		XP Temp Code:	T3C

Nameplate NP1401XPSLEV											
NO.						CC	010A				
S/N						TEMP CODE	T3C				
SPEC.	07-0000-0164					INV.TYPE	PWM				
CAT.NO.	VDRX21744T					C HP FR	60		C HP TO	90	
HP	7.5//5					CT HZ FROM	6		CT HZ TO	60	
VOLTS	230/460//190/380					VT HZ FROM	6		VT HZ TO	60	
AMPS	20.2/10.1//17.4/8.7					MAG CUR	10.8/5.4				
RPM	1770//1470					MX RPM	2700				
HZ	60//50		PH	3		CL	F		NOM.EFF.	91.7	
SER.F.	1.00		DES	A		SL HZ	1		WK2	0.934	
FRAME	213TC		RATING	40C AMB-CONT							
	55C AMB @ 1.0 SF										
	1.15 SF SINEWAVE					NEMA MG-1 PT 5,IP55					

Parts List		
Part Number	Description	Quantity
SA371143	SA 07-0000-0164	1.000 EA
RA360823	RA 07-0000-0164	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0145B01	CONNECTION LABEL	1.000 EA
NP1401XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-C&D	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
LB1081F	ALUM XP CAUTION LABEL (FS PLANT ONLY-	1.000 EA
HW3201A05	3/8-16 EYEBOLT	1.000 EA
07FH1003A05	FAN HOUSING 307 EXPLOSION PROOF W/ GREAS	1.000 EA
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	4.000 EA
37FN3002C01	EXFN, PLASTIC, 6.00 OD, 1.155 ID	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
07EP1707A17	FREP XP GR C W/DRAINS, GRSRS	1.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 EA
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 EA
07EP1708A12	PUEP 213-5TC 307M "DRILL RIG DUTY" SLING	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 EA
HA2065A02	SLINGER, ALUM MODLE 36 & 37 DRILL RIG MT	1.000 EA
80XN1032A07	SET SCREW, HEX XOCK, ZN	1.000 EA
10XN2520A32	1/4 X 2 HEX HEAD CAP SCR, GRADE 2	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 EA
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 EA
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 EA
07CB1000A01	CONDUIT BOX MACH	1.000 EA
10XN3118A16	5/16-18X1 HEX HD CAP	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
07CB1502A01	CONDUIT BOX LID MACH (DUCTILE IRON)	1.000 EA
84XN2520J16	1/4-20 X 1 SOC HD CAP SCREW	4.000 EA
MG1500Y02	WILKOPON PRIMER YELLOW	0.022 GA
MG1025G29	WILKOFASST, 789.229, DARK CHARCOAL GRAY	0.022 GA
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 EA
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT

AC Induction Motor Performance Data

Record # 72835

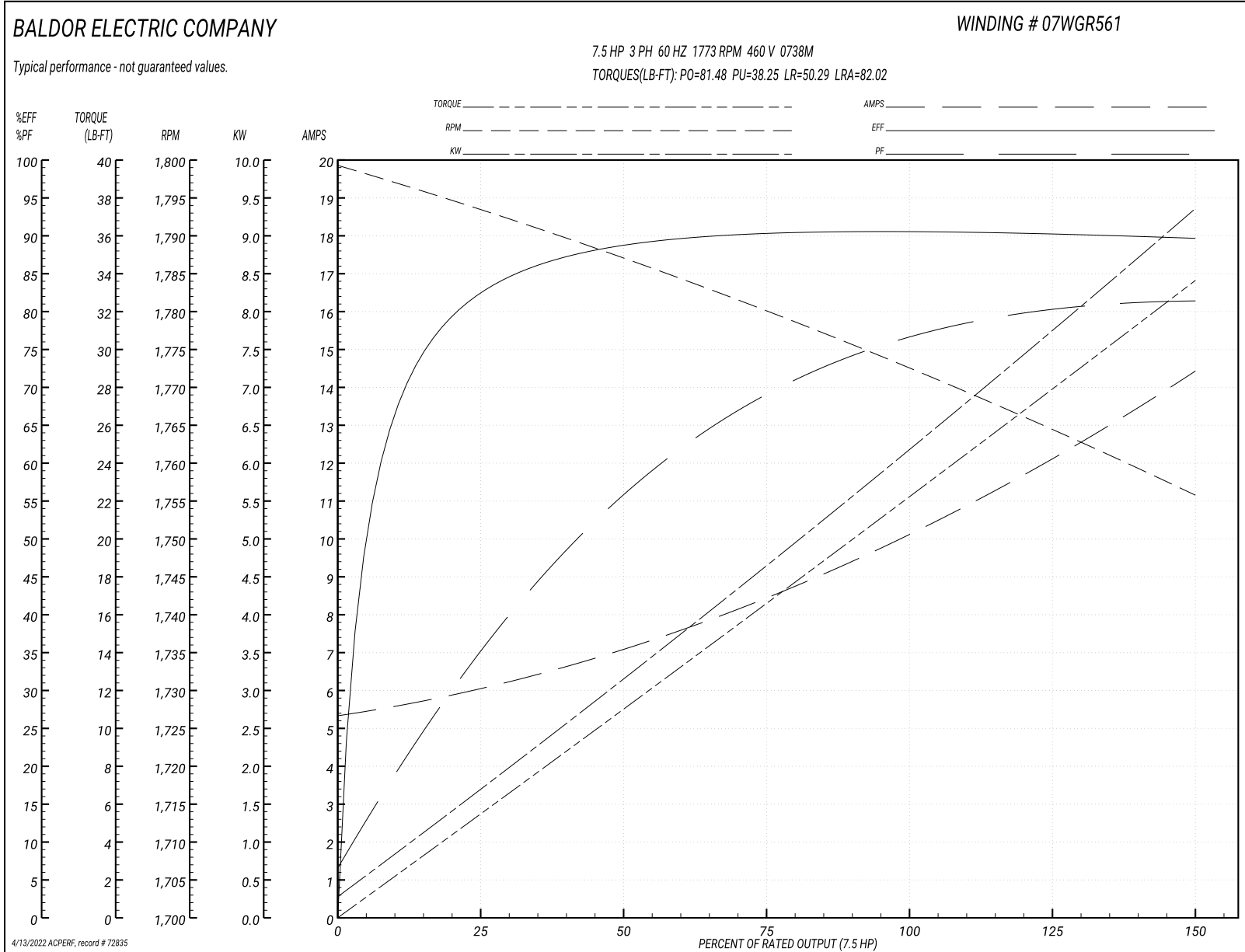
Typical performance - not guaranteed values

Winding: 07WGR561-R003		Type: 0738M		Enclosure: XPFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	7.5//5		Full Load Torque	22.08 LB-FT	
Volts	230/460//190/380		Start Configuration	direct on line	
Full Load Amps	20.2/10.1//17.4/8.7		Breakdown Torque	81.48 LB-FT	
R.P.M.	1770//1470		Pull-up Torque	38.25 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque	50.29 LB-FT
NEMA Design Code	A	KVA Code	K	Starting Current	82.02 A
Service Factor (S.F.)	1		No-load Current	5.44 A	
NEMA Nom. Eff.	91.7	Power Factor	75	Line-line Res. @ 25°C	1.22 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	42°C	
			Locked-rotor Power Factor	37.5	
			Rotor inertia	0.934 lb-ft ²	

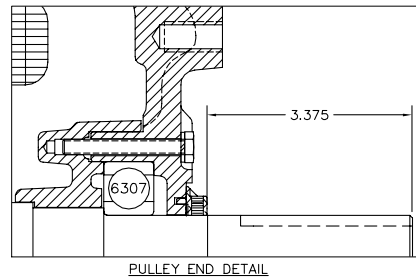
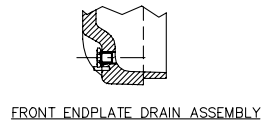
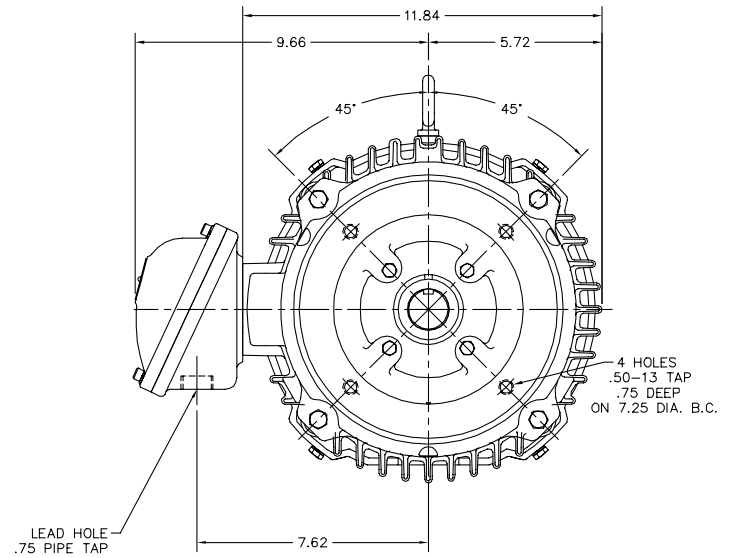
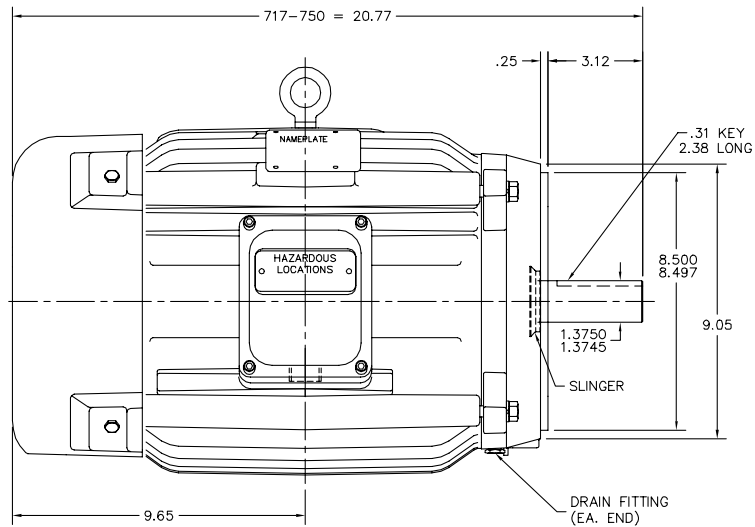
Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	36	57	69	76	80	82
Efficiency	82.1	88.6	90.3	90.6	90.2	89.6
Speed	1794	1787	1780	1773	1764	1756
Line amperes	5.93	6.99	8.43	10.18	12.2	14.34

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values



07LYK484



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

REV. DESC: NEW	VERSION: 00	TDR: 000000439619
REV. LTR: -	REVISED: 10:23:08 08/07/2007	BY: ENMATRO
FILE: \AAA\00149\767		
MTL: -		

Baldor • Dodge • Reliance
VERT 213-5TC XPFC M CL-1 GP-C&D (DRILL RIG MOTOR)

07LYK484

CD0005

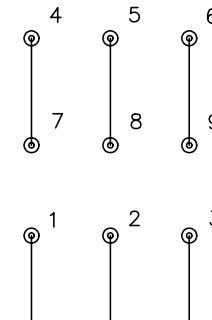


LOW VOLTAGE
(2Y)



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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005

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