

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VLECP2334T**

**20HP,1770RPM,3PH,60HZ,256LP,0960M,TEFC,F**

Part Detail							
Revision:	D	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	09WGT459	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	09T01	Layout:	09LYT001	Poles:	04	Created Date:	11-29-2017
Base:	N	Eff. Date:	04-01-2020	Leads:	9#10		

Specs			
Catalog Number:	VLECP2334T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	256LP	Inverter Code:	Inverter Duty
Frame Material:	Iron	KVA Code:	J
Output @ Frequency:	20.000 HP @ 60 HZ	Lifting Lugs:	Vertical Lifting Lugs
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Locked Bearing Indicator:	Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 10 AWG
	230.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
XP Class and Group:	CLI GP A,B,C,D	Motor Lead Termination:	Flying Leads
XP Division:	Division II	Motor Type:	0960M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	83
	CSA	Product Family:	Super-E Chemical Processing
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Thrust
Auxillary Box Lead Termination:	None	Pulley Face Code:	P-Base
Base Indicator:	No Mounting	Pulley Shaft Indicator:	P-Base Groove & Key
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	Shaft Extension Location:	Pulley End

<b>Constant Torque Speed Range:</b>	1.0	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
<b>Current @ Voltage:</b>	24.000 A @ 460.0 V	<b>Shaft Rotation:</b>	Reversible
	48.000 A @ 230.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
	52.000 A @ 208.0 V	<b>Speed Code:</b>	Single Speed
<b>Design Code:</b>	A	<b>Motor Standards:</b>	NEMA
<b>Drip Cover:</b>	Drip Cover	<b>Starting Method:</b>	Direct on line
<b>Duty Rating:</b>	CONT	<b>Thermal Device - Bearing:</b>	None
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Winding:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Face Code:</b>	Standard	<b>Winding Thermal 1:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 2:</b>	None
		<b>XP Temp Code:</b>	T3C

Nameplate NP3241											
CAT.NO.	VLECP2334T	P/N		ENCLOSURE	TEFC						
SPEC.	09T001T459G1	CC	010A	FRAME	256LP	S/N					
HP	20	CLASS	F	HZ	60	DES	A				
RPM	1770	RPM MAX	2700	PH	3	KVA-CODE	J				
VOLT	230/460	MOTOR WEIGHT	322								
AMP	48/24	SER.F.	1.15	PF	83	ODE BRG	6208	DE BRG	QJ213		
RATING	40C AMB-CONT	NEMA-NOM-EFF	93	GREASE	POLYREX EM						
				INV.TYPE	PWM						
TEMP CODE	T3C	INVERTER-TEMP-CODE	180								
TEMP =	160	C HP FR	60	C HP TO	90						
CT HZ FROM	1.0	CT HZ TO	60								
HTR-VOLTS		HTR-AMPS		HTR-WATTS		MAX. SPACE HEATER TEMP.		VT HZ FROM	0	VT HZ TO	60

Parts List		
Part Number	Description	Quantity
SA348379	SA 09T001T459G1	1.000 EA
RA336937	RA 09T001T459G1	1.000 EA
09FN3001D01SP	EXTERNAL FAN, PLASTIC	1.000 EA
09CB1002A13P	KOBX W/1.50 NPT LEAD HL,2.38 MTG HL PATT	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 EA
10XN2520K12	1/4-20 X.75 GRD 5	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HA3400A33	STUD- 3/8-16 X 4.82 HEX WELKER	4.000 EA
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 EA
10XN2520K06	1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P	1.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4600B44	V-RING SLINGER 1.500 X 1.810 X .28 VITON	1.000 EA
HW5100A08	W3118-035 WVY WSHR (WB)	1.000 EA
HW4600B43	V-RING SLINGER 2.875 X 3.355 X .35 VITON	1.000 EA
10XN2520K28	1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P	2.000 EA
10XN3118K56	5/16-18 X 3.50" HEX HD, GRADE 5	4.000 EA
09EP1505A02P	PULLEY ENDPLATE, MACH W/EPOXY PRIMER	1.000 EA
10XN3816K24	3/8-16 X 1.50 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
HW4600B42	V-RING SLINGER 2.375 X 3.070 X .28 VITON	1.000 EA
09FH1000A11P	FAN COVER, MACH P-BASE W/EPOXY PRIMER	1.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
HA6387	SPL EYE BRACKET 309-10 FRCR. STEEL P-BAS	2.000 EA
10XN3816K20	3/8-16 X 1.25 HEX HD CAP GRADE 5	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
XY3816A12	3/8-16 FINISHED NUT	4.000 EA
09FH1500A01P	DRIP COVER, MACH W/EPOXY PRIMER	1.000 EA
10XN2520K30	STD.25X20 THD HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1000A25	1/4 SAE FLAT WASHER (FS)	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
12CB1503P	CONDUIT BOX LID, CAST W/EPOXY PRIMER	1.000 EA
12GS1002	GASKET, CONDUIT BOX LID, NEOP	1.000 EA
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.001 EA
10XN3118K18	5/16-18X1-1/8 HEX HD GR5	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
HW2501G18	SQUARE STEEL KEY .375 X 2.00 LONG	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.023 EA
LB1115N	LABEL,LIFTING DEVICE (ON ROLLS)	1.000 EA
LB1002N	LABEL,MARINE DUTY (ON ROLLS)	1.000 EA
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 EA
LB1182	WARNING LABEL FOR MOTORS WITH EYENUTS	2.000 EA
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	3.000 EA
19XW3118A08	.31-18 X .50 HEX WASHER HEAD TAPTITE II	3.000 EA
09EP1100A28GP6	ENDPLATE,MACH,PRIMED, W/RELIANCE GREEN	1.000 EA
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 EA

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HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.080 LB
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 EA
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 EA
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 EA
MG1025N19	WILKOFAS, 778.50, RELIANCE BLUE-GREEN	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP3241	SS SUPER-E INV UL CSA-EEV PREM CC	1.000 EA
18PA1014	PKG. GRP., 09-10 VERTICAL MOUNT	1.000 EA
LB1449	DIV-2/NEC WARNING LABEL	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

**AC Induction Motor Performance Data**

Record # 68075 - Typical performance - not guaranteed values

<b>Winding:</b> 09WGT459-R011	<b>Type:</b> 0960M	<b>Enclosure:</b> TEFC
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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.)	1.15			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
S.F. Amps				Temp. Rise @ S.F. Load	70°C
				Locked-rotor Power Factor	26.5

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

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

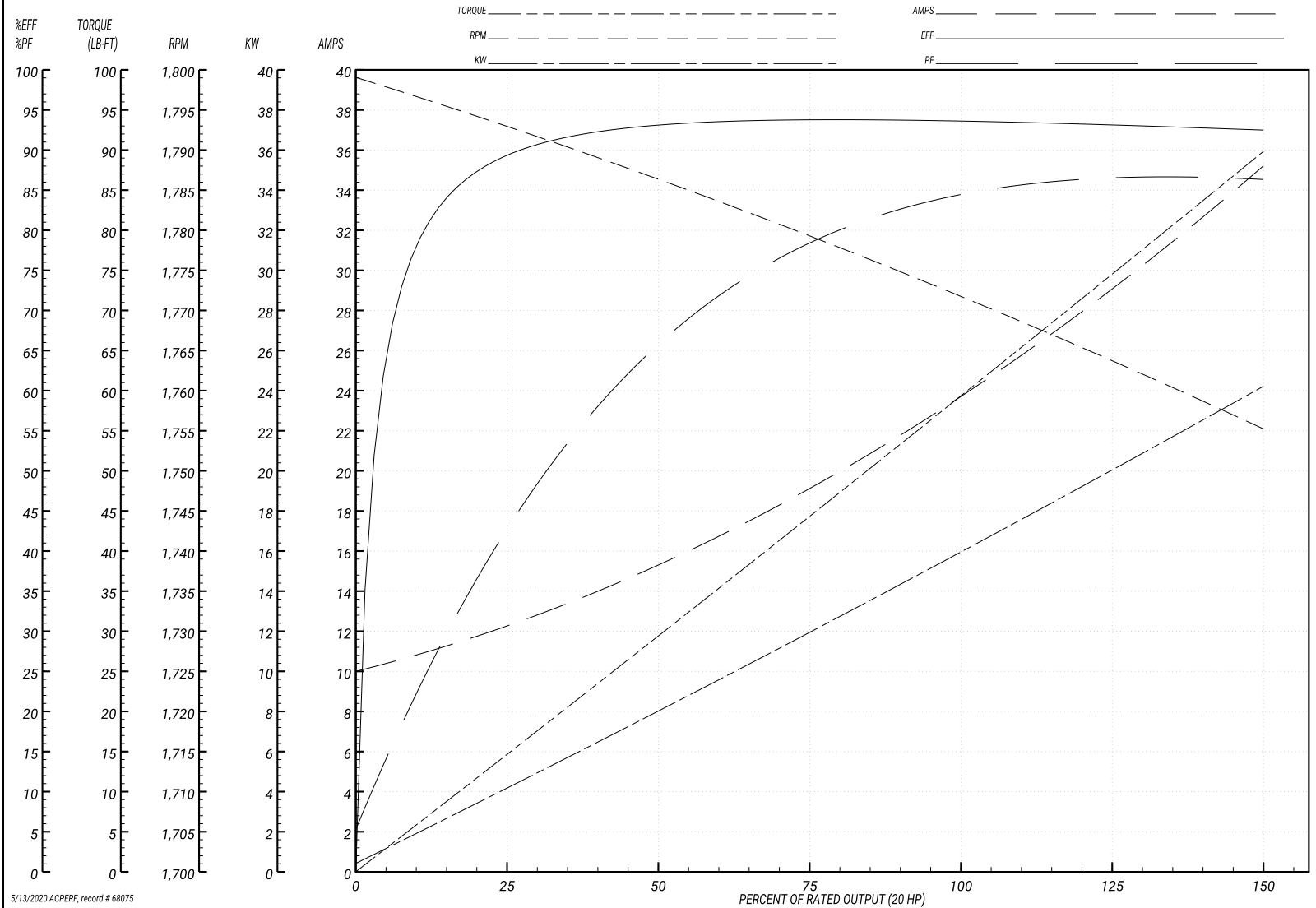
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

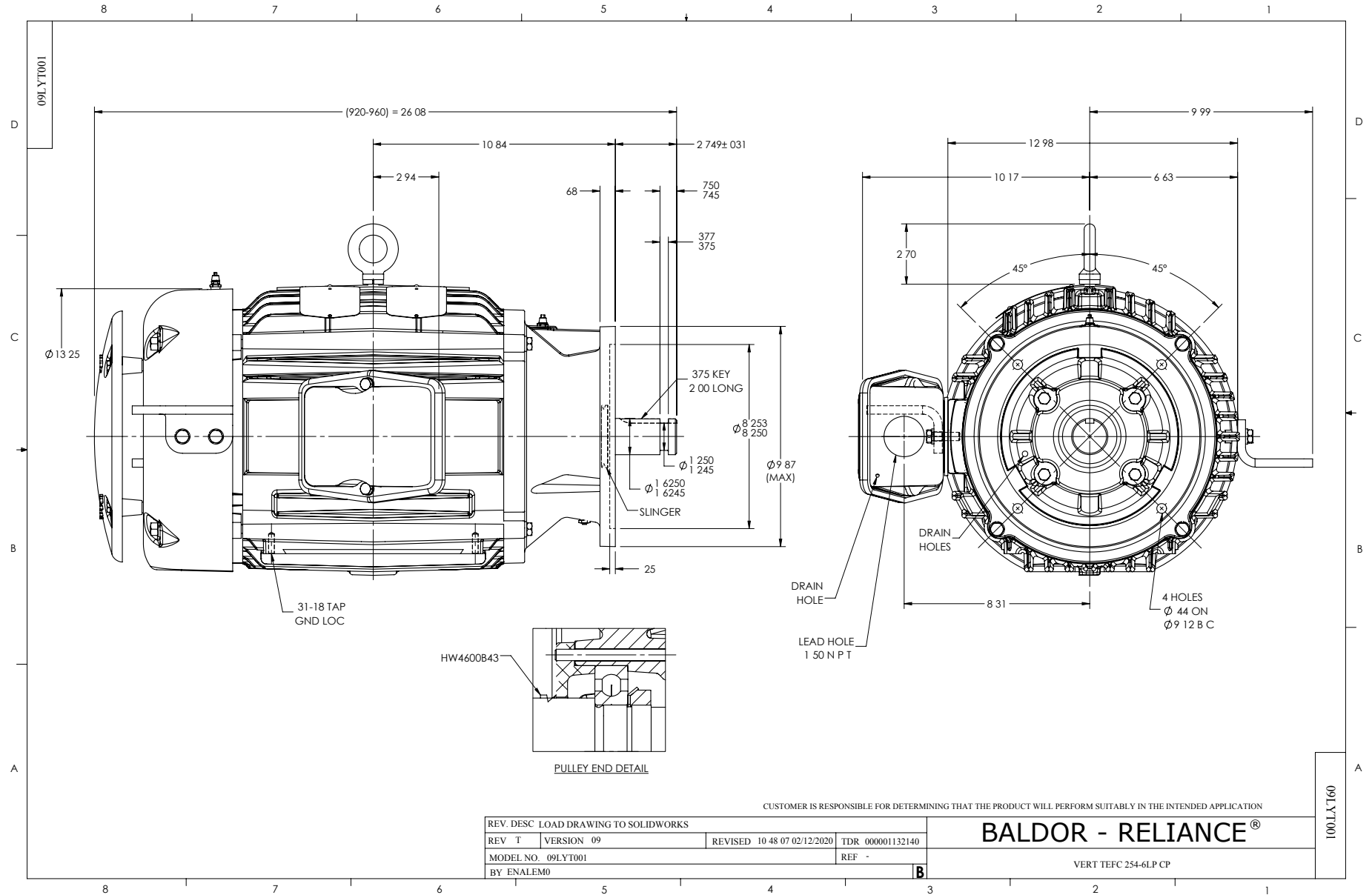
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198



5/13/2020 ACPERF, record # 68075



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

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIRO
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**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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