

BALDOR® • RELIANCE 

Product Information Packet

VHECP2334T

20HP, 1770RPM, 3PH, 60HZ, 256HP, 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:	09G604	Layout:	09LYG604	Poles:	04	Created Date:	11-20-2017
Base:	N	Eff. Date:	03-10-2020	Leads:	9#10		

Specs			
Catalog Number:	VHECP2334T	Heater Indicator:	No Heater
Enclosure:	TEFC	Insulation Class:	F
Frame:	256HP	Inverter Code:	Inverter Ready
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:	None	Motor Lead Termination:	Flying Leads
XP Division:	Not Applicable	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:	Ball
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

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

Nameplate NP1260E										
CAT.NO.	VHECP2334T									
SPEC.	09G604T459									
HP	20									
VOLTS	230/460									
AMP	48/24									
RPM	1770									
FRAME	256HP					HZ	60		PH	3
SER.F.	1.15			CODE	J	DES	A		CL	F
NEMA-NOM-EFF	93			PF	83					
RATING	40C AMB-CONT									
CC	010A					USABLE AT 208V	52			
DE	6311				ODE	6208				
ENCL	TEFC			SN						

Parts List		
Part Number	Description	Quantity
SA348033	SA 09G604T459	1.000 EA
RA336591	RA 09G604T459	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
10XN2520K12	1/4-20 X.75 GRD 5	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
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
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
HW4600E45	CR#20599 DBL LIP VITON SEAL 2.063 I.D.	1.000 EA
HW4600B40	V-RING SLINGER 2.000 X 2.680 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
HA6387	SPL EYE BRACKET 309-10 FRCR. STEEL P-BAS	2.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	2.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 EA
HW2501E18	KEY, 1/4 SQ X 2.000	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
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
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

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09EP1505A11P	PU ENDPLATE ENCL 213 BRG 309 254-256LP,	1.000 EA
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 EA
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	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	WILKOFASST, 778.50, RELIANCE BLUE-GREEN	0.050 GA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0181	CONNECTION LABEL	1.000 EA
NP1260E	SS CP SUPER-E UL CSA CC	1.000 EA
40PA1014	PACKAGING GROUP, 09 NO BASE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA

AC Induction Motor Performance Data

Record # 67948 - Typical performance - not guaranteed values

Winding: 09WGT459-R001	Type: 0960M	Enclosure: 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	26.9

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

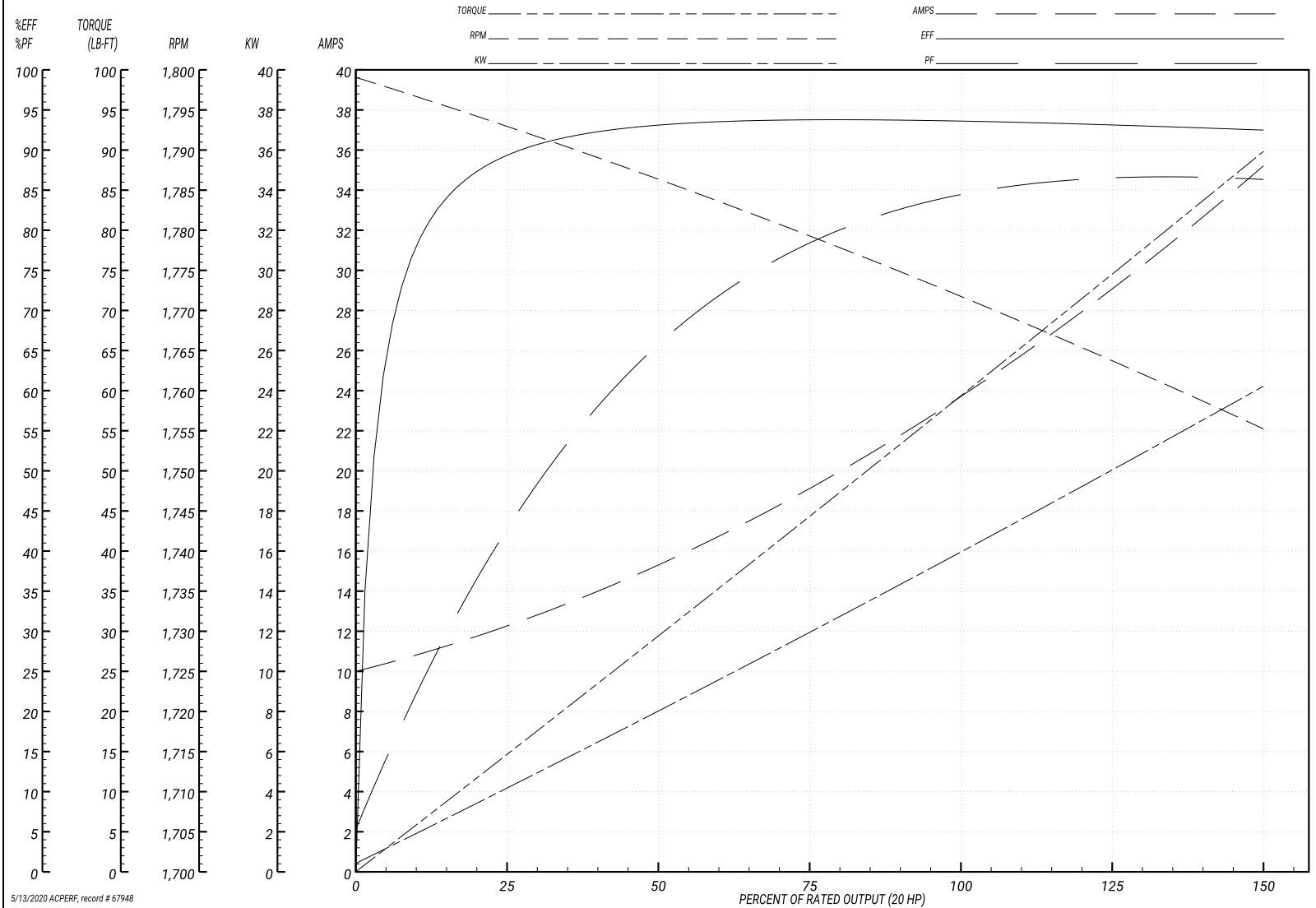
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

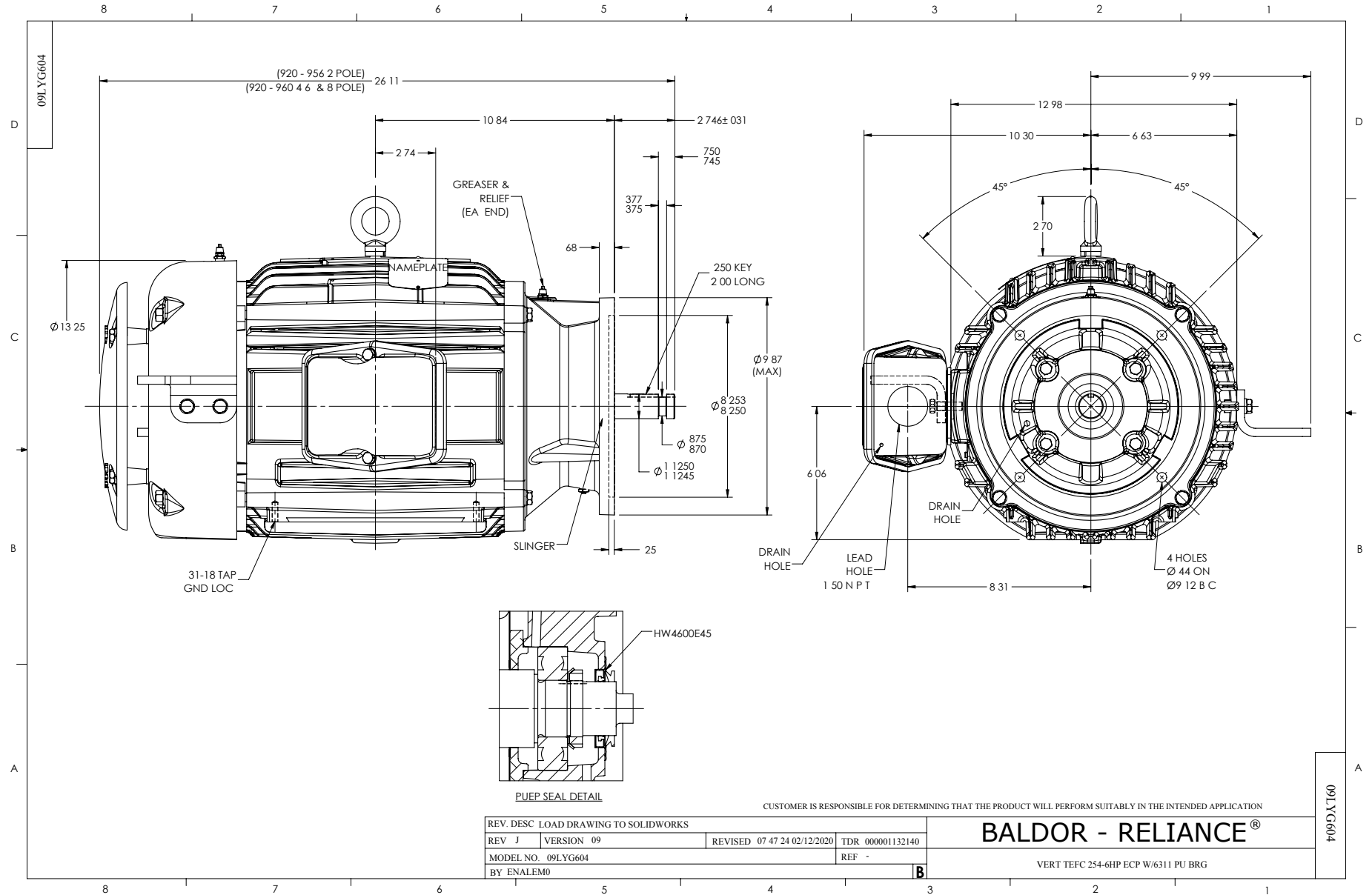
Typical performance - not guaranteed values.

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

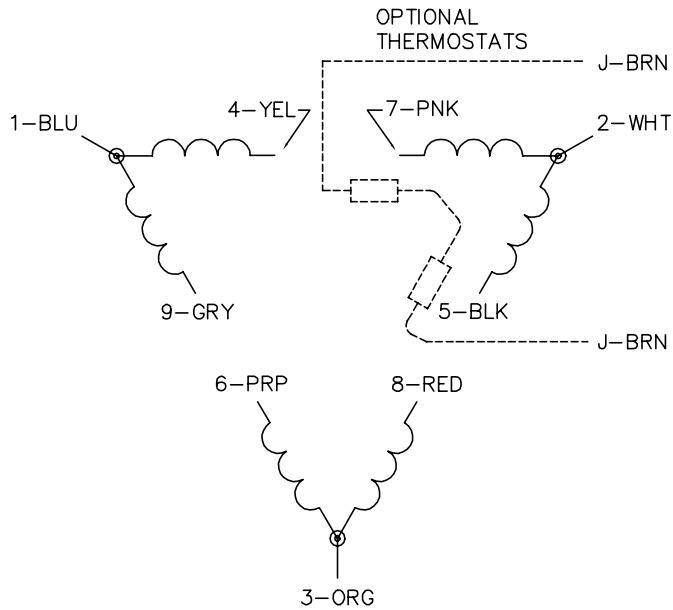
TORQUES(LB-FT): PO=232 PU=126 LR=141 LRA=198



5/13/2020 ACPERF, record # 67948



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
MTL: -	© □	

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3PH, DV, 9 LEADS, DELTA CONNECTION

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