

**BALDOR • RELIANCE**

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# Customer information packet

## VEM2516T

25HP, 3515RPM, 3PH, 60HZ, 254TC, 3938M, OPEN, F

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPEN
Frame	254TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	25.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	56.000 A @ 230.0 V 62.000 A @ 208.0 V 28.000 A @ 460.0 V
Design Code	A
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

## Part detail

Revision	Y
Type	AC
Mech. spec.	39P021
Base	
Status	PRD/A
Elec. spec.	39WGX424
Layout	39LYP021
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	05-01-2015

Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	28.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3938M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	22.15 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3515 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None

<b>Vibration Sensor Indicator</b>	<b>No Vibration Sensor</b>
<b>Winding Thermal 1</b>	<b>None</b>
<b>Winding Thermal 2</b>	<b>None</b>

**Nameplate**

NP3554LUA										
<b>CAT.NO.</b>	VEM2516T			<b>P/N</b>				<b>ENCL</b>		<b>OPEN</b>
<b>SPEC.</b>	39P021X424G1	<b>CC</b>	010A	<b>FRAME</b>	254TC		<b>SER.NO.</b>			
<b>HP</b>	25		<b>CLASS</b>	F	<b>HZ</b>	60				
<b>RPM</b>	3515		<b>PH</b>	3	<b>DES</b>	A				
<b>VOLTS</b>	230/460		<b>CODE</b>	G	<b>ODE BRG</b>	6208	<b>DE BRG</b>	6309		
<b>AMPS</b>	56/28									
<b>RATING</b>	40C AMB-CONT		<b>NEMA-NOM-EFF</b>	91.7	<b>GREASE</b>	POLYREX EM				
<b>PF</b>	89	<b>SER.F.</b>	1.15		<b>CT30-60(2:1)</b>	<b>VT3-60(20:1)</b>				
<b>USABLE AT</b>	50HZ 25HP 190/380V 68/34A			<b>SF 1.0</b>						
<b>HTR-VOLTS</b>	<b>HTR-AMPS</b>			<b>MAX. SPACE HEATER TEMP.</b>						

## Parts list

Part number	Description	Quantity
SA300117	SA 39P021X424G1	1.000 ea
RA287163	RA 39P021X424G1	1.000 ea
HA6016	ADAPTER, CAST CONDUIT BOX	1.000 ea
09CB3003	CB W/1.75" DIA LD HL - 37, 39, 307 & 309	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
WD1000B16	T&B CX70TN OR L70P TERMINAL LUG	1.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
39EP3200A02	FR E P, MACH - DR CVR MTG	1.000 ea
39AD2002A01	BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS	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	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
39EP3400A01	STD FACE MTD ENDPLATE 309 BRG	1.000 ea
HA3154A05	THRUBOLT STUD 3/8-16 X 16.875	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 ea
39FH4500A01	DRIP COVER, STAMPED	1.000 ea
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	2.000 ea
HA2001B08	SPL SPACER FOR AIR DEFLECTOR .50 O.D. X	2.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501G25	KEY, 3/8 SQ X 2.875	1.000 ea
PK6016	BASELESS FOOT BRACKET FOR 39 & 40 FRAME	3.000 ea
10XN5013K20	1/2-13 X 1.25 LON HEX HD SCREW SAME AS	2.000 ea
HW1000A50	1/2 SAE FLAT WASHERS	2.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	1.000 ea
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.050 ga
MJ1000A02	GREASE, POLYREX EM EXXON	0.030 lb

HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0181	CONNECTION LABEL	1.000 ea
NP3554LUA	SS SUPER-E VPWM INV READY,CURUS-EEV,PREM	1.000 ea
39PA1000	PACKAGING GROUP 39 PRINT	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
LD7020E09	LEAD SET, 10AWG, 9 LEAD, 20" LONG LEADS	1.000 ea

**AC Induction Motor Performance Data**

Record # 32011

Typical performance - not guaranteed values

<b>Winding: 39WGX424-R001</b>		<b>Type: 3938M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	25		<b>Full Load Torque</b>	37.2 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	56/28		<b>Breakdown Torque</b>	148 LB-FT	
<b>R.P.M.</b>	3515		<b>Pull-up Torque</b>	54.9 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	77.2 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	197 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	8.48 A	
<b>NEMA Nom. Eff.</b>	<b>91.7 Power Factor</b>	89	<b>Line-line Res. @ 25°C</b>	0.38245 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	46°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	57°C	
			<b>Locked-rotor Power Factor</b>	28.7	
			<b>Rotor inertia</b>	0.971 lb-ft <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 25 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	50	79	86	89	90	90	90
<b>Efficiency</b>	87.5	91.8	92.3	91.7	90.7	89.4	91.1
<b>Speed</b>	3578.1	3559.4	3538.9	3515.1	3490	3461	3500
<b>Line amperes</b>	13.1	15.8	21.8	28.4	35.6	43.3	32.7



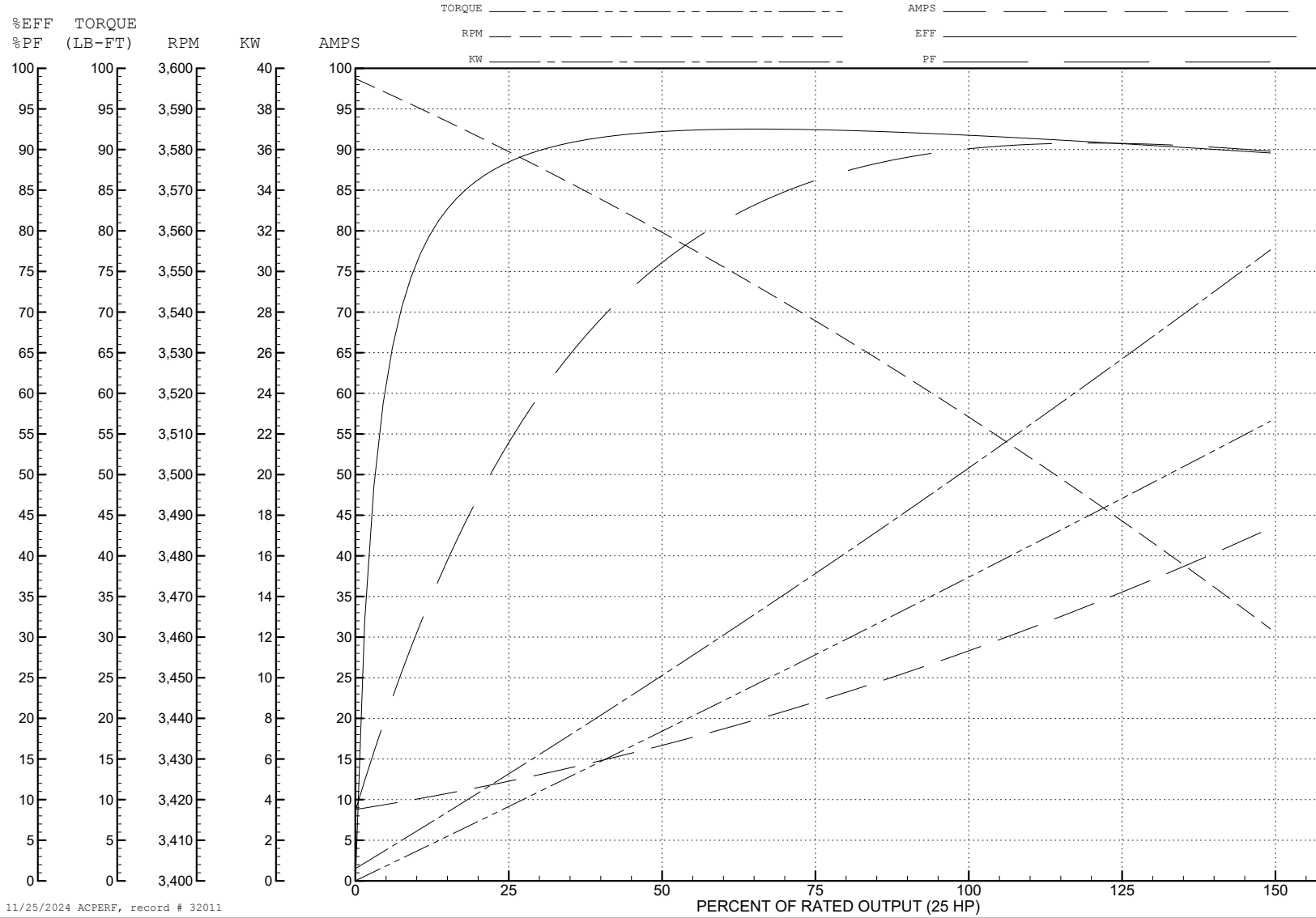
ABB Motors and Mechanical Inc.

WINDING # 39WGX424

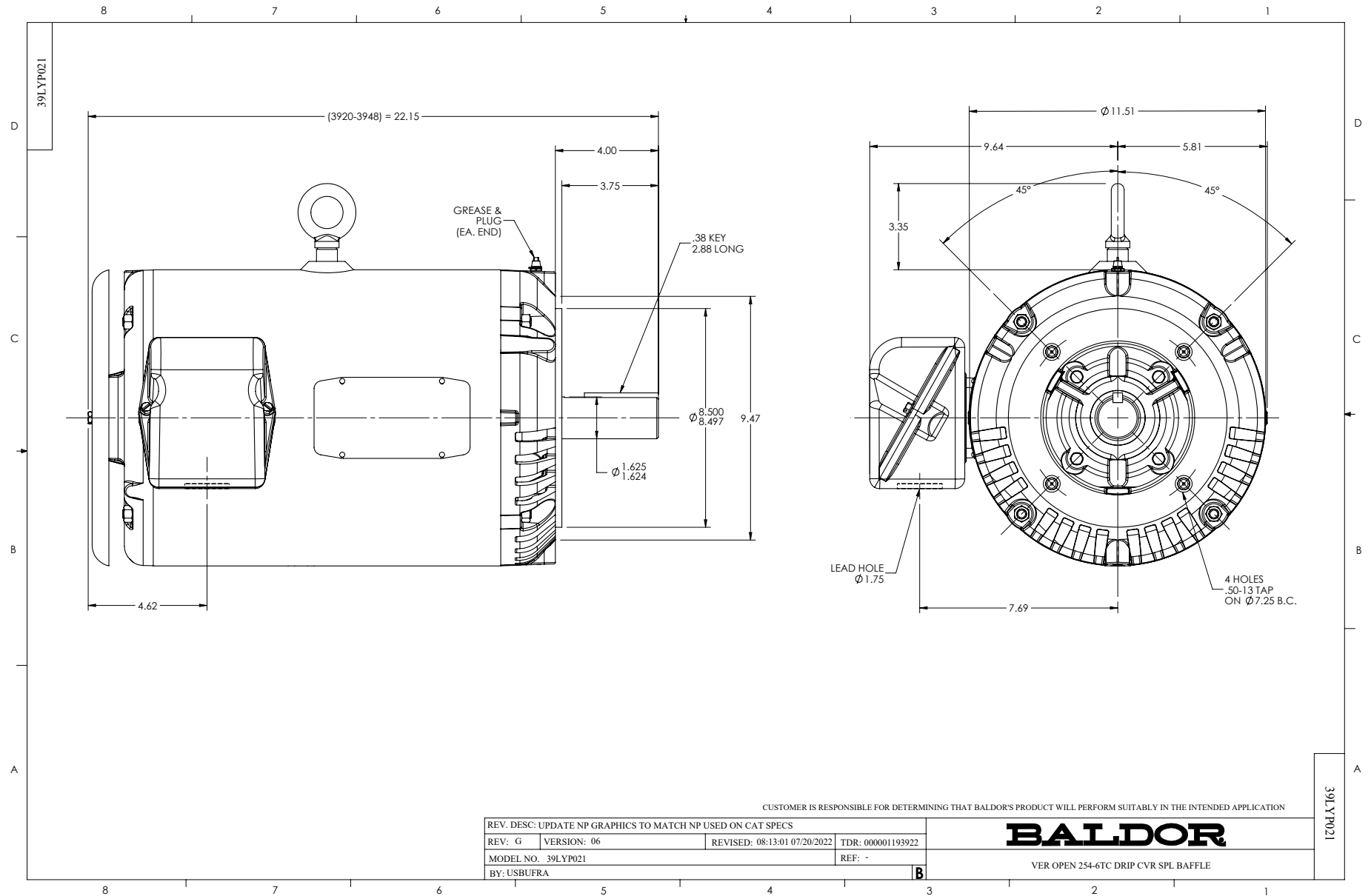
Typical performance - not guaranteed values.

25 HP 3 PH 60 HZ 3515 RPM 460 V 3938M

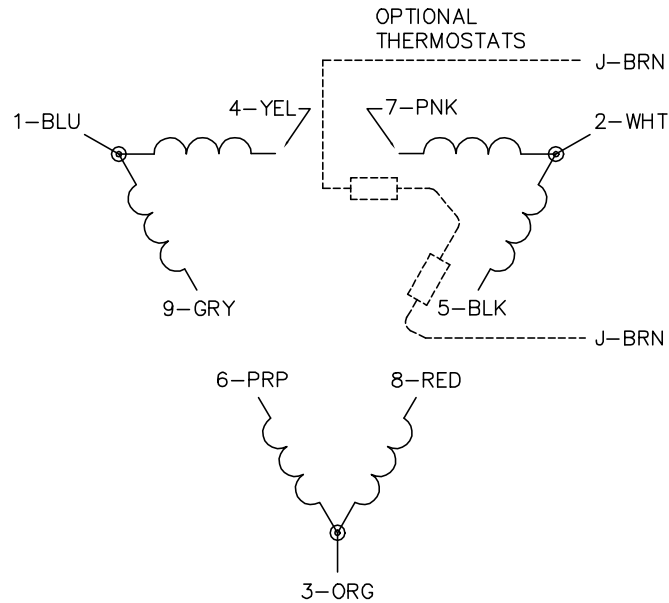
TORQUES (LB-FT): PO=148 PU=54.9 LR=77.2 LRA=197



11/25/2024 ACPERF, record # 32011



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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