

BALDOR® • RELIANCE 

Product Information Packet

VDRX25244T

20HP,1770//1470RPM,3PH,60/50HZ,256TC,XPF

Part Detail							
Revision:	F	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGT459	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:		Layout:	09LYF525	Poles:	04	Created Date:	06-06-2019
Base:		Eff. Date:	03-29-2021	Leads:	9#10		

Specs			
Catalog Number:	VDRX25244T	Duty Rating:	CONT
Enclosure:	XPFC	Electrically Isolated Bearing:	Not Electrically Isolated
Frame:	256TC	Feedback Device:	NO FEEDBACK
Frame Material:	Iron	Heater Indicator:	No Heater
Output @ Frequency:	20.000 HP @ 60 HZ	Insulation Class:	F
	15.000 HP @ 50 HZ	Inverter Code:	Inverter Duty
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	IP Rating:	NONE
Voltage @ Frequency:	190.0 V @ 50 HZ	KVA Code:	J
	230.0 V @ 60 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:	0960M
XP Division:	Division I	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	83
	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:	52.000 A @ 208.0 V	Starting Method:	Direct on line
	48.000 A @ 230.0 V	Thermal Device - Bearing:	None
	44.000 A @ 190.0 V	Thermal Device - Winding:	Normally Closed Thermostat
	24.000 A @ 460.0 V	Vibration Sensor Indicator:	No Vibration Sensor
	22.000 A @ 380.0 V	Winding Thermal 1:	None
Design Code:	A	Winding Thermal 2:	None
Drip Cover:	No Drip Cover	XP Temp Code:	T3C

Nameplate NP1401XPSLEV										
NO.						CC	010A			
S/N						TEMP CODE	T3C			
SPEC.	09-0000-1467					INV.TYPE	PWM			
CAT.NO.	VDRX25244T					C HP FR	60	C HP TO	90	
HP	20//15					CT HZ FROM	6	CT HZ TO	60	
VOLTS	230/460//190/380					VT HZ FROM	6	VT HZ TO	60	
AMPS	48/24//44/22					MAG CUR	20.8/10.4			
RPM	1770//1470					MX RPM	2700			
HZ	60//50	PH	3	CL	F	NOM.EFF.	93			
SER.F.	1.00	DES	A	SL HZ	1	WK2	2.62			
FRAME	256TC	RATING	40C AMB-CONT							
55C AMB @ 1.0 SF, 60C RISE										
1.15SF ON SINEWAVE					NEMA MG-1 PT.5,IP55					

Parts List		
Part Number	Description	Quantity
SA370410	SA 09-0000-1467	1.000 EA
RA360060	RA 09-0000-1467	1.000 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	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
LB1081Z	ALUM XP CAUTION LABEL (ZK PLANT ONLY-	1.000 EA
HW3201A01	1/2-13 EYEBOLT	1.000 EA
HW1002A63	WASHER, 5/8 HI-COLLAR SPRLCKWASHER	1.000 EA
09FH1004A48P	FAN COVER, MACH, W/GRSR, RLF & DRN HOLE	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	3.000 EA
10XN2520K14	1/4-20 X .88 HEX GRD 5 (20001)	3.000 EA
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 EA
37FN3002B02	EXFN, PLASTIC, 7.50 OD, 1.503 ID	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
09EP1700A65PP15	FR ENDPLATE, MACH, XPFC W/DRN HW4505A02	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
HA2065A03	SLINGER, ALUM.	1.000 EA
80XN1032A07	SET SCREW, HEX XOCK, ZN	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
HA4017A03	.125 X 1.75 GREASE EXT (F/S)	1.000 EA
HA4017A08	.125X3.50 GREASER EXTEN.	1.000 EA
HW4019A01	PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
09EP1708A19P	PUEP, MACH W/METAL SLINGER & HW4505A02 W	1.000 EA
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
HA2066A01	SLINGER, ALUM (AUTO)	1.000 EA
80XN1032A07	SET SCREW, HEX XOCK, ZN	1.000 EA
10XN2520K36	1/4-20 X 2.25" HX HD SCRWGRADE 5, ZINC P	4.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 EA
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 EA
09CB1003A01P	KOBX, MACH 1.25 NPT GROUP C MTRS PRIMED	1.000 EA
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
WD1000B25	GND LUG, BURNDY L125HP OR T&B L125HP-BB	1.000 EA

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10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	1.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	1.000 EA
09CB1502A01P	CONDUIT BOX LID MACH. GROUP C MTRS W/EP	1.000 EA
84XN5013J24	1/2-13 X 1-1/2 HEX SOCKET HD CAP SCREW	6.000 EA
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	6.000 EA
MG1025G29	WILKOFASST, 789.229, DARK CHARCOAL GRAY	0.070 GA
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	3.000 EA
40PA1017	PACKAGING GROUP, 09 VERT LARGE FLANGE	1.000 EA
19XW3118A08	.31-18 X .50 HEX WASHER HEAD TAPTITE II	3.000 EA
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 EA
MJ5000A09	EFI KIT #1578 (400 ML CARTRIDGE OF EFI	0.031 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 QT

AC Induction Motor Performance Data

Record # 68068

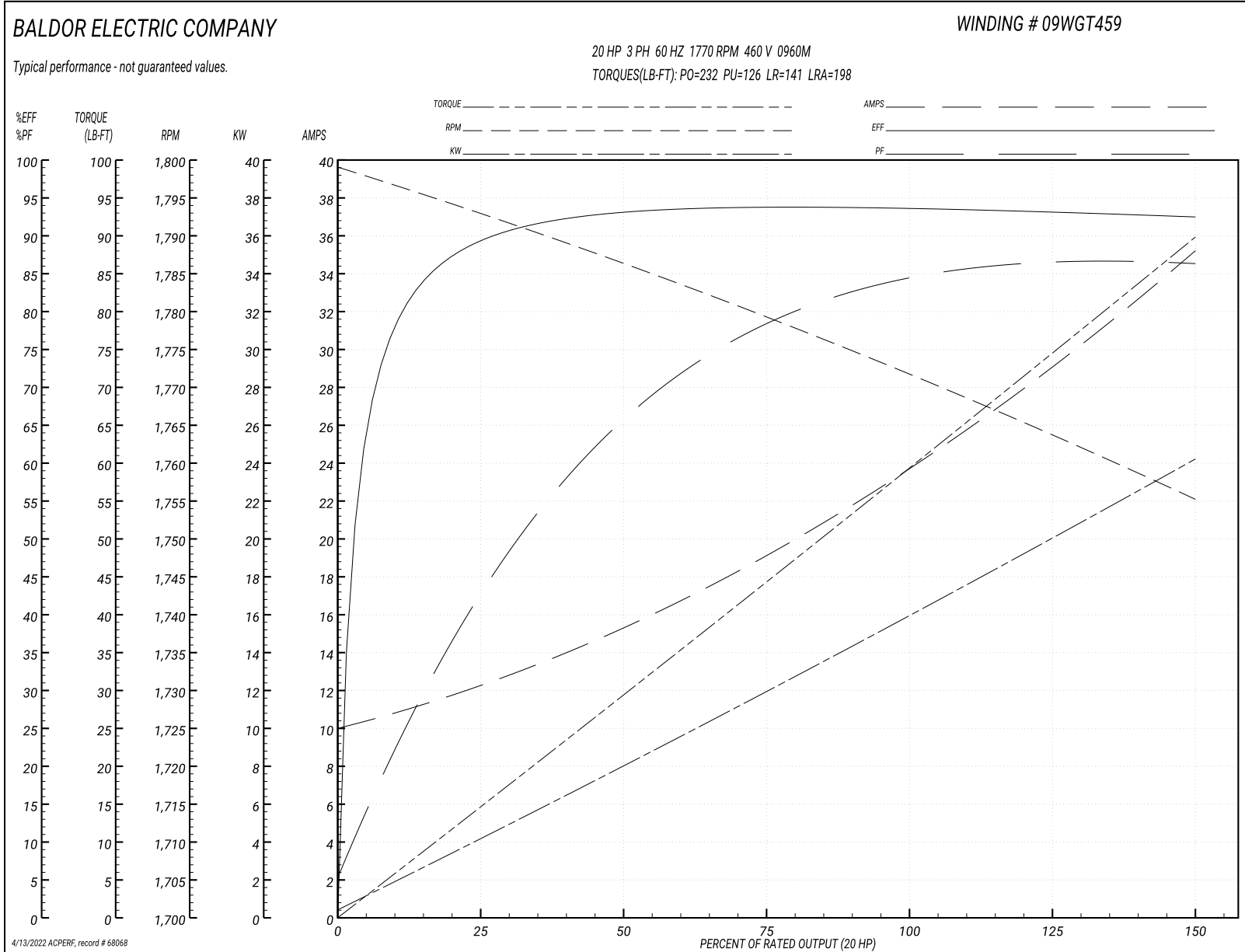
Typical performance - not guaranteed values

Winding: 09WGT459-R009		Type: 0960M		Enclosure: XPFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	20	Full Load Torque	59.27 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	48/24	Breakdown Torque	232 LB-FT		
R.P.M.	1770	Pull-up Torque	126 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	141 LB-FT	
NEMA Design Code	A KVA Code	J	Starting Current	198 A	
Service Factor (S.F.)		1	No-load Current	10.4 A	
NEMA Nom. Eff.	93 Power Factor	83	Line-line Res. @ 25°C	0.33814 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	58°C	
			Locked-rotor Power Factor	26.5	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	67	78	83	86	87
Efficiency	89.2	93	93.7	93.6	93.1	92.4
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3
Line amperes	11.8	15	19.2	24	29.3	34.9

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 75710

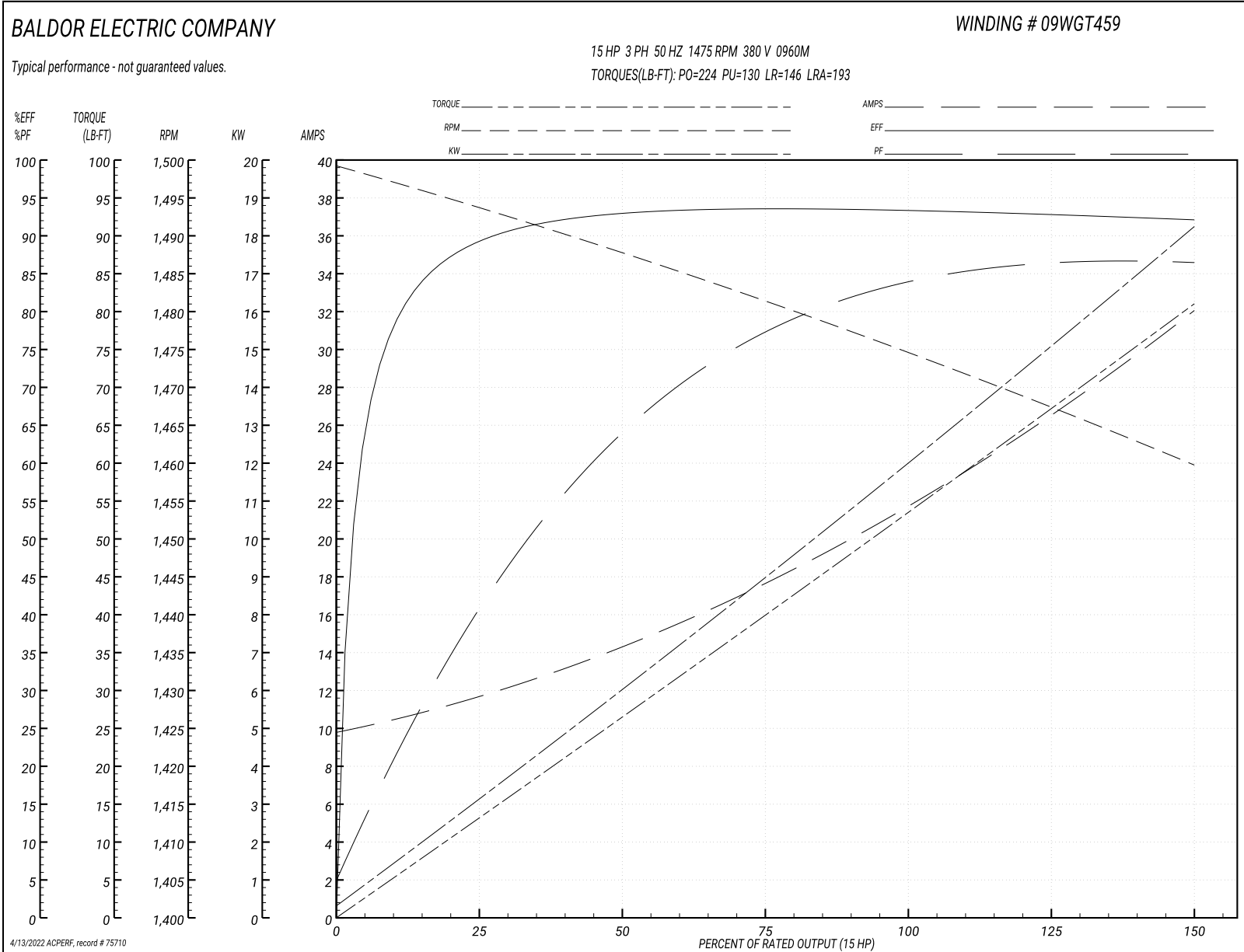
Typical performance - not guaranteed values

Winding: 09WGT459-R033		Type: 0960M		Enclosure: XPFC	
Nameplate Data			380 V, 50 Hz: High Voltage Connection		
Rated Output (HP)	20//15		Full Load Torque	53.39 LB-FT	
Volts	230/460//190/380		Start Configuration	direct on line	
Full Load Amps	48/24//44/22		Breakdown Torque	224 LB-FT	
R.P.M.	1770//1470		Pull-up Torque	130 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque	146 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	193 A
Service Factor (S.F.)	1		No-load Current	10.15 A	
NEMA Nom. Eff.	93	Power Factor	83	Line-line Res. @ 25°C	0.332 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	50°C	
S.F. Amps			Temp. Rise @ S.F. Load	60°C	
			Locked-rotor Power Factor	29.8	
			Rotor inertia	2.65 LB-FT ²	

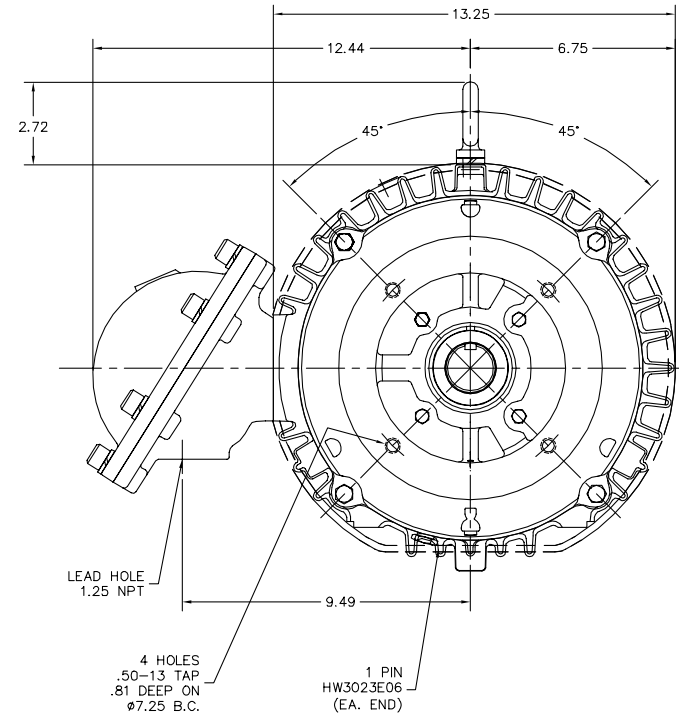
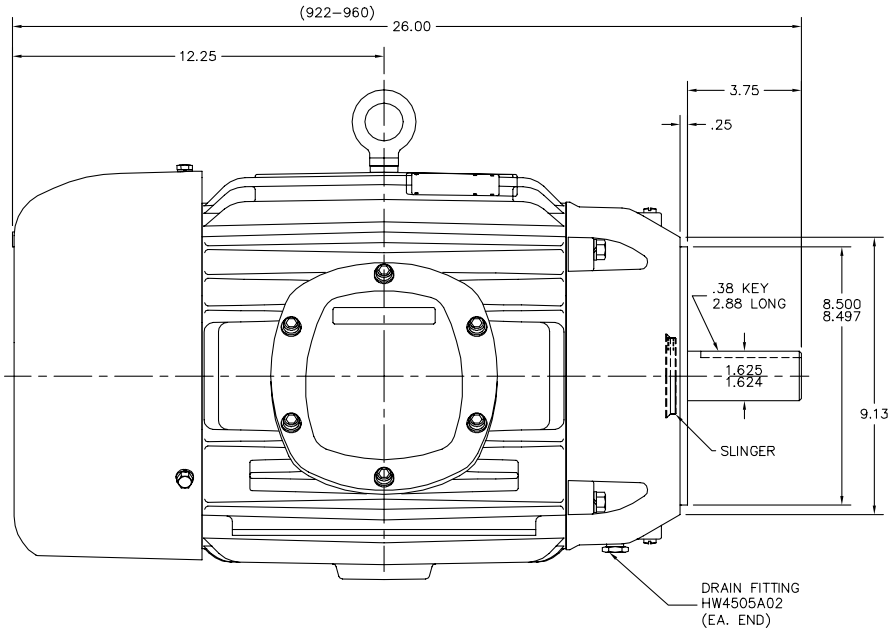
Load Characteristics 380 V, 50 Hz, 15 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	43	65	77	83	85	87
Efficiency	89.1	92.8	93.5	93.4	92.8	92.1
Speed	1494	1488	1481	1475	1467	1460
Line amperes	11.28	14	17.72	21.99	26.74	31.76

Performance Graph at 380V, 50Hz, 15.0HP Typical performance - Not guaranteed values



09LYF525



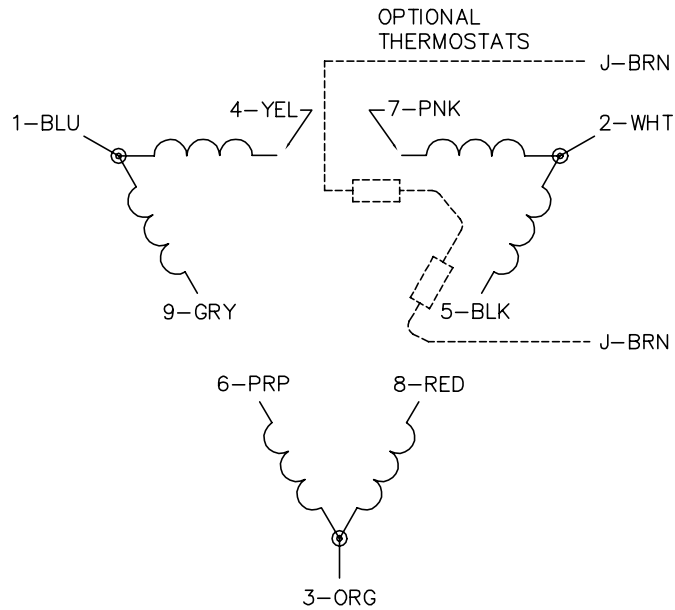
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CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

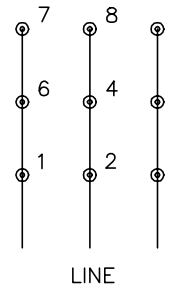
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 VERT XPFC 254-6TC, CL.I GRP.C&D ONLY, DRILL RIG
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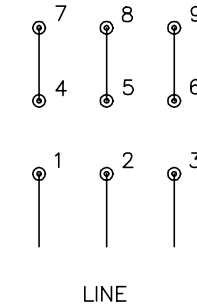
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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.

CD0180

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3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

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