ABB 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	115.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	C UR US
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	12.000 A @ 115.0 V
	6.000 A @ 230.0 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
Insulation Class	B

Part Detail

Revision	BA
Type	AC
Mech. spec.	35J383
Base	
Status	PRD/A
Elec. spec.	35WG0480
Layout	35LYJ383
Eff. date	02-19-2026
CD Diagram	CD0008
Poles	02
Leads	4#16 A&J,2#18 B PH,1#14 #4TH
Proprietary	False
Created date	06-22-2007

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										

Accessories

Part number	Description	Multiplier
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

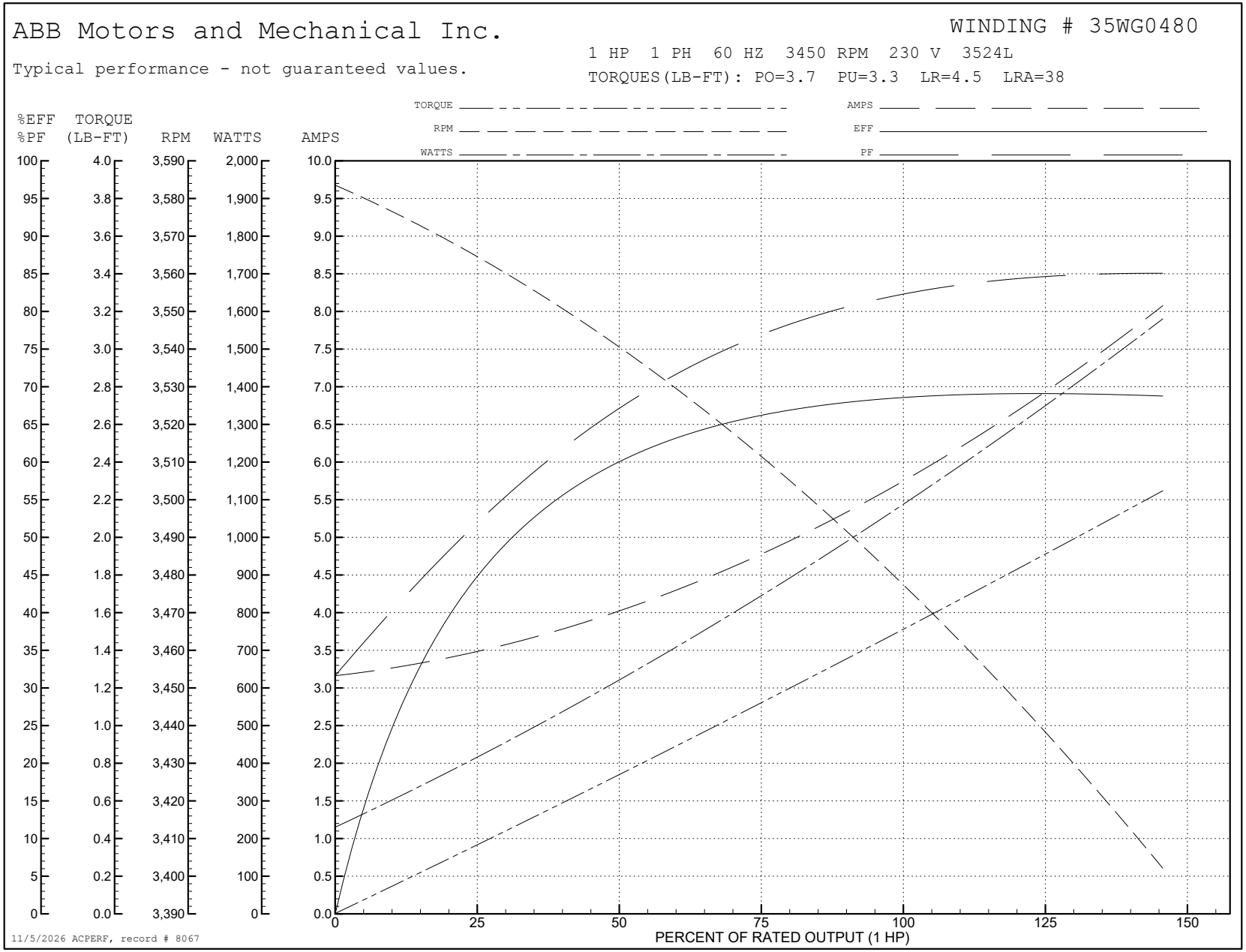
AC Induction Motor Performance Data
Record # 8067
Typical performance - not guaranteed values

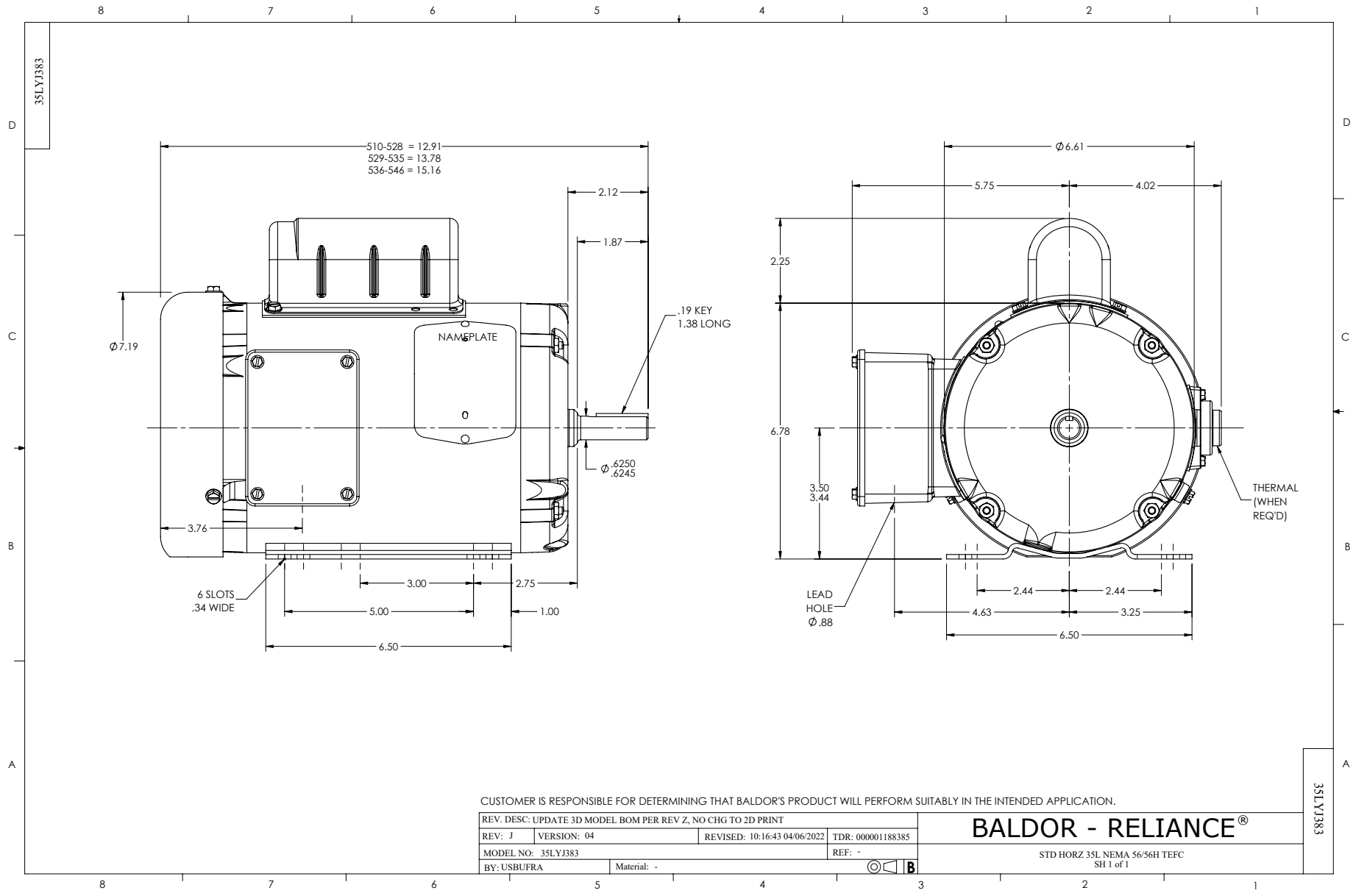
Winding: 35WG0480-R001	**Type:** 3524L	**Enclosure:** TEFC

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**	1	**Locked-rotor Torque**	4.5 LB-FT
NEMA Design Code	N **KVA Code**	K	**Starting Current**	38 A
Service Factor (S.F.)		1.25	**No-load Current**	3.15 A
NEMA Nom. Eff.	66 **Power Factor**	81	**Line-line Res. @ 25ºC**	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

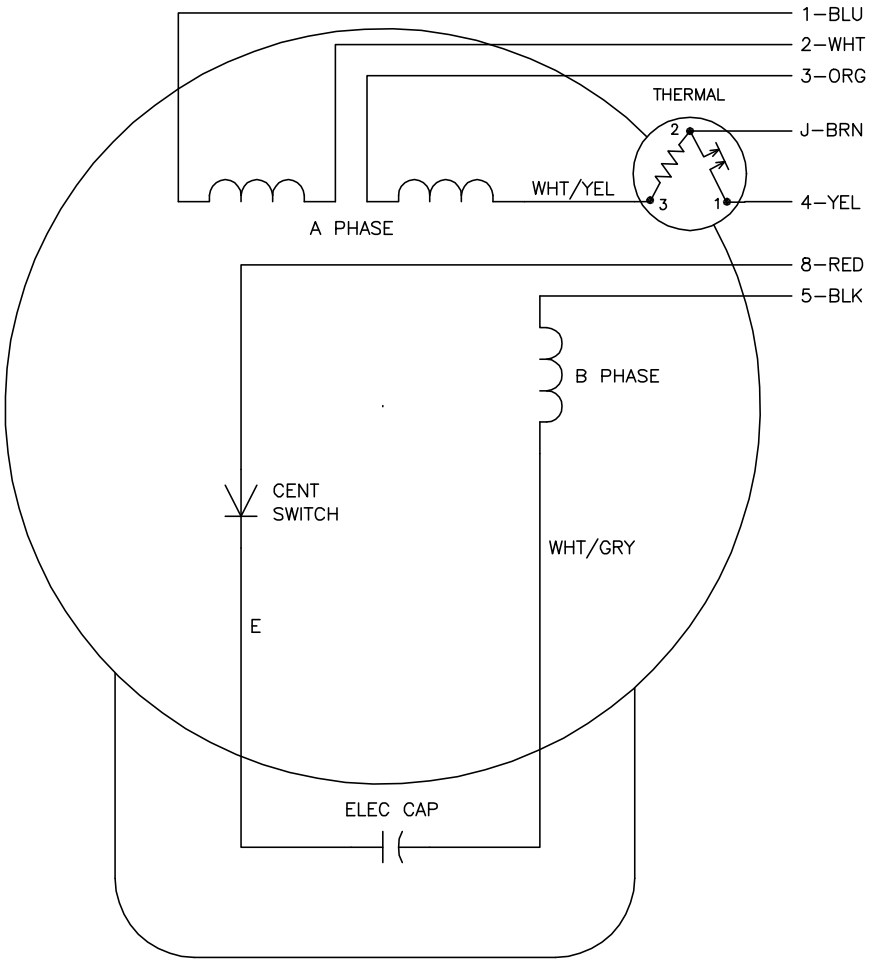
Load Characteristics 230 V, 60 Hz, 1 HP

% 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
1 HP 1 PH 60 HZ 3450 RPM 230 V 3524L
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=3.7 PU=3.3 LR=4.5 LRA=38
TORQUE
RPM
WATTS
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
WATTS
AMPS
100 95 90 85 80 75 70 65 60 55 50 45 40 35 30 25 20 15 10 5 0
4.0 3.8 3.6 3.4 3.2 3.0 2.8 2.6 2.4 2.2 2.0 1.8 1.6 1.4 1.2 1.0 0.8 0.6 0.4 0.2 0.0
3,590 3,580 3,570 3,560 3,550 3,540 3,530 3,520 3,510 3,500 3,490 3,480 3,470 3,460 3,450 3,440 3,430 3,420 3,410 3,400 3,390
2,000 1,900 1,800 1,700 1,600 1,500 1,400 1,300 1,200 1,100 1,000 900 800 700 600 500 400 300 200 100 0
10.0 9.5 9.0 8.5 8.0 7.5 7.0 6.5 6.0 5.5 5.0 4.5 4.0 3.5 3.0 2.5 2.0 1.5 1.0 0.5 0.0
0 25 50 75 100 125 150
PERCENT OF RATED OUTPUT (1 HP)
11/5/2026 ACPERF, record # 8067


35LYJ383
510-528 = 12.91
529-535 = 13.78
536-546 = 15.16
2.12
1.87
.19 KEY
1.38 LONG
NAMEPLATE
Ø7.19
Ø .6250
.6245
3.76
6 SLOTS
.34 WIDE
3.00
2.75
5.00
1.00
6.50
Ø6.61
5.75
4.02
2.25
6.78
3.50
3.44
THERMAL
(WHEN
REQ'D)
LEAD
HOLE
Ø .88
2.44
2.44
4.63
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATE 3D MODEL BOM PER REV Z, NO CHG TO 2D PRINT
REV: J
VERSION: 04
REVISED: 10:16:43 04/06/2022
TDR: 000001188385
MODEL NO: 35LYJ383
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
STD HORZ 35L NEMA 56/56H TEFC
SH 1 of 1
35LYJ383

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.

CD0008

REV. DESC: REMOVE 2–TERMINAL THERMAL DETAIL, SEE CD0008A02			BALDOR ELECTRIC Co.
REV. LTR: F	VERSION: 01	TDR: 000000360649	
CD0008	FILE: \AAA\00007\408	REVISED: 10:56:54 04/18/2005	TYPE L, DV, REV, THERMAL, 7 LEADS
	MTL: –	BY: ENJOEP0	