

**BALDOR • RELIANCE**

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# Customer information packet

## VJPFPM2514T-2/4

20HP, 3450RPM, 3PH, 60HZ, 254JP, 3742M, OPSB, F

A

Class - None

Division - Not Applicable

## Specifications

Enclosure	OPSB
Frame	254JP
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	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	200.0 V @ 60 HZ 400.0 V @ 60 HZ
Agency Approvals	UL CSA EEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	26.500 A @ 400.0 V 53.000 A @ 200.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	26.5 a

## Part detail

Revision	N
Type	AC
Mech. spec.	37N805
Base	
Status	PRD/A
Elec. spec.	37WGR917
Layout	37LYN805
Eff. date	08-08-2024
CD Diagram	CD0104
Poles	02
Leads	12#12
Proprietary	False
Created date	01-12-2016

<b>Insulation Class</b>	F
<b>Inverter Code</b>	Inverter Ready
<b>KVA Code</b>	G
<b>Lifting Lugs</b>	Vertical Lifting Lugs
<b>Locked Bearing Indicator</b>	Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	12 @ 12 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3742M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	27.66 IN
<b>Power Factor</b>	90
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Tapped & Key
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	ROHS COMPLIANT
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.250 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Rotation</b>	Reversible
<b>Shaft Slinger Indicator</b>	Shaft Slinger
<b>Speed</b>	3450 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Wye Start - Delta Run
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	None
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	None
<b>Winding Thermal 2</b>	None

**Nameplate**

**NP3454L**

<b>CAT.NO.</b>	VJPFPM2514T-2/4	<b>CUST P/N</b>		<b>I.P.</b>	23
<b>SPEC.</b>	37N805R917H1	<b>SER.NO.</b>		<b>FRAME</b>	254JP
<b>HZ</b>	60	<b>HP</b>	20	<b>RPM</b>	3450
<b>VOLTS</b>	200/400	<b>CODE</b>	G	<b>VOLTS</b>	
<b>AMPS</b>	53/26.5	<b>DES</b>	B	<b>AMPS</b>	
<b>EFF</b>	90.2	<b>SER.F.</b>	1.15	<b>PF</b>	90
<b>RATING</b>	40C AMB-CONT	<b>DE BRG</b>	6309	<b>GREASE</b>	POLYREX EM
<b>BLANK</b>		<b>ODE BRG</b>	6206	<b>MTR. WT.</b>	145
		<b>CLASS</b>	F	<b>PH</b>	3
		<b>ENCL</b>	OPSB	<b>CC</b>	010A
<b>HTR-VOLTS</b>		<b>HTR-AMPS</b>		<b>HTR-WATTS</b>	

## Parts list

Part number	Description	Quantity
SA313375	SA 37N805R917H1	1.000 ea
RA300833	RA 37N805R917H1	1.000 ea
09CB3002SP	CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30	1.000 ea
HA6429	KO BOX ADAPTER REXITE	1.000 ea
19XW2520A16	SCREW,1/4-20X1 TAPTITE-II OR ROLOC 91	2.000 ea
59XW2520G07	.25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN	1.000 ea
37EP3203D02	D00 W/AXIAL FAN MTG	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA1104A01	RODENT SCREEN 37 FRAME 206 BRG FRONT END	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 ea
HW1000A10	#10 FLAT WASHER (SAE)	4.000 ea
HW1000A10	#10 FLAT WASHER (SAE)	4.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3401A45	PUEP OPEN 309 BRG NO BAFFLE	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	1.000 ea
HA1222	RODENT SCREEN - 37 C-FACE MOTORS	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 ea
10XN2520A36	1/4-20X 2 1/4 HEX HD X	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
39FH4500A09	39 FRAME DRIP COVER FOR 36 FRAME OPSB MO	1.000 ea
HA1040A03	UNICORP #1725M09F162520 SPACER FOR FAN C	3.000 ea
10XN2520A08	1/4-20X1/2 HEX HEAD CAP	3.000 ea
09CB3501SP	CONDUIT BOX LID FOR 09CB3001 & 09CB3002	1.000 ea
51XW2520A10	.25-20 X .62, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW4600B67	V-RING SLINGER 1.770 X 2.170 X .28 VITON	1.000 ea
HW2501E22	KEY, 1/4 SQ X 2.500	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea

MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1025R44	WILKOFAS, 784.109, CARMINE RED #3002	0.028 ga
HA3104A52	THRUBOLT, .31-18 X 17.000	4.000 ea
37AD2001C01	BAFFLE PLATE, PLASTIC 1.56" WIDTH	2.000 ea
LC0104A01	CONNECTION DIAGRAM	1.000 ea
NP3454L	ALUM FIRE PUMP MOTOR(LEGACY/BALDOR ONLY)	1.000 ea
37PA1039	PALLET PACK GROUP, BLANK PK1148	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/22	1.000 ea

**AC Induction Motor Performance Data**

Record # 54856

Typical performance - not guaranteed values

<b>Winding: 37WGR917-R001</b>		<b>Type: 3742M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>400 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	20	<b>Full Load Torque</b>	30.3 LB-FT		
<b>Volts</b>	200/400	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	53/26.5	<b>Breakdown Torque</b>	90.9 LB-FT		
<b>R.P.M.</b>	3450	<b>Pull-up Torque</b>	46.9 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	52.8 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	G	<b>Starting Current</b>	161 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	7.12 A		
<b>NEMA Nom. Eff.</b>	90.2 <b>Power Factor</b>	90	<b>Line-line Res. @ 25°C</b>	0.396 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	67°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	86°C	
			<b>Locked-rotor Power Factor</b>	32.4	
			<b>Rotor inertia</b>	0.383 LB-FT <sup>2</sup>	

**Load Characteristics 400 V, 60 Hz, 20 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>	63	81	88	90	90	90	90
<b>Efficiency</b>	91.7	92.9	92	90.2	88.2	85.8	89
<b>Speed</b>	3565	3530	3492	3449	3398	3341	3418
<b>Line amperes</b>	9.54	14.4	20.1	26.5	33.8	41.9	30.9

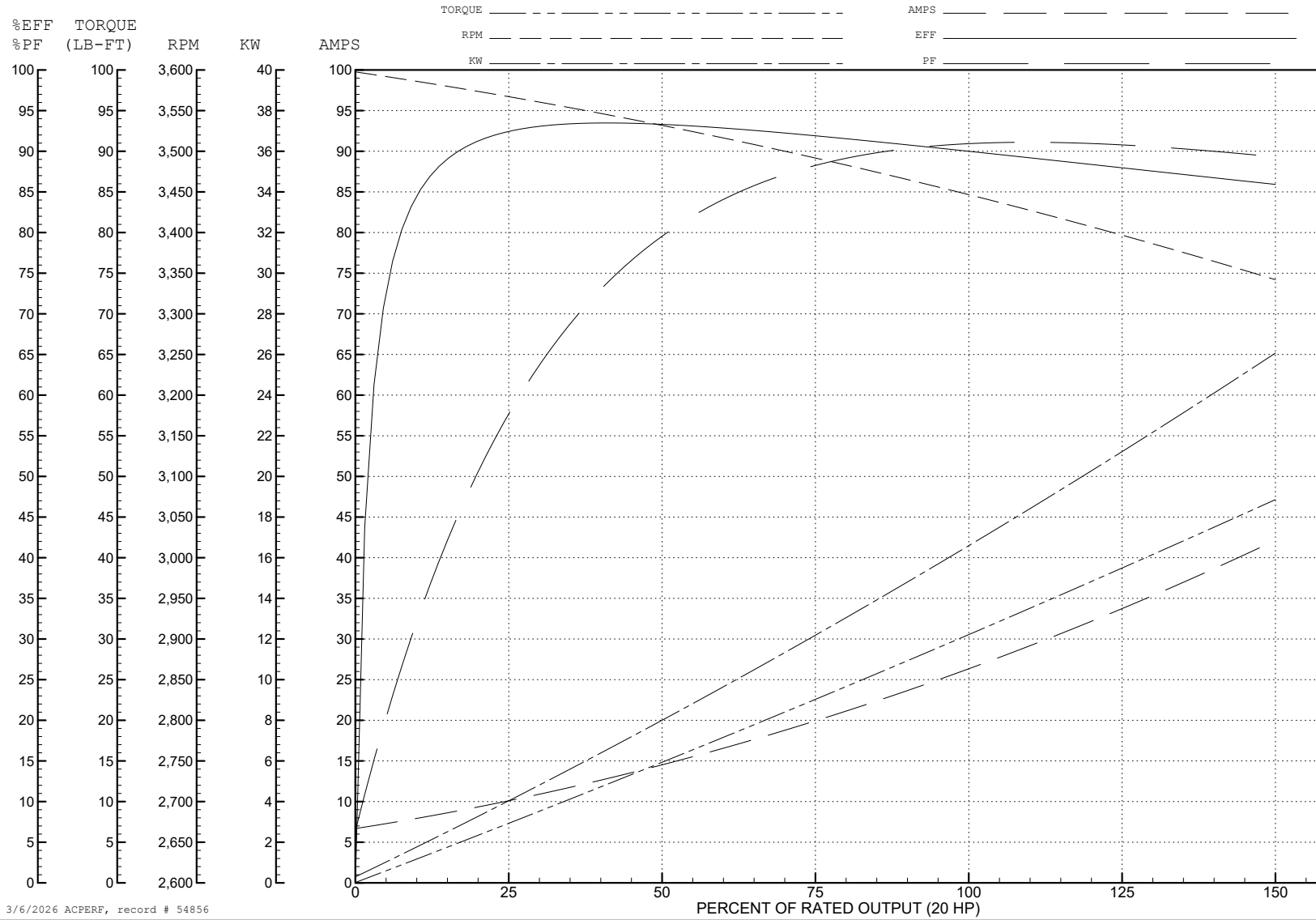
ABB Motors and Mechanical Inc.

WINDING # 37WGR917

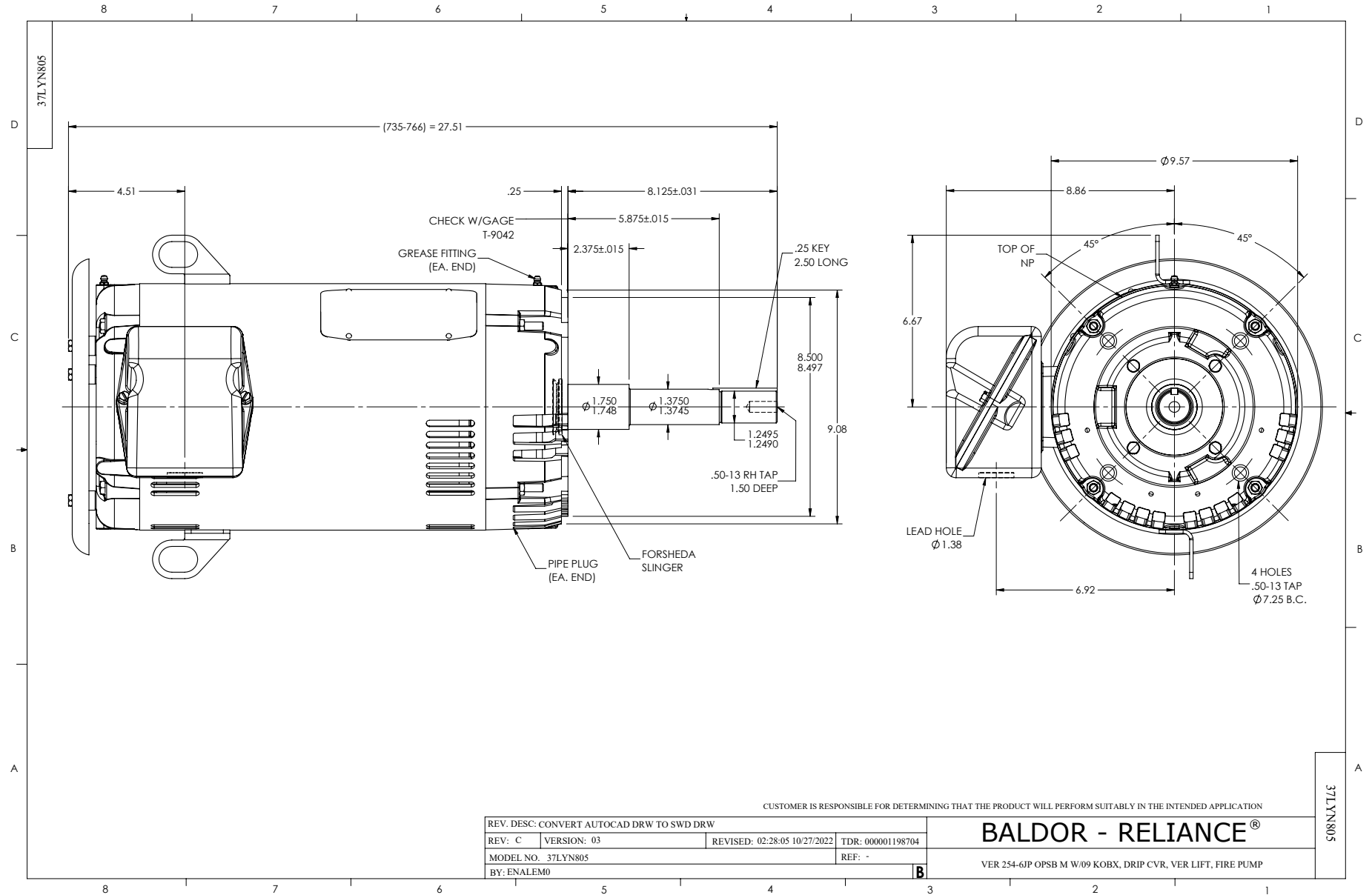
Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3450 RPM 400 V 3742M

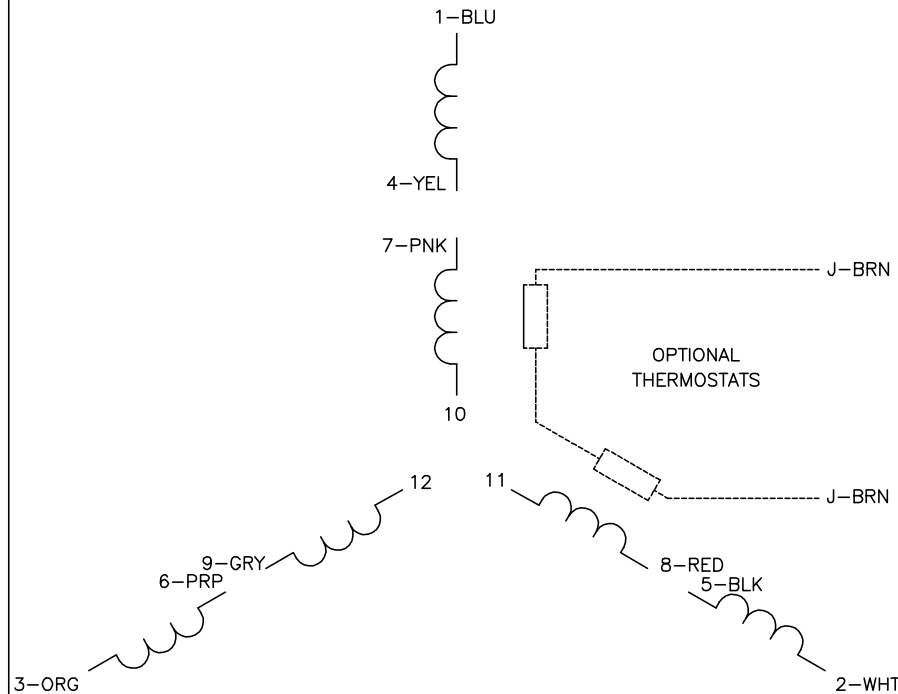
TORQUES (LB-FT): PO=90.9 PU=46.9 LR=52.8 LRA=161



3/6/2026 ACPERF, record # 54856

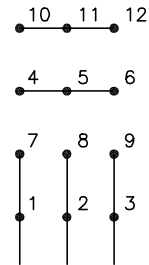


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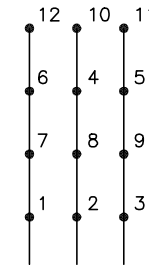
**LOW VOLTAGE**

START (2Y)



LINE

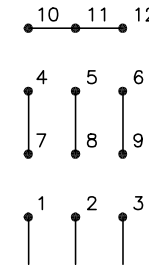
RUN (2D)



LINE

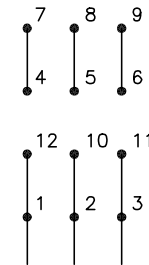
**HIGH VOLTAGE**

START (1Y)



LINE

RUN (1D)



LINE

**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.

CD0104

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FILE: \AAA\00008\377	REVISED: 09:02:55 02/19/2019	BY: ENBRIRO
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**BALDOR - RELIANCE®**

3PH, DV, 12 LEADS, Y START/D RUN

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