

**BALDOR • RELIANCE**

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# Customer information packet

## L3509M

1HP, 3450RPM, 1PH, 60HZ, 56/56H, 3524L, TEFC

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	56/56H
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	1.000 HP @ 60 HZ
Phase	1
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 115.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.000 A @ 230.0 V 12.000 A @ 115.0 V
Design Code	N
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	66.0 %
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	6.0 a

## Part detail

Revision	AZ
Type	AC
Mech. spec.	35J383
Base	
Status	PRD/A
Elec. spec.	35WG0480
Layout	35LYJ383
Eff. date	05-14-2024
CD Diagram	CD0008
Poles	02
Leads	4#16 A&J,2#18 B PH,1#14 #4TH
Proprietary	False
Created date	06-22-2007

<b>Insulation Class</b>	B
<b>Inverter Code</b>	Not Inverter
<b>KVA Code</b>	K
<b>Lifting Lugs</b>	No Lifting Lugs
<b>Locked Bearing Indicator</b>	No Locked Bearing
<b>Motor Lead Exit</b>	Ko Box
<b>Motor Lead Quantity/Wire Size</b>	4 @ 16 AWG, A&J
<b>Motor Lead Termination</b>	Flying Leads
<b>Motor Standards</b>	NEMA
<b>Motor Type</b>	3524L
<b>Mounting Arrangement</b>	F1
<b>Number of Poles</b>	2
<b>Overall Length</b>	12.91 IN
<b>Power Factor</b>	81
<b>Product Family</b>	General Purpose
<b>Pulley End Bearing Type</b>	Ball
<b>Pulley Face Code</b>	Standard
<b>Pulley Shaft Indicator</b>	Standard
<b>Rodent Screen</b>	None
<b>RoHS Status</b>	ROHS COMPLIANT
<b>Service Factor</b>	1.25
<b>Shaft Diameter</b>	0.625 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>	No Slinger
<b>Speed</b>	3450 rpm
<b>Speed Code</b>	Single Speed
<b>Starting Method</b>	Direct on line
<b>Thermal Device - Bearing</b>	None
<b>Thermal Device - Winding</b>	Do Not Use
<b>Vibration Sensor Indicator</b>	No Vibration Sensor
<b>Winding Thermal 1</b>	Manual Thermal Overload
<b>Winding Thermal 1 Location</b>	SB

**Winding Thermal 2**

**None**

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**Nameplate**

<b>NP1257L</b>									
<b>CAT.NO.</b>	L3509M								
<b>SPEC.</b>	35J383-480								
<b>HP</b>	1								
<b>VOLTS</b>	115/230								
<b>AMP</b>	12/6								
<b>RPM</b>	3450								
<b>FRAME</b>	56/56H			<b>HZ</b>	60		<b>PH</b>	1	
<b>SER.F.</b>	1.25	<b>CODE</b>	K	<b>DES</b>	N	<b>CL</b>	B		
<b>NEMA-NOM-EFF</b>	66	<b>PF</b>	81						
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>									
<b>DE</b>	6205	<b>ODE</b>	6203						
<b>ENCL</b>	TEFC	<b>SN</b>							
	SFA 14.4/7.2								

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

**AC Induction Motor Performance Data**

Record # 8067

Typical performance - not guaranteed values

Winding: 35WG0480-R001		Type: 3524L	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	1	Full Load Torque	1.5 LB-FT	
Volts	115/230	Start Configuration	direct on line	
Full Load Amps	12/6	Breakdown Torque	3.7 LB-FT	
R.P.M.	3450	Pull-up Torque	3.3 LB-FT	
Hz	60 Phase	Locked-rotor Torque	4.5 LB-FT	
NEMA Design Code	N KVA Code	Starting Current	38 A	
Service Factor (S.F.)	1.25	No-load Current	3.15 A	
NEMA Nom. Eff.	66 Power Factor	Line-line Res. @ 25°C	2.37 Ω A Ph 1.75 Ω B Ph	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	61°C	
S.F. Amps	14.4/7.2	Temp. Rise @ S.F. Load	78°C	

**Load Characteristics 230 V, 60 Hz, 1 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	67	77	83	86	88	86
Efficiency	44.7	59.7	66.2	68.9	69.4	68.5	69.4
Speed	3563	3538	3511	3480	3444	3400	3444
Line amperes	3.5	4.05	4.8	5.7	6.8	8.1	6.8

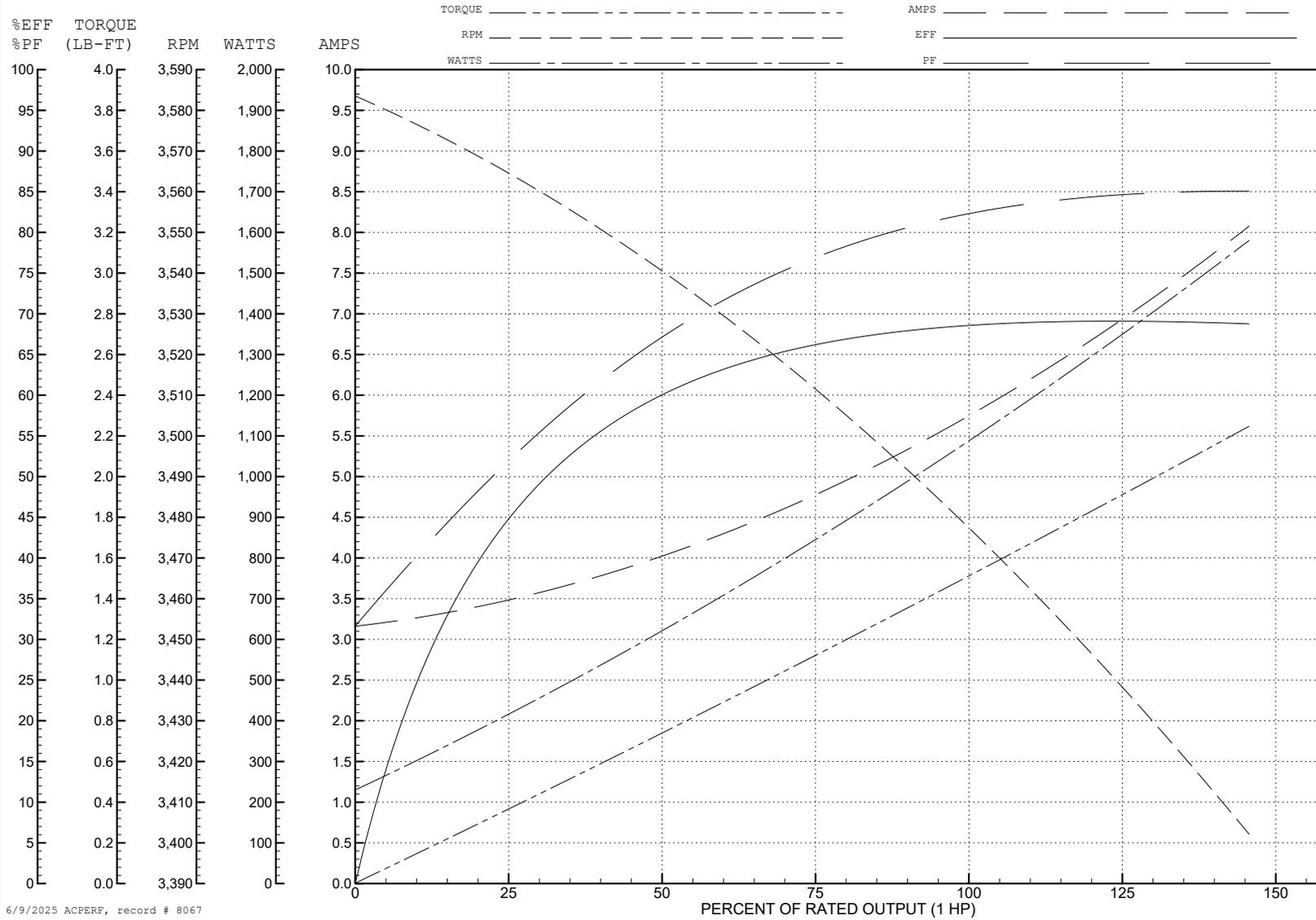
ABB Motors and Mechanical Inc.

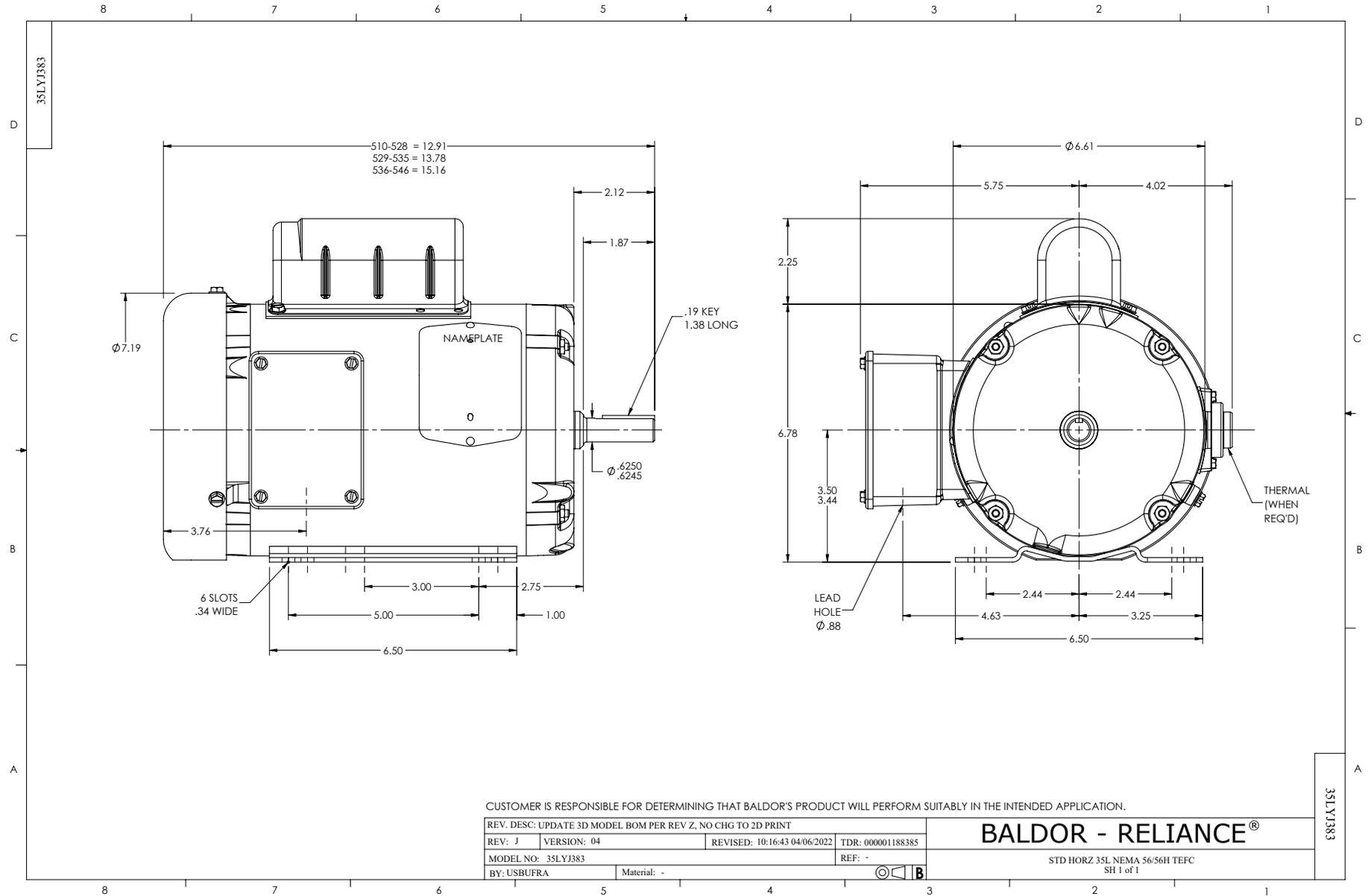
WINDING # 35WG0480

Typical performance - not guaranteed values.

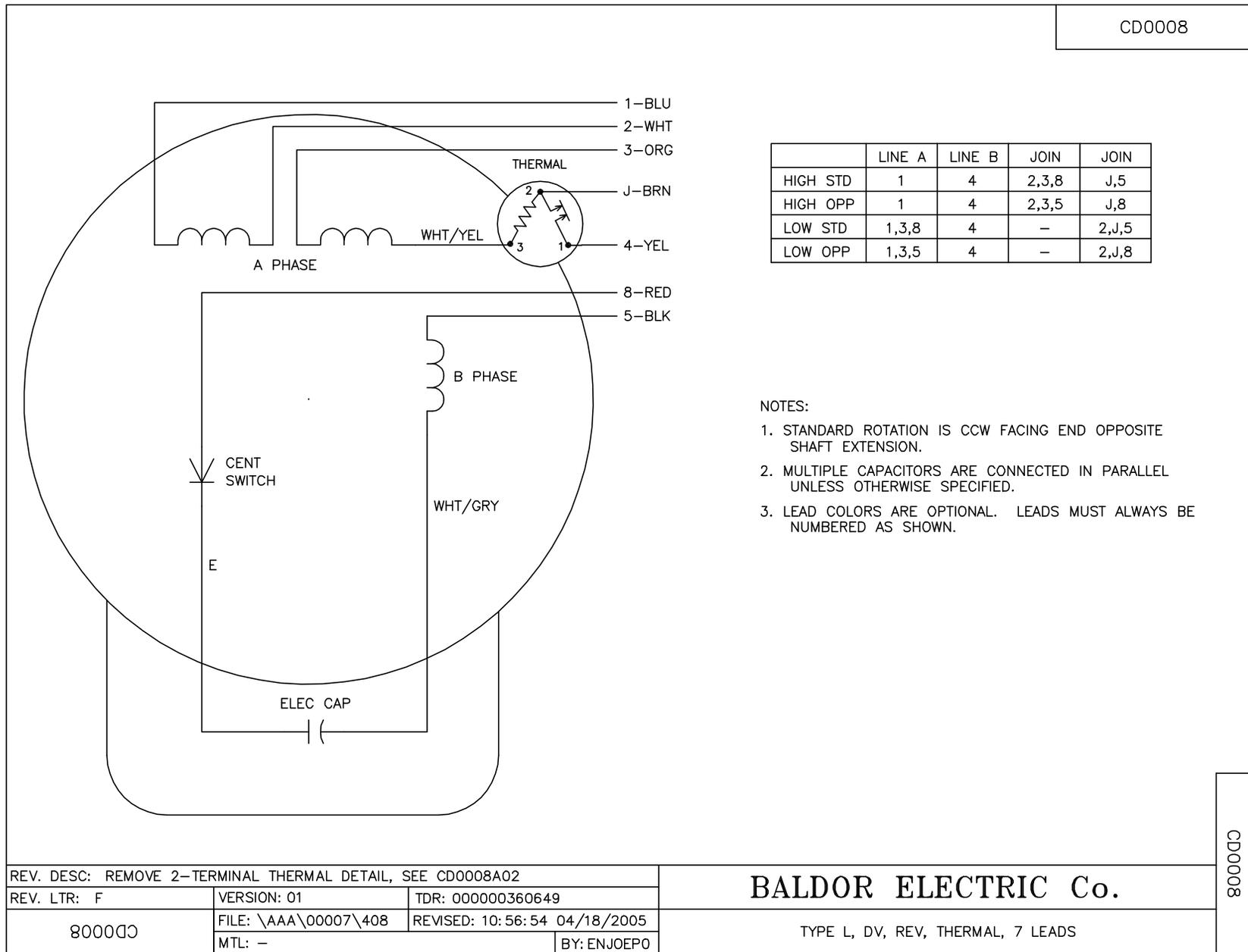
1 HP 1 PH 60 HZ 3450 RPM 230 V 3524L

TORQUES (LB-FT): PO=3.7 PU=3.3 LR=4.5 LRA=38





CD0008



	LINE A	LINE B	JOIN	JOIN
HIGH STD	1	4	2,3,8	J,5
HIGH OPP	1	4	2,3,5	J,8
LOW STD	1,3,8	4	-	2,J,5
LOW OPP	1,3,5	4	-	2,J,8

NOTES:

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

REV. DESC: REMOVE 2-TERMINAL THERMAL DETAIL, SEE CD0008A02		
REV. LTR: F	VERSION: 01	TDR: 000000360649
800000	FILE: \AAA\00007\408	REVISED: 10:56:54 04/18/2005
	MTL: -	BY: ENJOEPO

**BALDOR ELECTRIC Co.**

TYPE L, DV, REV, THERMAL, 7 LEADS

CD0008