

**BALDOR • RELIANCE**

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# Customer information packet

## VJPFPM2542T-2/4

50HP, 3520RPM, 3PH, 60HZ, 324JP, 4044M, OPSB, F  
A

## Specifications

Enclosure	OPSB
Frame	324JP
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	50.000 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	CSA EEV UL
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	134.000 A @ 200.0 V 67.000 A @ 400.0 V
Design Code	B
Drip Cover	Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.4 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Drip Cover Mounting
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	67.0 a
Insulation Class	F
Inverter Code	Not Inverter

## Part detail

Revision	G
Type	AC
Mech. spec.	40L037
Base	
Status	PRD/A
Elec. spec.	40WGX328
Layout	40LYL037
Eff. date	07-24-2023
CD Diagram	CD0104
Poles	02
Leads	12#8
Proprietary	False
Created date	01-11-2016

<b>KVA Code</b>	F
<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 @ 8 AWG
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	4044M
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	31.13 IN
<b>Power Factor</b>	87
<b>Product Family</b>	Fire Pump Motor
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	C-Face
<b>Pulley Shaft Indicator</b>	Tapped & Key
<b>Rodent Screen</b>	Included
<b>Service Factor</b>	1.15
<b>Shaft Diameter</b>	1.750 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>	3520 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>	VJPFPM2542T-2/4	<b>CUST P/N</b>		<b>I.P.</b>	23
<b>SPEC.</b>	40L037X328H2	<b>SER.NO.</b>		<b>FRAME</b>	324JP
<b>HZ</b>	60	<b>HP</b>	50	<b>RPM</b>	3520
<b>VOLTS</b>	200/400	<b>CODE</b>	F	<b>VOLTS</b>	
<b>AMPS</b>	134/67	<b>DES</b>	B	<b>AMPS</b>	
<b>EFF</b>	92.4	<b>SER.F.</b>	1.15	<b>PF</b>	87
<b>RATING</b>	40C AMB-CONT	<b>DE BRG</b>	6312	<b>GREASE</b>	POLYREX EM
<b>BLANK</b>		<b>ODE BRG</b>	6309	<b>MTR. WT.</b>	456
		<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
SA313324	SA 40L037X328H2	1.000 ea
RA300781	RA 40L037X328H2	1.000 ea
HA6361A01	LIFTING LUG FOR 37, 39 & 40 FRAME ZINC	2.000 ea
HA6017	CAST ADAPTER, 40,42 KOBX	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	2.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	2.000 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
10CB3001	CONDUIT BOX CAST W/2.500 LEAD HOLE	1.000 ea
19XW3118A12	.31-18 X .75 HEX WASHER HEAD TAPTITE II	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
40EP3200A01	STD FREP OPEN 309 BRG W/DRIP COVER	1.000 ea
HA1166A06	RODENT SCREEN FOR 40 ENDPLATE 40EP3200.	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 ea
HW5100A11	W3917-042 WVY WSHR (WB)	1.000 ea
40EP1401A02	ENDPLATE, MACH OPEN NEMA 324-6T W/SCR	1.000 ea
HA1166A02	RODENT SCREEN FOR 40 ENDPLATE 40EP1300A.	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	4.000 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
XY3816A12	3/8-16 FINISHED NUT W/SERRATIONS	8.000 ea
HA7205	"L" SHAPE LIFTING LUG FOR 37,39 & 40 FRA	2.000 ea
40FH2500A01	SP'L DRIP COVER MODEL 40- OPEN	1.000 ea
10XN2520K12	1/4-20 X.75 GRD 5	2.000 ea
10CB3500SP	CONDUIT BOX LID, CAST	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	4.000 ea
HA2009A04	ALUM SLINGER 309 BRG CLOSE CPL PUMP MOTO	1.000 ea
80XN1032J06	10-32 X 3/8 SET SCREW, HEX SOC, CUP PT	1.000 ea
HW2501E22	KEY, 1/4 SQ X 2.500	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
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 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
HA3159A06	THRUBOLT- .38-16 X 19.00 LONG STUD	4.000 ea
MG1025R44	WILKOFAS, 784.109, CARMINE RED #3002	0.050 ga
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
40AD2002C01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
40AD2002C01	LEXAN BAFFLE 40 FR OPEN	1.000 ea
LC0104A01	CONNECTION DIAGRAM	1.000 ea
NP3454L	ALUM FIRE PUMP MOTOR(LEGACY/BALDOR ONLY)	1.000 ea
40PA1010	PACKAGING GROUP, PRINT PK1151A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/22	1.000 ea

**AC Induction Motor Performance Data**

Record # 54839

Typical performance - not guaranteed values

<b>Winding: 40WGX328-R001</b>		<b>Type: 4044M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>400 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	50	<b>Full Load Torque</b>	74.2 LB-FT		
<b>Volts</b>	200/400	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	134/67	<b>Breakdown Torque</b>	235 LB-FT		
<b>R.P.M.</b>	3520	<b>Pull-up Torque</b>	86.4 LB-FT		
<b>Hz</b>	60 <b>Phase</b>	3	<b>Locked-rotor Torque</b>	126 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	F	<b>Starting Current</b>	403 A	
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	18.3 A		
<b>NEMA Nom. Eff.</b>	92.4 <b>Power Factor</b>	87	<b>Line-line Res. @ 25°C</b>	0.127 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	44°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	53°C	
			<b>Locked-rotor Power Factor</b>	24.1	
			<b>Rotor inertia</b>	1.89 LB-FT <sup>2</sup>	

**Load Characteristics 400 V, 60 Hz, 50 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>	62	80	86	87	88	89	88
<b>Efficiency</b>	89.4	92.6	93.2	92.4	91.8	90	92
<b>Speed</b>	3583	3565	3547	3527	3505	3478	3514
<b>Line amperes</b>	24.9	36.7	50.8	66.5	83.4	101	76.6

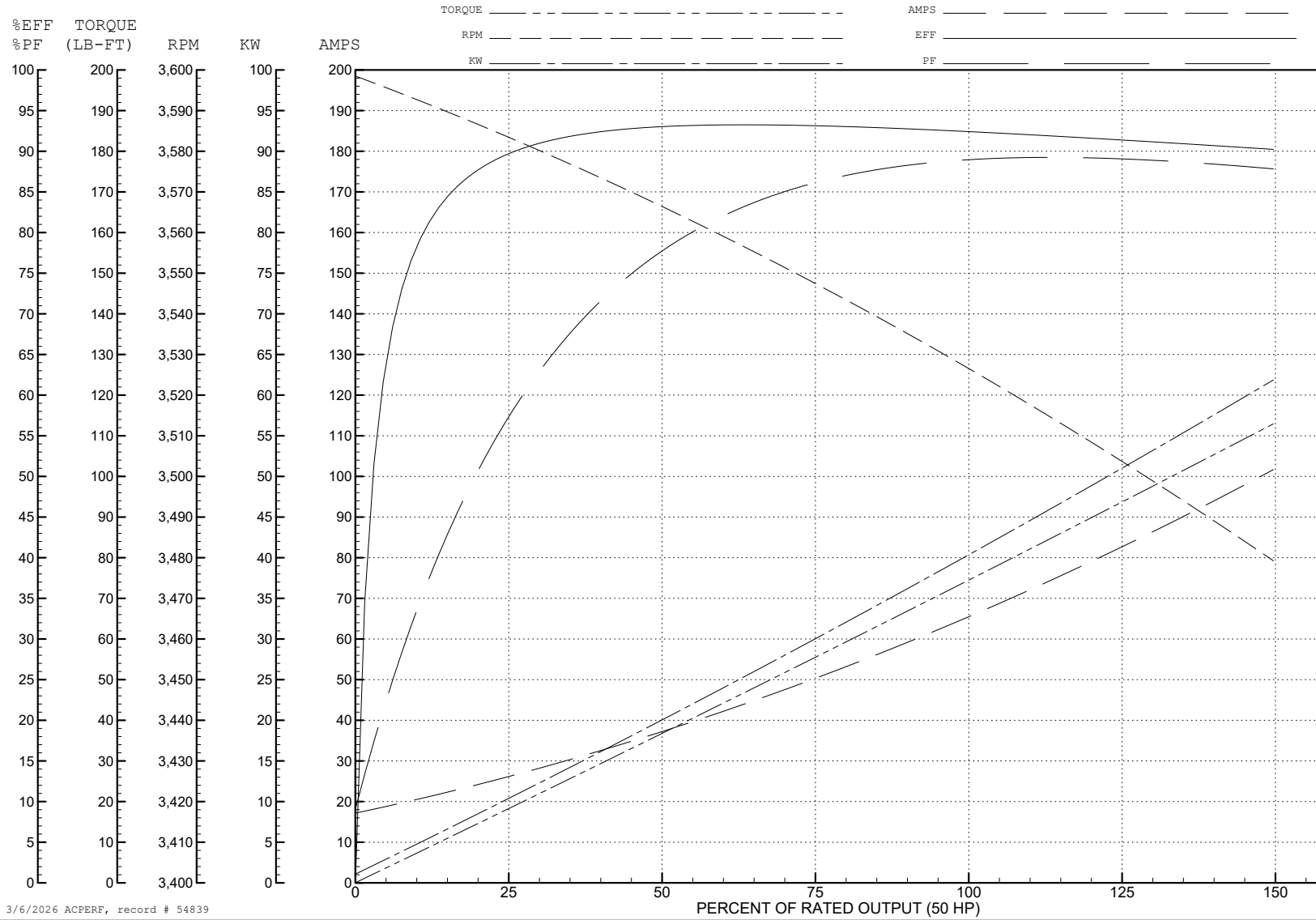
ABB Motors and Mechanical Inc.

WINDING # 40WGX328

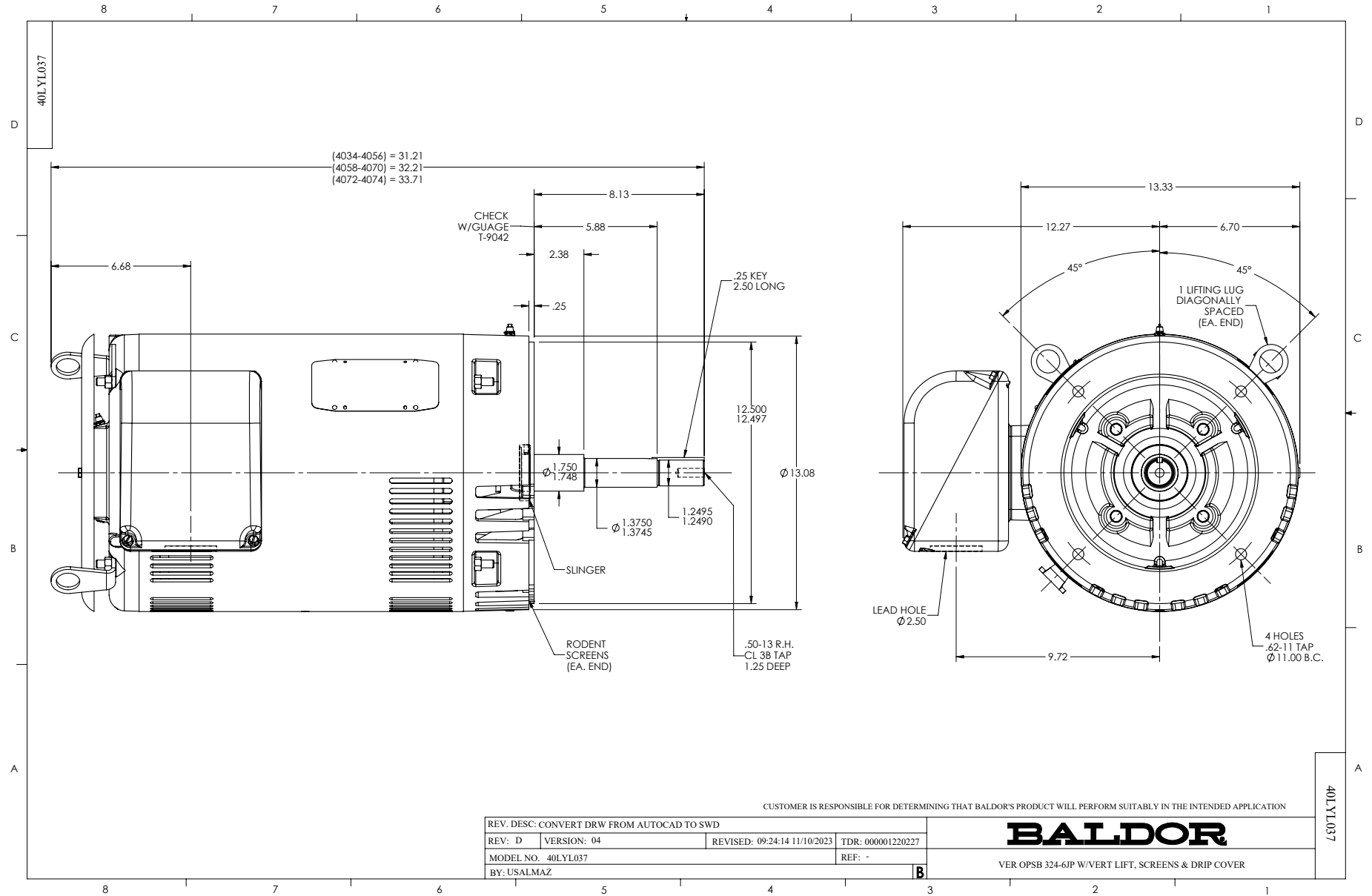
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 3520 RPM 400 V 4044M

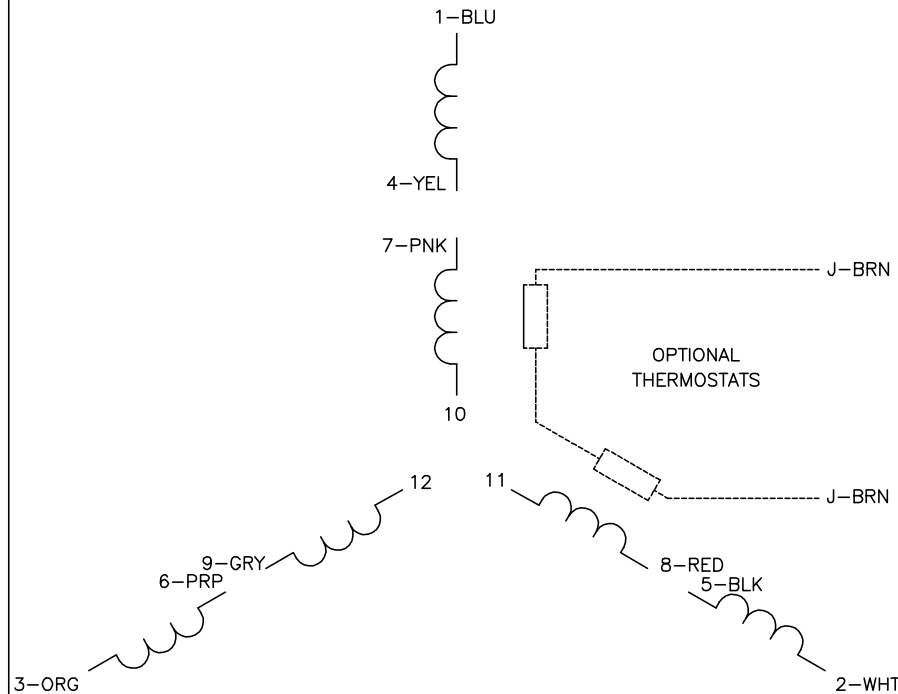
TORQUES (LB-FT): PO=235 PU=86.4 LR=126 LRA=403



3/6/2026 ACPERF, record # 54839



CD0104



**LOW VOLTAGE**

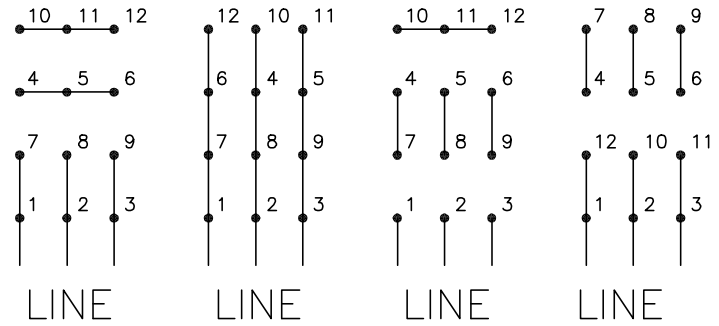
START (2Y)

RUN (2D)

**HIGH VOLTAGE**

START (1Y)

RUN (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.

CD0104

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**BALDOR - RELIANCE®**

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

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