

**BALDOR • RELIANCE**

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# Customer information packet

## VL3513T

1.5HP, 3450RPM, 1PH, 60HZ, 3524L, N

Class - None

Division - Not Applicable

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11/24/2024 11:59:00 AM

## Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Cap Start, Induction Run
Output @ Frequency	1.500 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	115.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	UR CSA
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	16.000 A @ 115.0 V 8.000 A @ 230.0 V 8.400 A @ 208.0 V
Design Code	L
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	70.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	R
Type	AC
Mech. spec.	35Y522
Base	
Status	PRD/A
Elec. spec.	35WGY748
Layout	35LYY522
Eff. date	05-08-2024
CD Diagram	CD0001
Poles	02
Leads	4#16 A PH,2#18 B PH
Proprietary	False
Created date	12-04-2009

High Voltage Full Load Amps	8.0 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	4 @ 16 AWG, A PH
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524L
Mounting Arrangement	F1
Number of Poles	2
Overall Length	13.29 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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**

<b>NP1256L</b>									
<b>CAT.NO.</b>	VL3513T								
<b>SPEC.</b>	35Y522Y748G1								
<b>HP</b>	1.5								
<b>VOLTS</b>	115/230								
<b>AMP</b>	16/8								
<b>RPM</b>	3450								
<b>FRAME</b>	143TC		<b>HZ</b>	60		<b>PH</b>	1		
<b>SER.F.</b>	1.15	<b>CODE</b>	J	<b>DES</b>	L	<b>CLASS</b>	B		
<b>NEMA-NOM-EFF</b>	70	<b>PF</b>	85						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>ENCL</b>	TEFC	<b>SN</b>							

## Parts list

Part number	Description	Quantity
SA188368	SA 35Y522Y748G1	1.000 ea
RA176106	RA 35Y522Y748G1	1.000 ea
EC1645A06SP	ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 ea
35GS3001A02	GASKET, CA.COVER, 5.38 LONG .06 CS301	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3307D00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
WD1000A16	2-520128-2 AMP FLAG TERMINAL(4M/RL)	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
34FN3002A01SP	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
SP5051A24	MODEL 35 TORQ STATIONARY SWITCH FOR "L"	1.000 ea

HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LC0001A01	CONN LABEL / WARNING LABEL (LC0001 / LB1	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea
PK3083	STYROFOAM PACKING CRADLE	1.000 ea
PK3088	MICROFOAM, 8"X"8 PERF. SHEETS	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea

**AC Induction Motor Performance Data**

Record # 10315

Typical performance - not guaranteed values

Winding: 35WGY748-R001		Type: 3524L	Enclosure: TEFC		
<b>Nameplate Data</b>			<b>230 V, 60 Hz: High Voltage Connection</b>		
Rated Output (HP)	1.5	Full Load Torque	2.25 LB-FT		
Volts	115/230	Start Configuration	direct on line		
Full Load Amps	16/8	Breakdown Torque	5.4 LB-FT		
R.P.M.	3450	Pull-up Torque	5 LB-FT		
Hz	60 Phase	1	Locked-rotor Torque	6.4 LB-FT	
NEMA Design Code	L	KVA Code	J	Starting Current	50 A
Service Factor (S.F.)	1.15	No-load Current	3.9 A		
NEMA Nom. Eff.	70	Power Factor	85	Line-line Res. @ 25°C	1.58 Ω A Ph 1.29 Ω B Ph
Rating - Duty	40C	AMB-CONT	Temp. Rise @ Rated Load	80°C	
S.F. Amps			Temp. Rise @ S.F. Load	90°C	

**Load Characteristics 230 V, 60 Hz, 1.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	68	78	85	89	90	87
Efficiency	56	68	70	70	67	64	69.5
Speed	3560	3530	3490	3450	3395	3335	3430
Line amperes	4.3	5.2	6.3	8	9.8	11.8	9



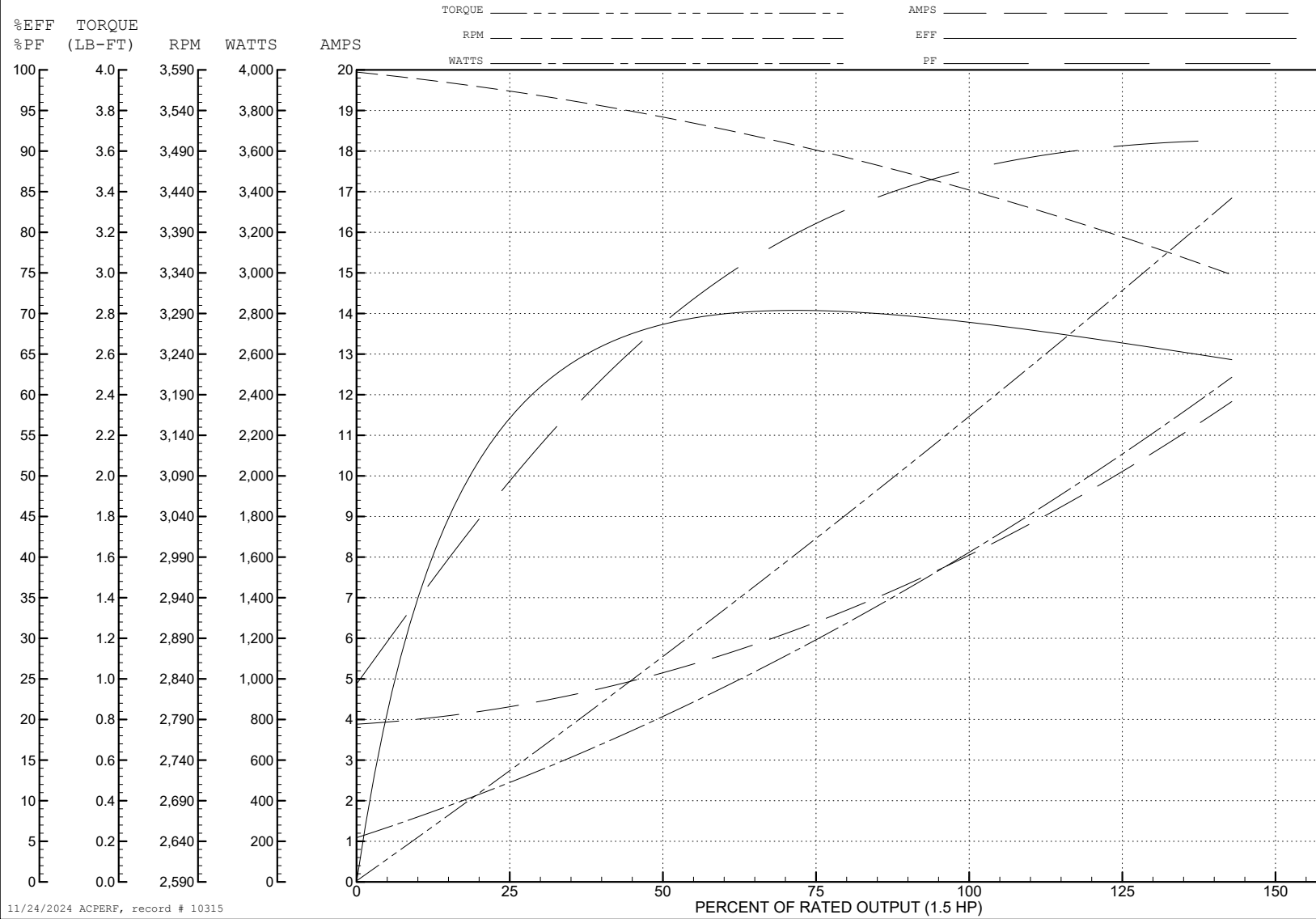
ABB Motors and Mechanical Inc.

WINDING # 35WGY748

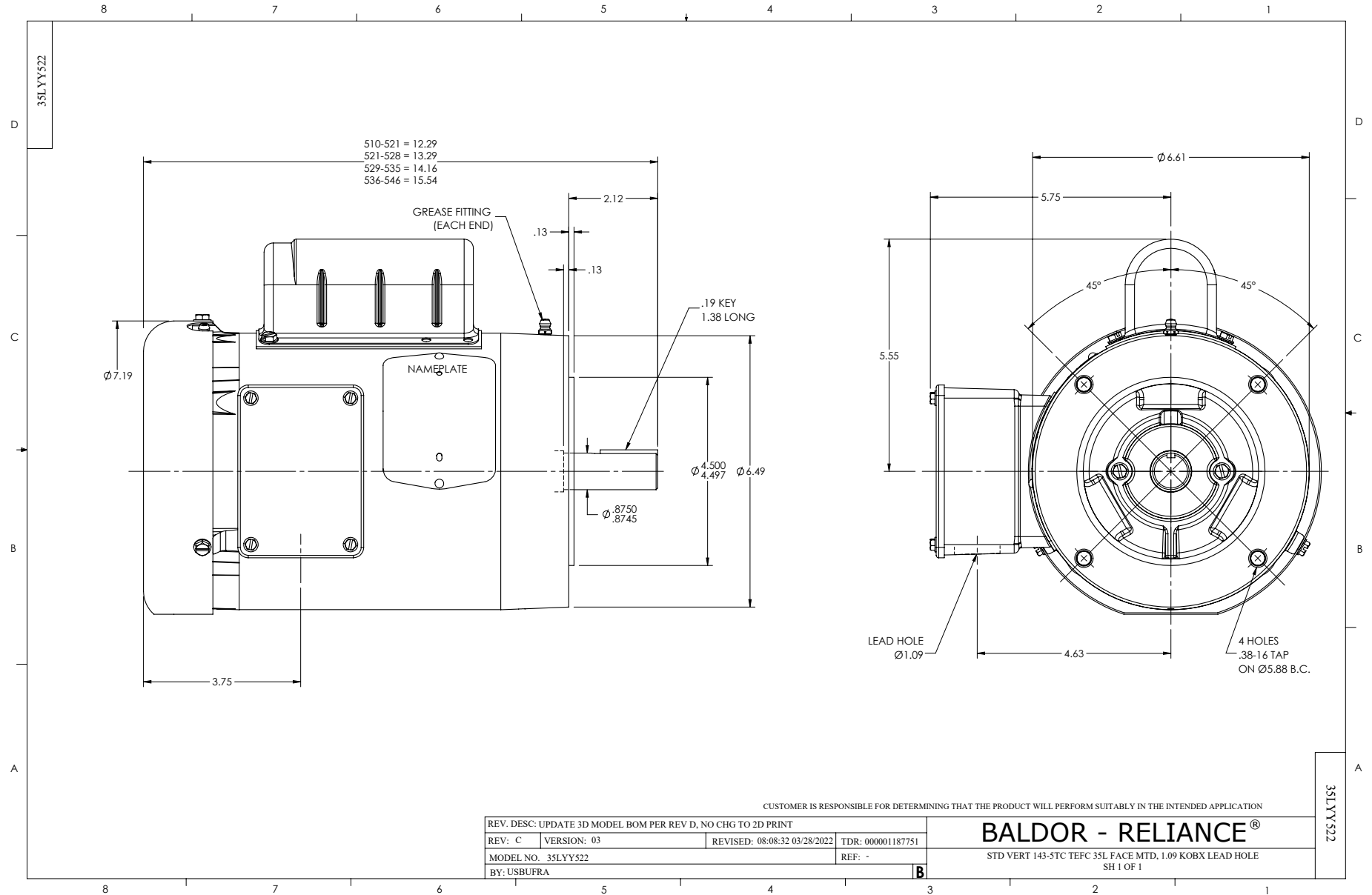
Typical performance - not guaranteed values.

1.5 HP 1 PH 60 HZ 3450 RPM 230 V 3524L

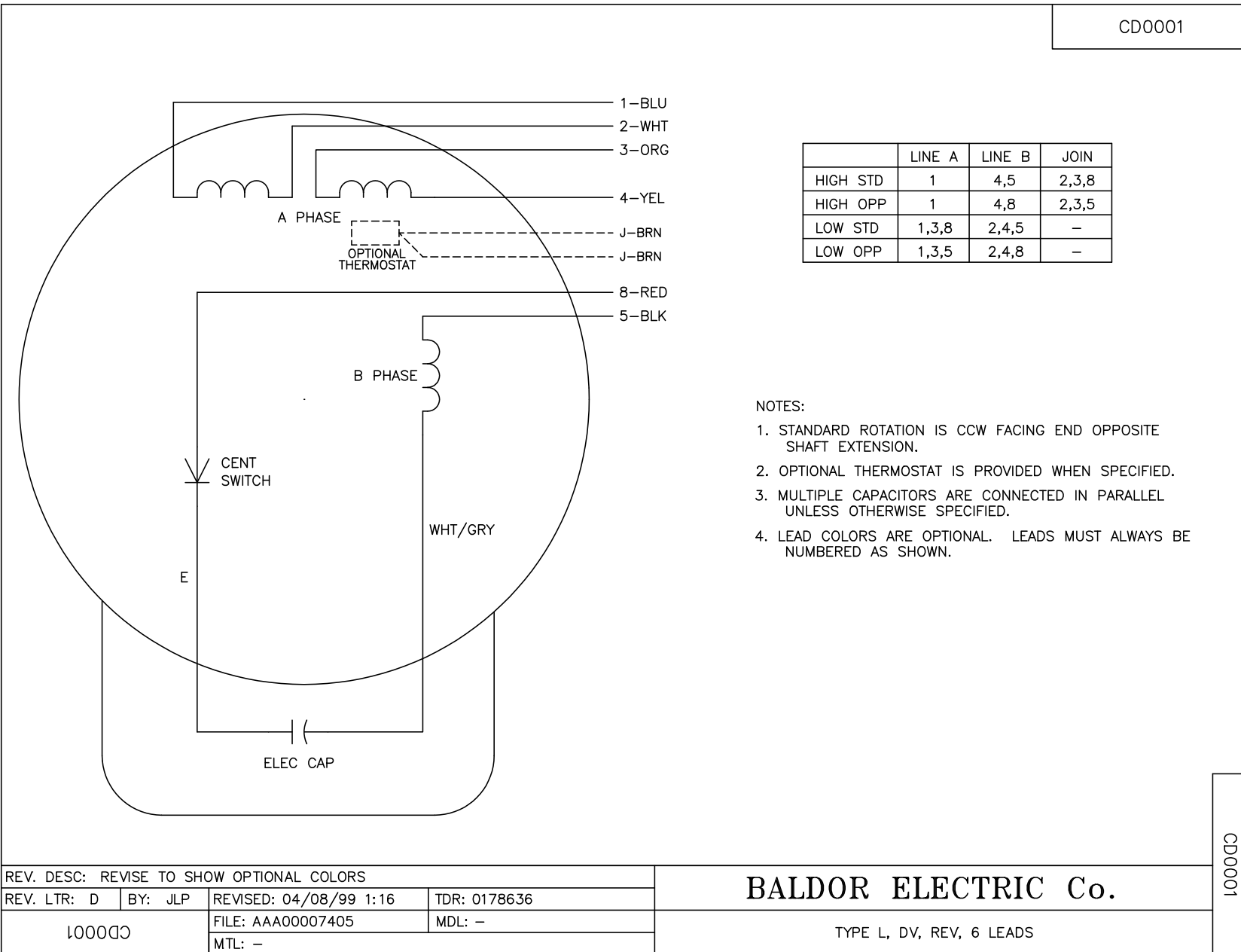
TORQUES (LB-FT): PO=5.4 PU=5 LR=6.4 LRA=50



11/24/2024 ACPERF, record # 10315



CD0001



**NOTES:**

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. OPTIONAL THERMOSTAT IS PROVIDED WHEN SPECIFIED.
3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0001

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: D	BY: JLP	REVISED: 04/08/99 1:16	TDR: 0178636
100000		FILE: AAA00007405	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

TYPE L, DV, REV, 6 LEADS