

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VHECP4104T**

**30HP, 1760RPM, 3PH, 60HZ, 286HP, 1056M, TEFC, F**

Part Detail							
Revision:	A	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	10WGY538	CD Diagram:	CD0180	Mfg Plant:	
Mech. Spec:	10F352	Layout:	10LYF352	Poles:	04	Created Date:	08-24-2017
Base:	N	Eff. Date:	05-09-2018	Leads:	9#8		

Specs			
Catalog Number:	VHECP4104T	Insulation Class:	F
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	286HP	IP Rating:	NONE
Frame Material:	Iron	KVA Code:	J
Output @ Frequency:	30.000 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 @ 8 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:	1056M
Agency Approvals:	UR	Mounting Arrangement:	F1
	CSA EEV	Power Factor:	80
	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

<b>Current @ Voltage:</b>	38.000 A @ 460.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	76.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	78.000 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	Shaft Slinger
<b>Design Code:</b>	A	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 2:</b>	None

<b>Nameplate NP1260E</b>											
CAT.NO.	VHECP4104T										
SPEC.	10F352Y538G2										
HP	30										
VOLTS	230/460										
AMP	76/38										
RPM	1760										
FRAME	286HP						HZ	60		PH	3
SER.F.	1.15			CODE	J	DES	A		CL	F	
NEMA-NOM-EFF	93.6			PF	80						
RATING	40C AMB-CONT										
CC	010A						USABLE AT 208V	78			
DE	6311			ODE	6309						
ENCL	TEFC			SN							

Parts List		
Part Number	Description	Quantity
SA343828	SA 10F352Y538G2	1.000 EA
RA332298	RA 10F352Y538G2	1.000 EA
10CB1000A16P	KOBX, MACH 2.00 NPT W/#26 DRAIN W/PRIMER	1.000 EA
09GS1010	GASKET, DWG, LEADWIRE SEPERATOR	1.000 EA
10XN3118K16	5/16-18 X 1' GRADE #5, STL, ZINC PLATE	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	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
HA4017A11	1/8 X 2.75 GREASE EXT (F/S)	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
HA1005A26	SLINGER, OD 3.00, ID 1.75, 309 BRG	1.000 EA
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 EA
10XN2520K32	1/4-20 X 2.00 HX HD SCRW GRADE 5, ZINC P	2.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 EA
10XN3118K56	5/16-18 X 3.50" HEX HD, GRADE 5	4.000 EA
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 EA
10EP1503A06P	SPL PU EP 6311 BRG 284-6HP, EPXY PRM	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
HW4600A90	SEAL 2.125 X 2.875 X 0.375 SINGLE LIP	1.000 EA
HW4600B41	V-RING SLINGER 2.125 X 2.880 X 0.280	1.000 EA
10FH1007A10P	FAN HOUSING MODEL 310 TEFC MOTORS W/EPOX	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
10XN3816K24	3/8-16 X 1.50 HEX HD CAP SCREW, GRADE 5	3.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	3.000 EA
12FH1500A01P	MACH DRIP COVER 310-312 MTRS	1.000 EA
10XN3816K36	3/8-16 X 2.25 HEX HD CAP SCREW, GRADE 5	4.000 EA
HW1000A38	WASHER, 3/8" FLAT, SAE Z/P	4.000 EA
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 EA
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
10CB1503A01P	CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR	1.000 EA
14GS1003	GASKET CONDUIT BOX LID, NEOP	1.000 EA
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 EA
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 EA
HW2501E11	KEY, 1/4 SQ X 1.125	1.000 EA
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.031 QT
MJ5001A14	DYNAPRO SEALANT, CP MTR VC#2508050 (603	0.026 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
10XN3816K10	BOLT, 3/8-16 X 5/8 HHCS YZ	3.000 EA
10EP1104A41GP6	FREP, MACH W/EPOXY PRIMER & PAINT	1.000 EA
HW4500A21	1618BALEMITE FITTING 825 UNIVERSAL	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	0.130 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
09FN3001C02	EXTERNAL FAN, PLASTIC	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	0.125 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
18PA1057	PKG. GRP., VERT SHIP 30.5+MAX 4-3/4"SHAF	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
PE-0000013	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 32189 - Typical performance - not guaranteed values

<b>Winding:</b> 10WGY538-R004	<b>Type:</b> 1056M	<b>Enclosure:</b> TEFC
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	30			Full Load Torque	88.7 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	76/38			Breakdown Torque	330 LB-FT
R.P.M.	1760			Pull-up Torque	142 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	178 LB-FT
NEMA Design Code	A	KVA Code	J	Starting Current	270 A
Service Factor (S.F.)	1.15			No-load Current	17.9 A
NEMA Nom. Eff.	93.6	Power Factor	80	Line-line Res. @ 25°C	0.19377 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	64°C
S.F. Amps				Temp. Rise @ S.F. Load	76°C
				Locked-rotor Power Factor	30.9
				Rotor inertia	4.47 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 30 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	73	80	82	85	81
Efficiency	87.6	92.3	93.5	93.7	93.4	92.9	93.5
Speed	1792.2	1787.6	1782.4	1776.5	1770.3	1762.1	1773
Line amperes	19.8	24.3	30.7	37.6	45.6	55.2	42.4

Performance Graph at 460V, 60Hz, 30.0HP Typical performance - Not guaranteed values

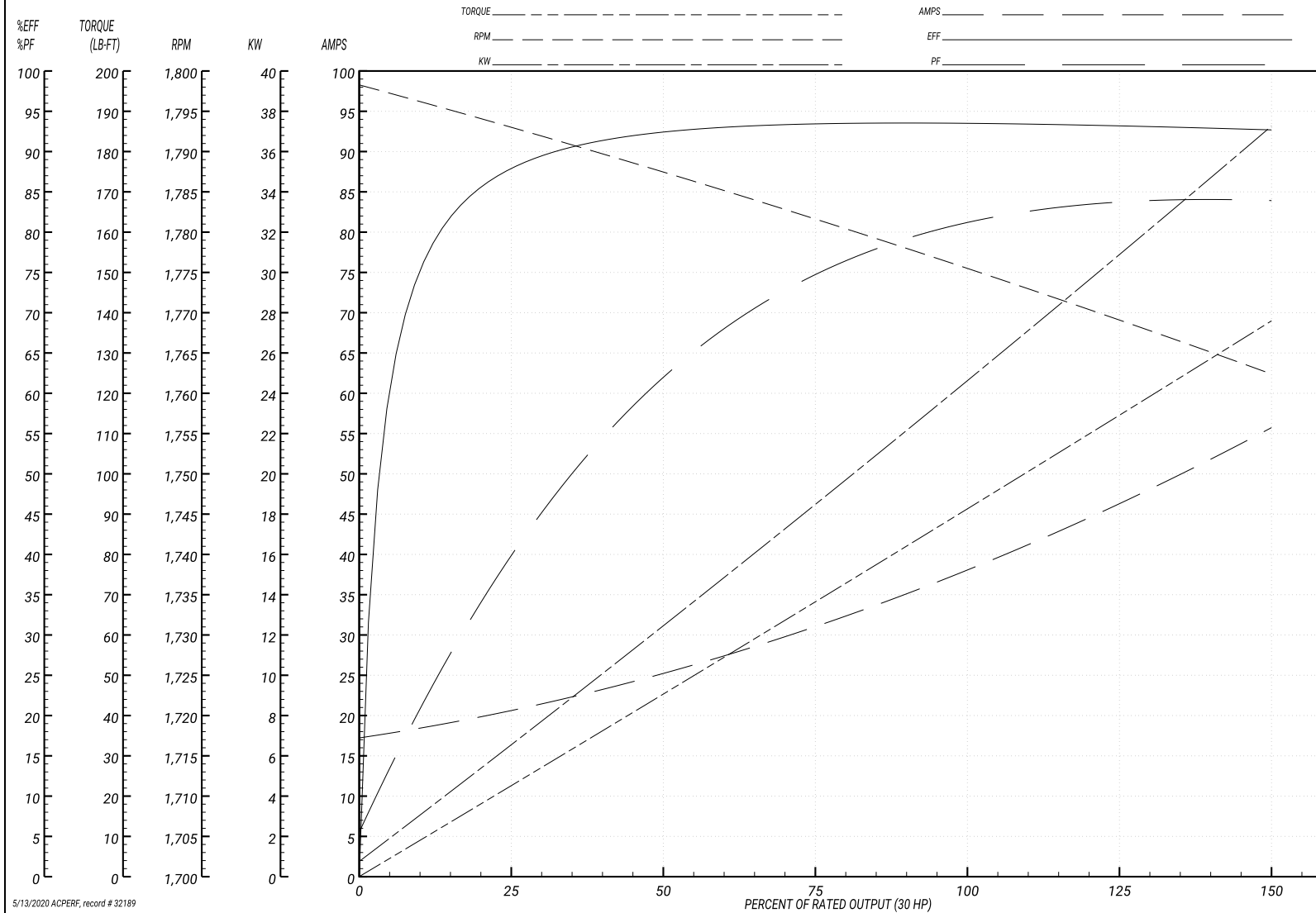
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

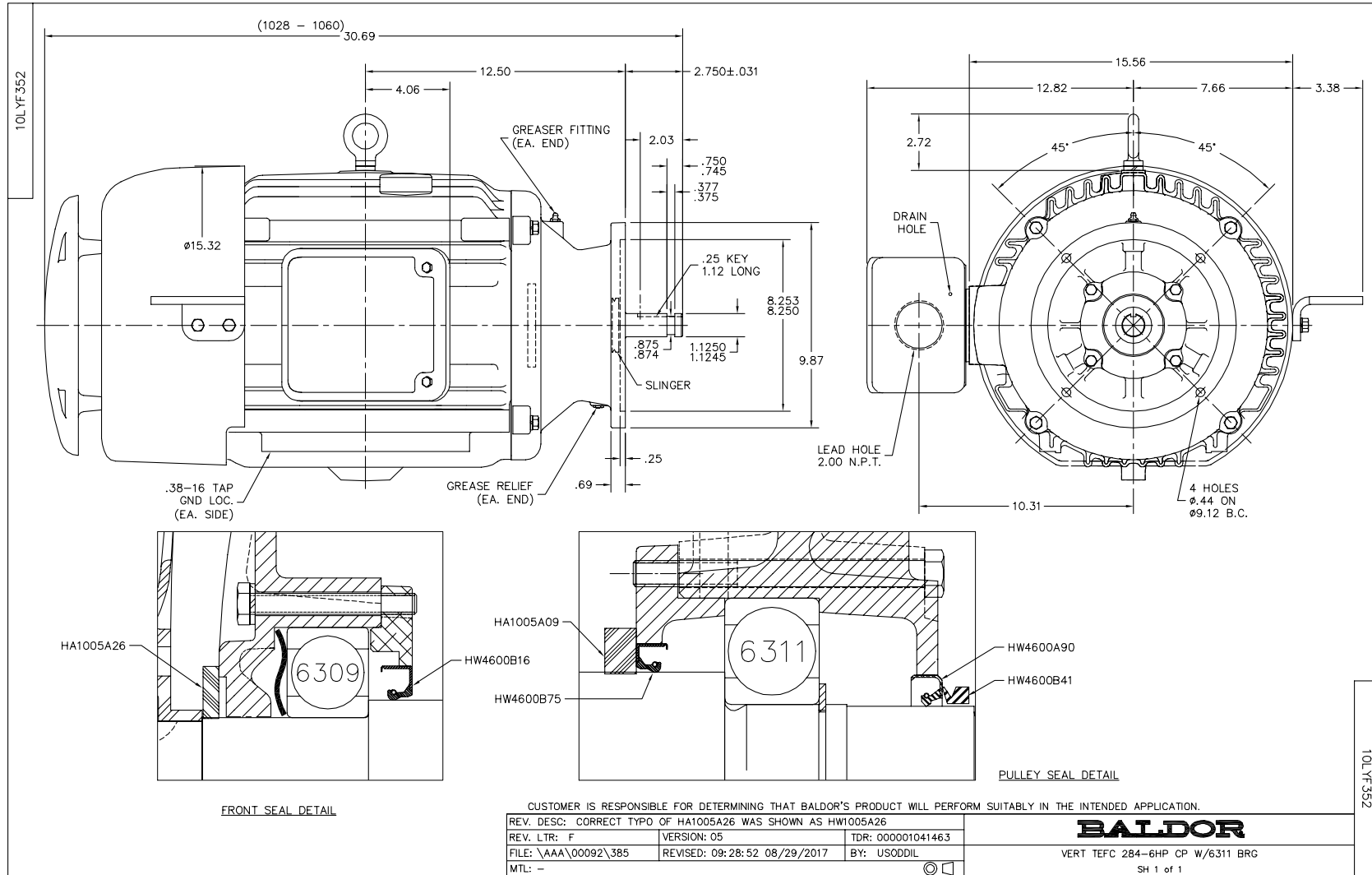
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

TORQUES(LB-FT): PO=330 PU=142 LR=178 LRA=270



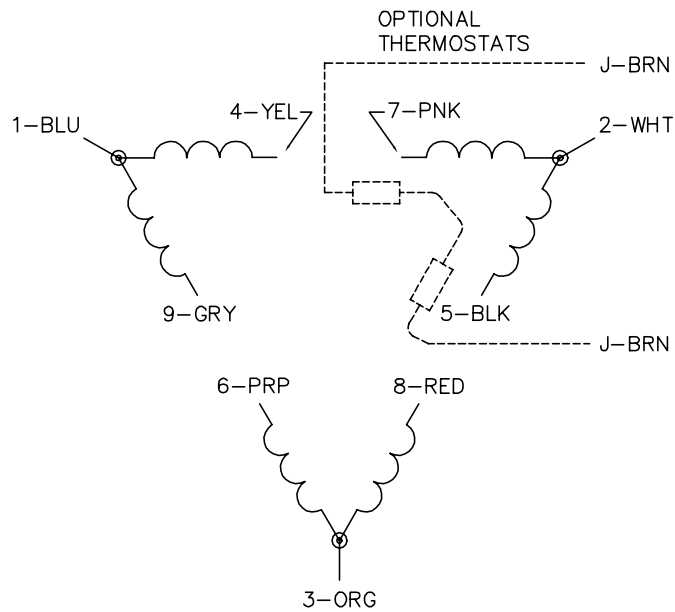
5/13/2020 ACPERF, record # 32189



REV. DESC: CORRECT TYPO OF HA1005A26 WAS SHOWN AS HW1005A26		
REV. LTR: F	VERSION: 05	TDR: 000001041463
FILE: \AAA\00092\385	REVISED: 09:28:52 08/29/2017	BY: USODDIL
MTL: -		

**BALDOR**  
 VERT TEFC 284-6HP CP W/6311 BRG  
 SH 1 of 1

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: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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