

**BALDOR • RELIANCE**

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# Customer information packet

## VEM4108T

30HP, 3520RPM, 3PH, 60HZ, 286TSC, 0950M, TEFC

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	286TSC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
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	68.000 A @ 230.0 V 74.000 A @ 208.0 V 34.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

## Part detail

Revision	P
Type	AC
Mech. spec.	09F909
Base	
Status	PRD/A
Elec. spec.	09WGT474
Layout	09LYF909
Eff. date	06-27-2024
CD Diagram	CD0180
Poles	02
Leads	9#10
Proprietary	False
Created date	11-09-2017

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	34.0 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
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	0950M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	22.45 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	Shaft Slinger
Speed	3520 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

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**Nameplate**

NP3443LUA									
<b>CAT.NO.</b>	VEM4108T			<b>CUST. P/N</b>				<b>ENCL</b>	<b>TEFC</b>
<b>SPEC.</b>	09F909T474G1	<b>CC</b>	010A	<b>FRAME</b>	286TSC	<b>SER.NO.</b>			
<b>HP</b>	30	<b>CLASS</b>		F	<b>HZ</b>	60			
<b>R.P.M.</b>	3520	<b>PH.</b>	3	<b>DES.</b>		A			
<b>VOLTS</b>	230/460			<b>CODE</b>	J	<b>ODE BRG</b>	6208	<b>DE BRG</b>	6311
<b>AMPS</b>	68/34								
<b>RATING</b>	40C AMB-CONT			<b>NEMA NOM. EFF.</b>		91.7	<b>GREASE</b>	POLYREX EM	
<b>P.F.</b>	89	<b>SER.F.</b>	1.15	<b>CT6-60H(10:1)VT3-60H(20:1)</b>					
<b>USABLE AT</b>	50Hz 30HP 190/380V 82/41A			1.0SF					
<b>VOLTS</b>	<b>AMPS</b>	<b>MAX. SPACE HEATER TEMP.</b>							

## Parts list

Part number	Description	Quantity
SA347597	SA 09F909T474G1	1.000 ea
RA336154	RA 09F909T474G1	1.000 ea
09FN3001D01SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
10CB3000SP	KOBX, CAST W/2.00 LEAD HOLE	1.000 ea
09GS1000	GASKET-CONDUIT BOX, 1/16 THICK LEXIDE	1.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	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
19XW3118G08	.31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN	1.000 ea
09EP1100A14	FREP ASSM, (FOR INTRL ROUTING PURPOSE)	1.000 ea
HA3400A33	STUD- 3/8-16 X 4.96 HEX	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	4.000 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
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	2.000 ea
10XN3118K40	5/16-18 X 2.50" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
09EP1310A08	SPL FACE MTD EP 284-6TC 309 ENCL 311 BRG	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW4600B40	V-RING SLINGER 2.000 X 2.680 X .28 VITON	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
09FH4000SP	309 FH - BLACK PRIMER	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
10GS1000SP	GASKET, CONDUIT BOX LID	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HW2501G17	KEY, 3/8 SQ X 1.875	1.000 ea
PK6014	STEEL STRAP FOR 309-312 BASELESS MOTORS	4.000 ea
19XW3118A08	.31-18 X .50 HEX WASHER HEAD TAPTITE II	4.000 ea
HW4500A05	1669B ALEM/UNIV860 GR FTG X	1.000 ea

HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.080 lb
HW4500A03	GREASE FITTING, .125 NPT 1610(ALEMITE) 8	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HA4054	SHORT T-DRAIN FITTING, .125" N.P.T.	1.000 ea
HA4051A00	PLASTIC CAP FOR GREASE FITTING	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *** NLA IN 5 GALLON	0.050 ga
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
NP3443LUA	SS SUPER-E,CURUS-EEV,NEMA PREM, CC	1.000 ea
40PA1017	PACKAGING GROUP, 09 VERT LARGE FLANGE	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 # 67631

Typical performance - not guaranteed values

<b>Winding: 09WGT474-R001</b>		<b>Type: 0950M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	30	<b>Full Load Torque</b>	44.65 LB-FT		
<b>Volts</b>	230/460	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	68/34	<b>Breakdown Torque</b>	173 LB-FT		
<b>R.P.M.</b>	3520	<b>Pull-up Torque</b>	87.6 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	104 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	J	<b>Starting Current</b>	283 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	10.9 A	
<b>NEMA Nom. Eff.</b>	91.7	<b>Power Factor</b>	90	<b>Line-line Res. @ 25°C</b>	0.2527 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	79°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	97°C	
			<b>Locked-rotor Power Factor</b>	28	

**Load Characteristics 460 V, 60 Hz, 30 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>	58	78	86	89	90	91	90
<b>Efficiency</b>	87.7	91.8	92.4	92.1	91.3	90.2	91.6
<b>Speed</b>	3580.7	3562.2	3542.3	3521	3497.7	3471	3507
<b>Line amperes</b>	13.7	19.4	26.4	34.2	42.4	51.3	39.1



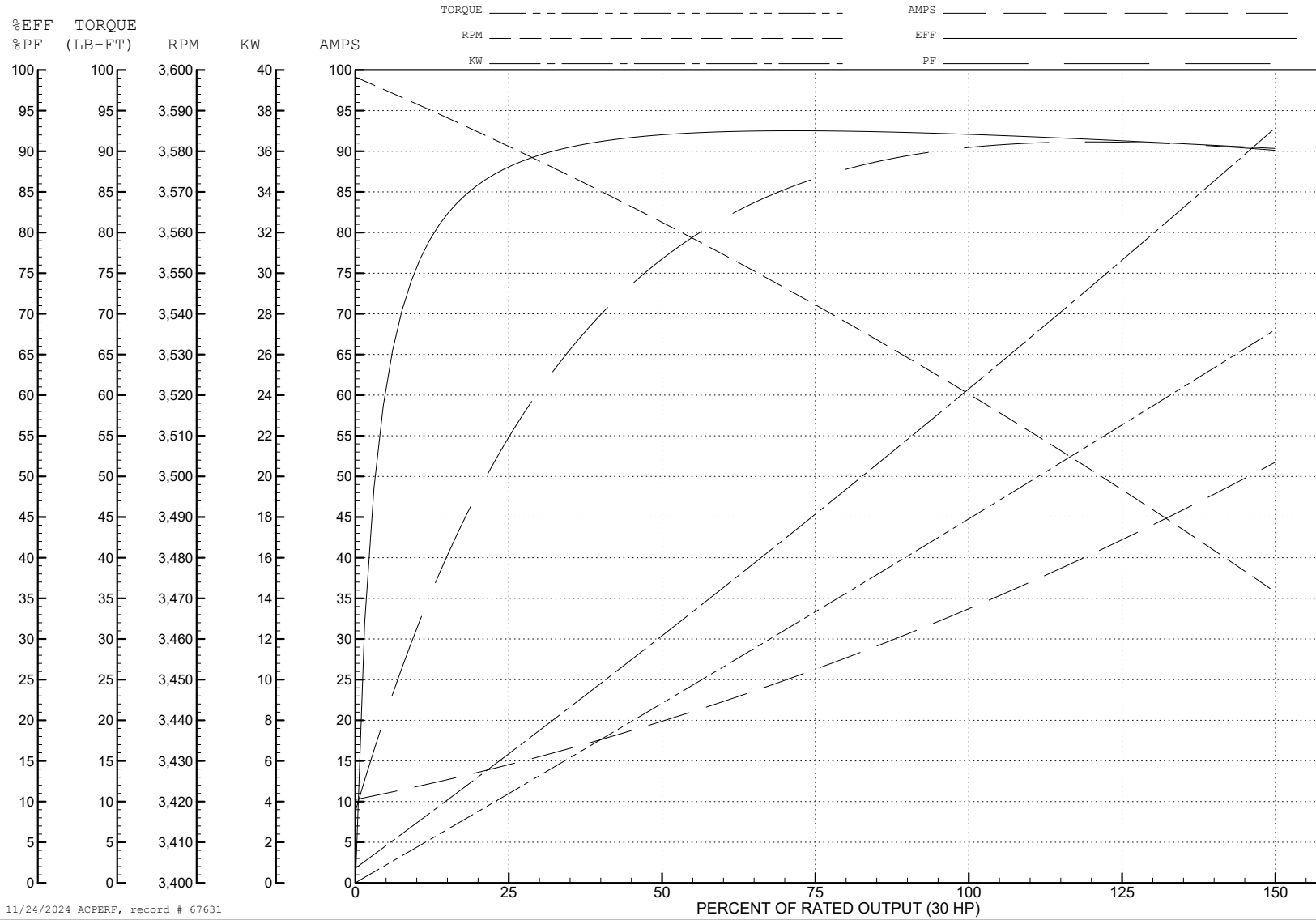
ABB Motors and Mechanical Inc.

WINDING # 09WGT474

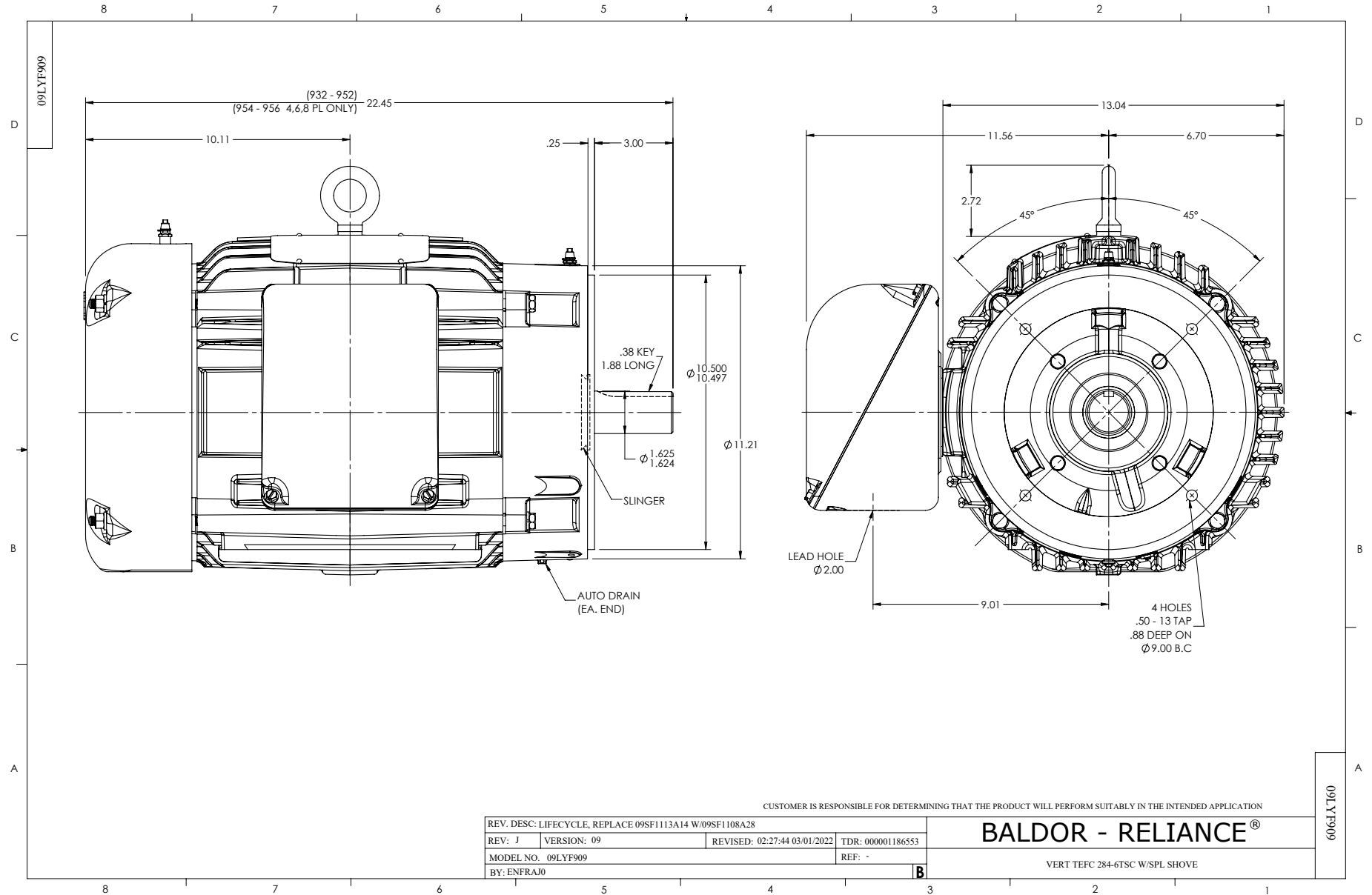
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 3520 RPM 460 V 0950M

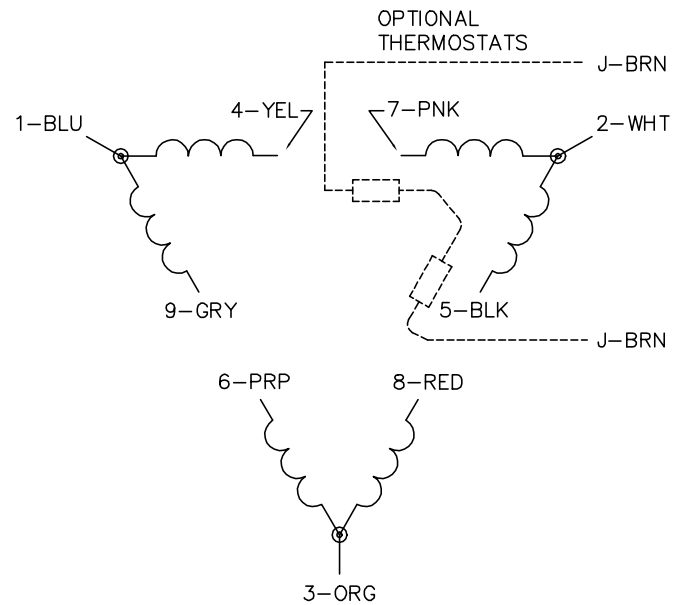
TORQUES (LB-FT): PO=173 PU=87.6 LR=104 LRA=283



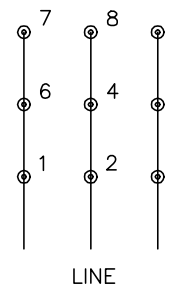
11/24/2024 ACPERP, record # 67631



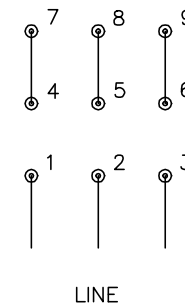
CD0180



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

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