

BALDOR • RELIANCE

Customer information packet

L3509M

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

Class - None

Division - Not Applicable

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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

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

Winding Thermal 2

None

Nameplate

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

Parts list

Part number	Description	Quantity
SA025931	SA 35J383-480	1.000 ea
RA021981	RA 35J383-480	1.000 ea
EC1645A06SP	ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.	1.000 ea
TP5059	GENERIC WELDED THERMAL, 7" LEAD KIT	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	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
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	2.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 ea
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 ea
35CB4802A02SP	CAPACITOR COVER, STAMPED X	1.000 ea
35GS3001A02	GASKET, CA.COVER, 5.38 LONG .06 CS301	1.000 ea
51XB1016A05	10-16X5/16HX WA SL SR TYB (F/S)	2.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123A00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - 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
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
WD1000A15	3-520132-2 AMP FLAG (4M/RL NON-CANC/NON-	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
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
SP5051A24	MODEL 35 TORQ STATIONARY SWITCH FOR "L"	1.000 ea
LB1087	LABEL,MANUAL RESET (ROLL LABEL)	1.000 ea

LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0008	CONNECTION LABEL	1.000 ea
NP1257L	ALUM UL CC THERMAL REV MTG	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
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	
Nameplate Data			230 V, 60 Hz: High Voltage Connection	
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

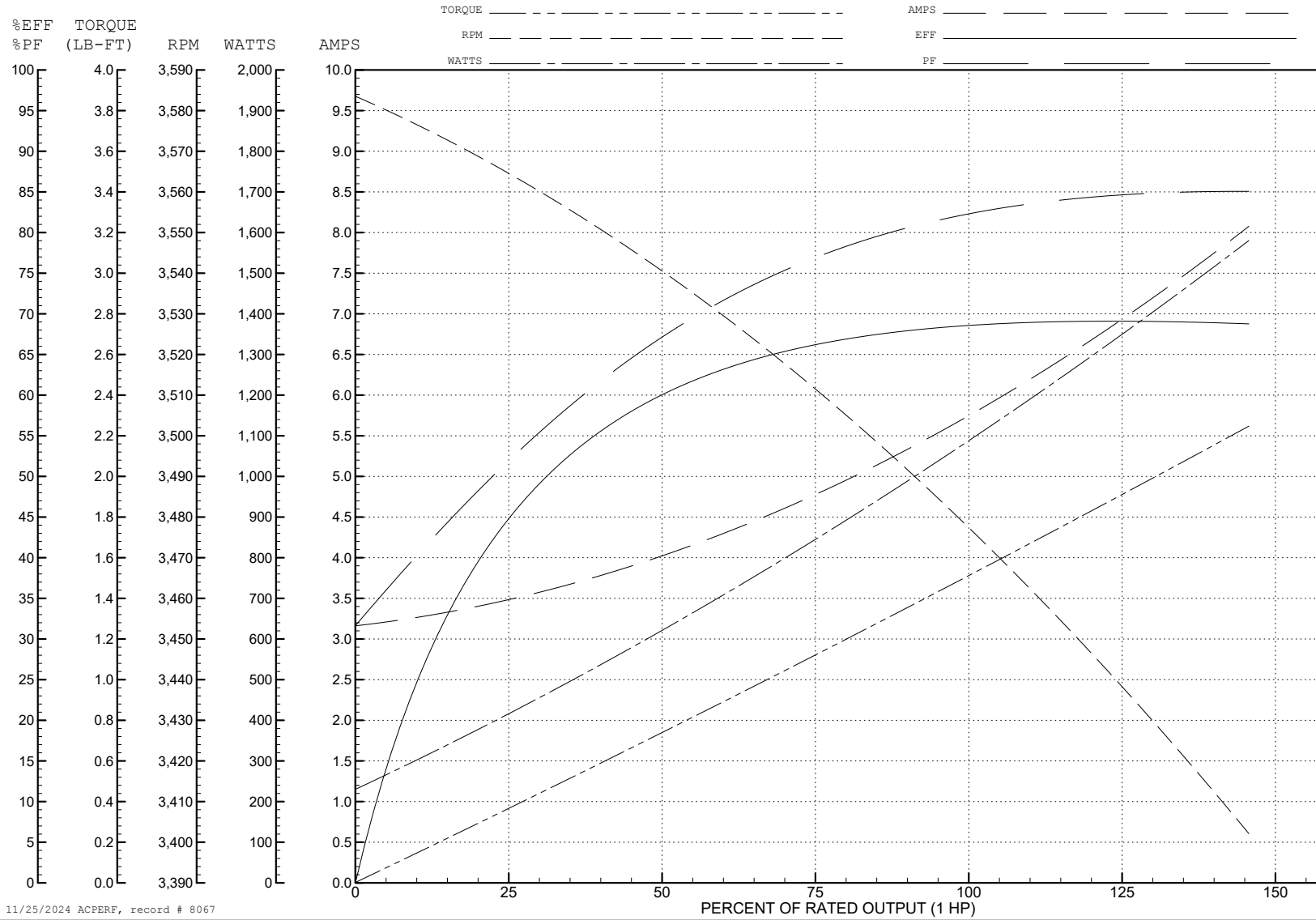
ABB Motors and Mechanical Inc.

WINDING # 35WG0480

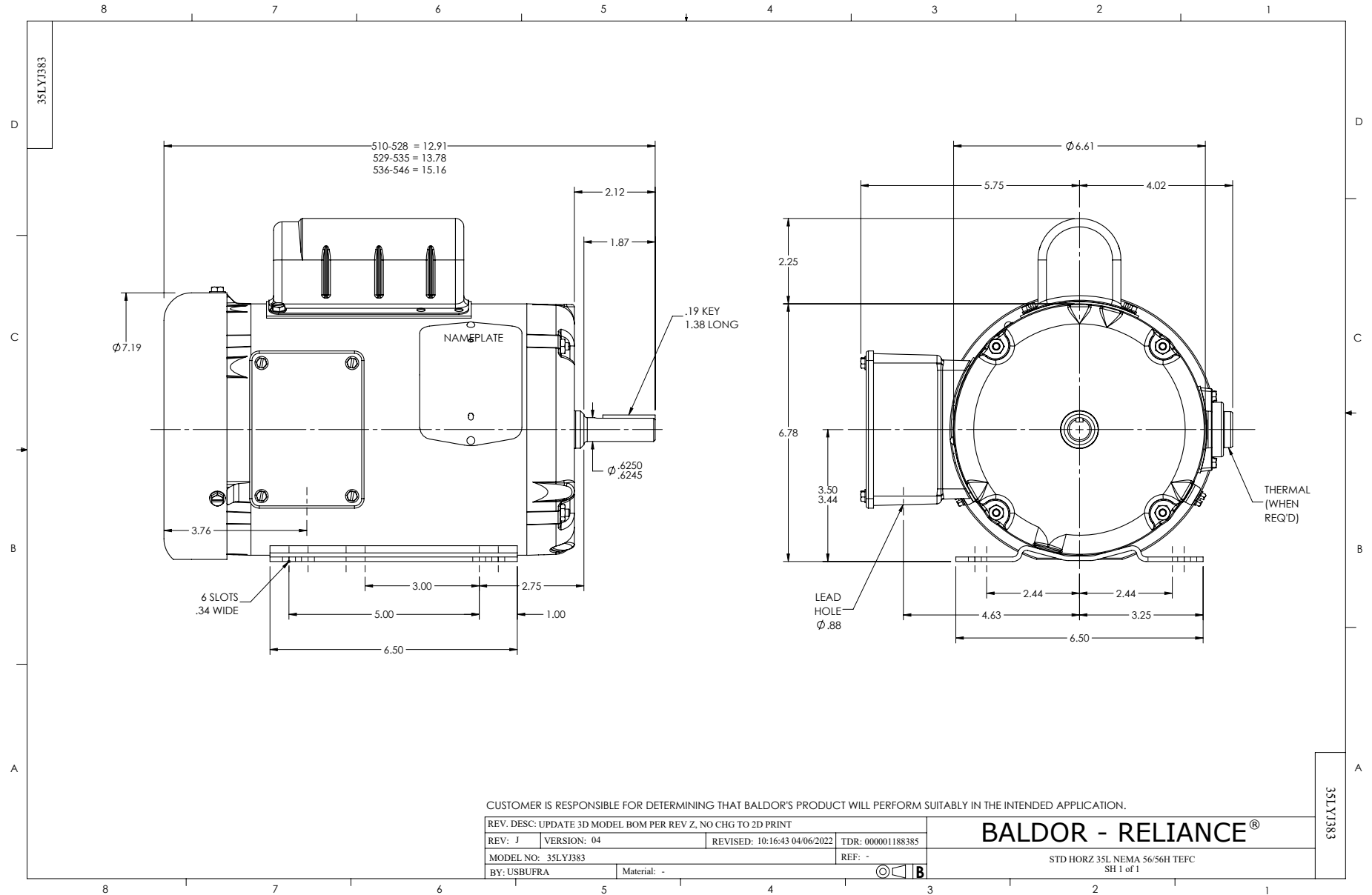
Typical performance - not guaranteed values.

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

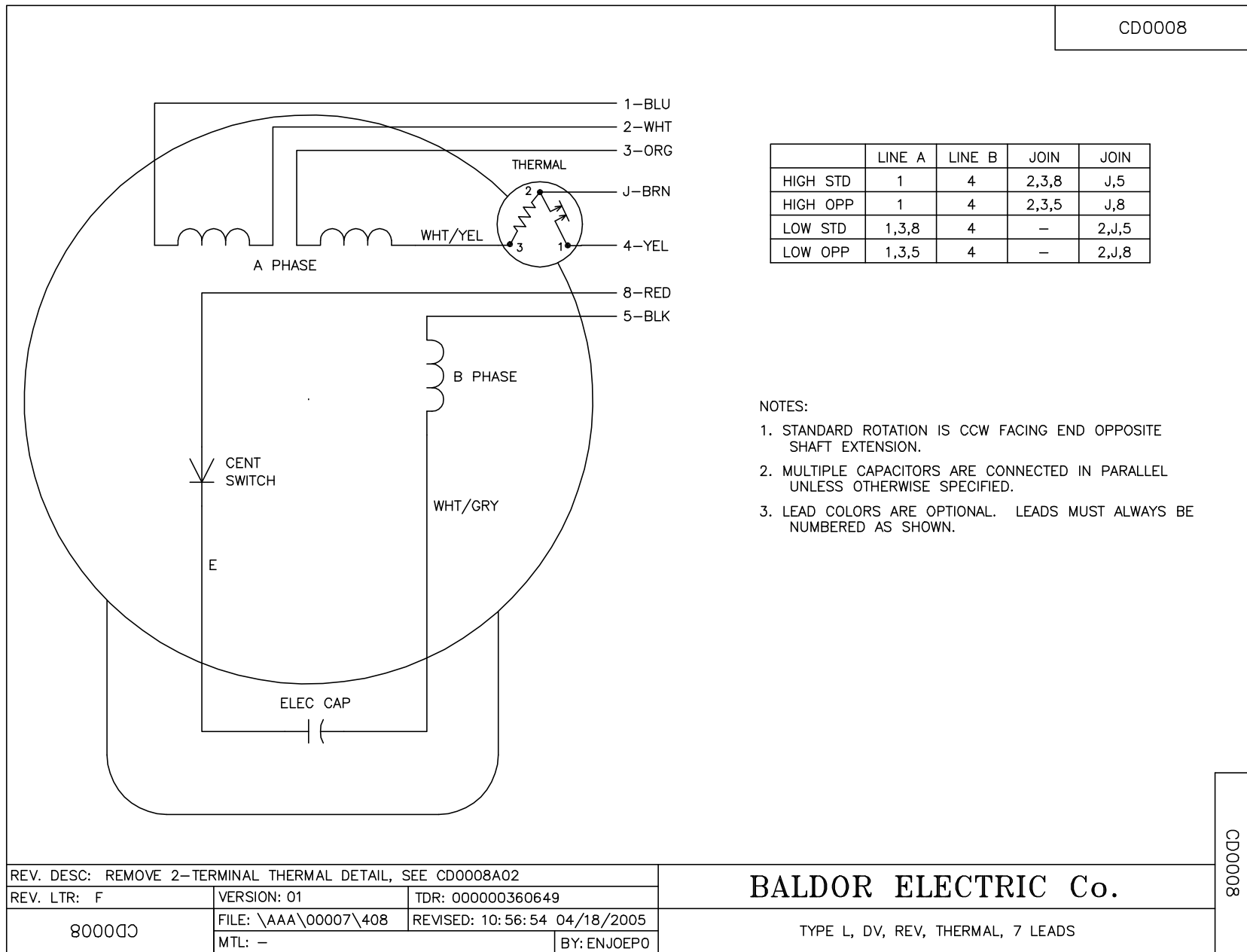
TORQUES (LB-FT): PO=3.7 PU=3.3 LR=4.5 LRA=38



11/25/2024 ACPERF, record # 8067



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