ABB BALDOR RELIANCE

# Customer information packet

## L3513T

1.5HP, 3450RPM, 1PH, 60HZ, 3524L, N
Class - None
Division - Not Applicable

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11/5/2026 4:00:43 PM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 143T |
| **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** | 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** | 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 |
| **High Voltage Full Load Amps** | 8.0 a |

## Part Detail

| | |
|---|---|
| **Revision** | N |
| **Type** | AC |
| **Mech. spec.** | 35Y521 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGY748 |
| **Layout** | 35LYY521 |
| **Eff. date** | 05-08-2024 |
| **CD Diagram** | CD0001 |
| **Poles** | 02 |
| **Leads** | 4#16 A PH,2#18 B PH |
| **Proprietary** | False |
| **Created date** | 12-07-2009 |

| | |
|---|---|
| **Insulation Class** | B |
| **Inverter Code** | Not Inverter |
| **KVA Code** | J |
| **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 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** | Standard |
| **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 |

**Nameplate**

| NP1256L | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | L3513T | | | | | | | |
| **SPEC.** | 35Y521Y748G1 | | | | | | | |
| **HP** | 1.5 | | | | | | | |
| **VOLTS** | 115/230 | | | | | | | |
| **AMP** | 16/8 | | | | | | | |
| **RPM** | 3450 | | | | | | | |
| **FRAME** | 143T | **HZ** | 60 | | | **PH** | 1 | |
| **SER.F.** | 1.15 | **CODE** | J | **DES** | L | **CLASS** | B | |
| **NEMA-NOM-EFF** | 70 | **PF** | 85 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | |
| **CC** | | | | | | | | |
| **DE** | 6205 | **ODE** | 6203 | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | |

**Accessories**

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

**AC Induction Motor Performance Data**
Record # 10315
Typical performance - not guaranteed values

| **Winding:** 35WGY748-R001 | **Type:** 3524L | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **230 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **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. @ 25ºC** | 1.58 Ω A Ph<br>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 |

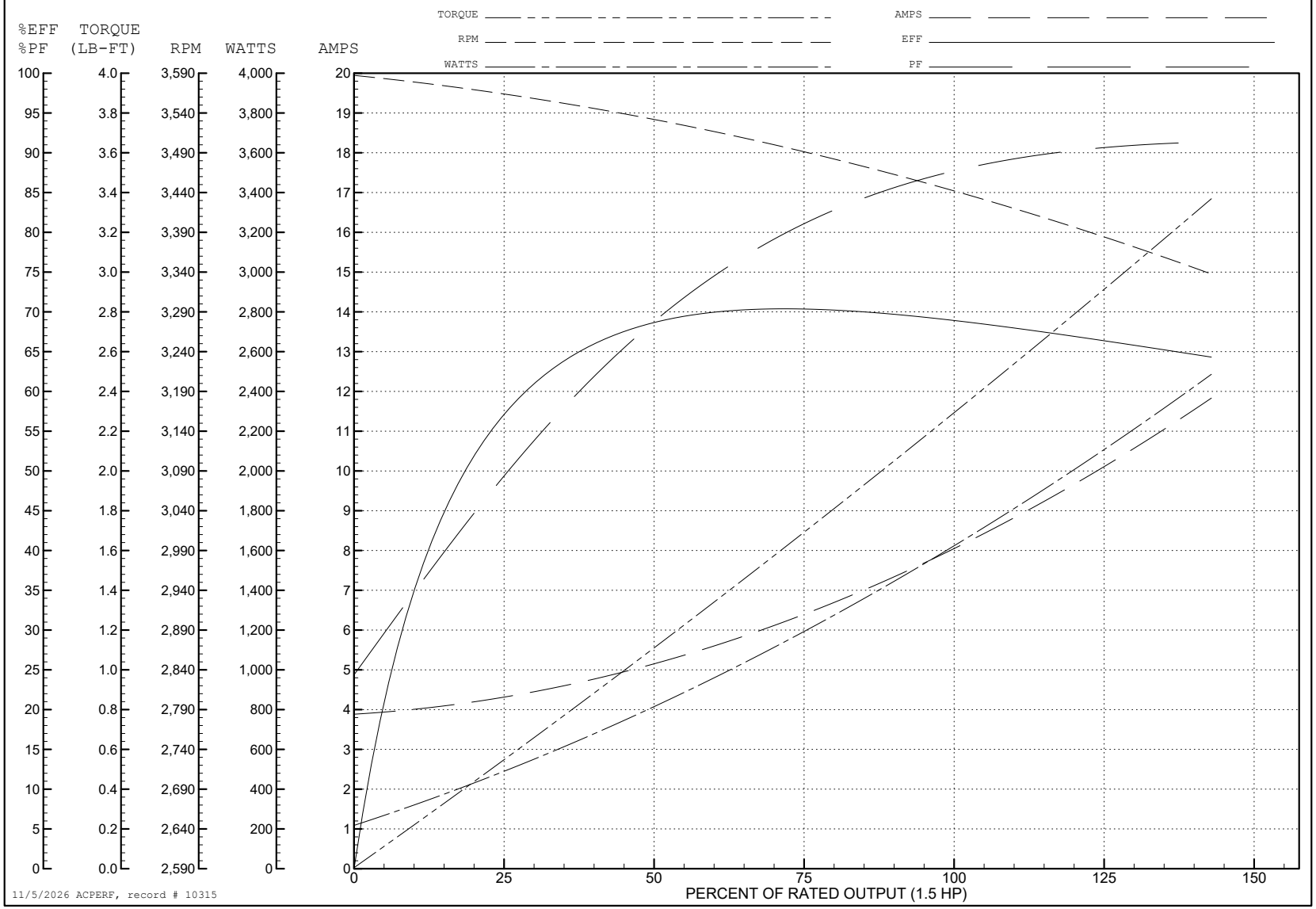
ABB Motors and Mechanical Inc.

WINDING # 35WGY748

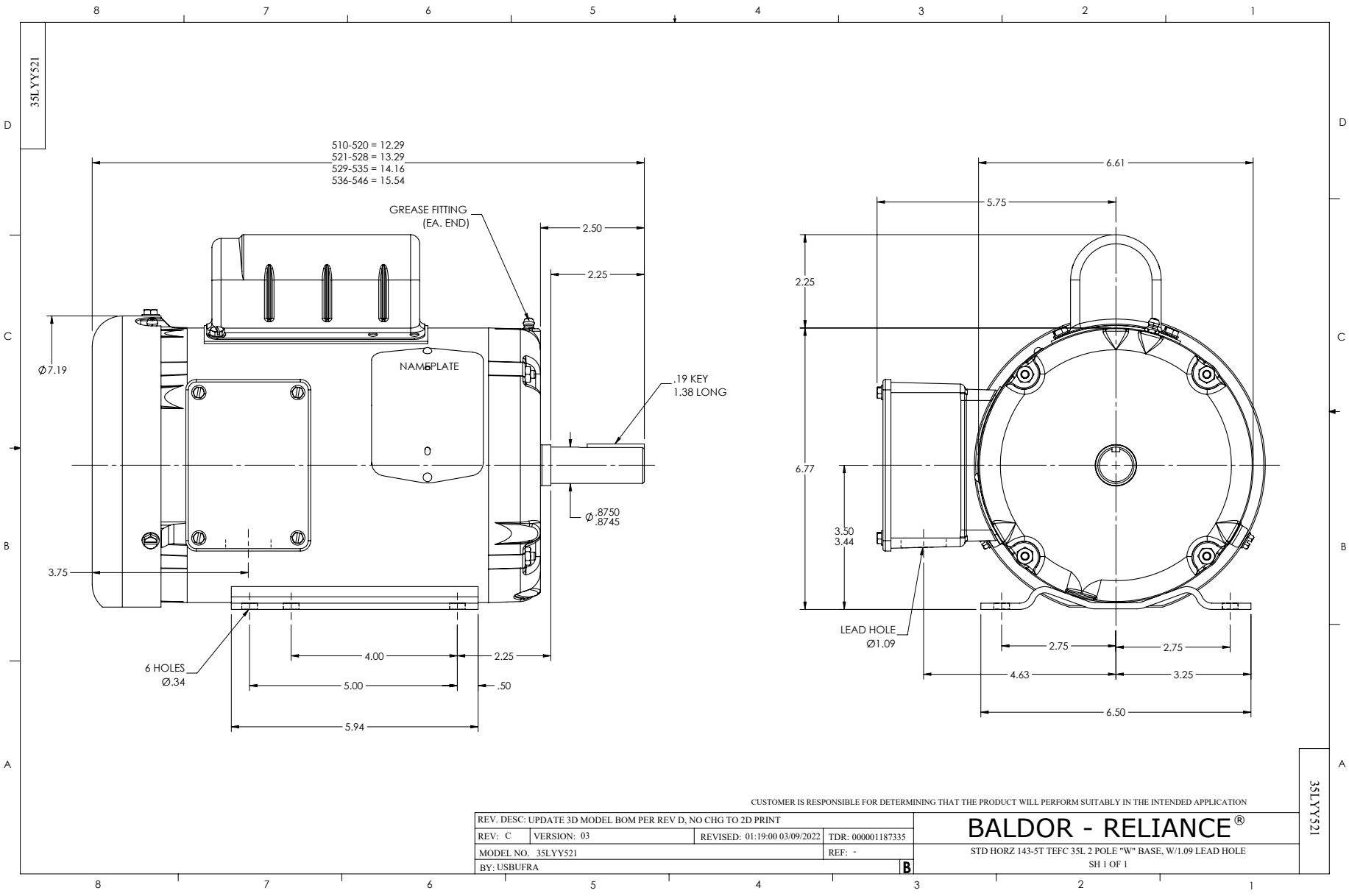
1.5 HP 1 PH 60 HZ 3450 RPM 230 V 3524L

Typical performance - not guaranteed values.

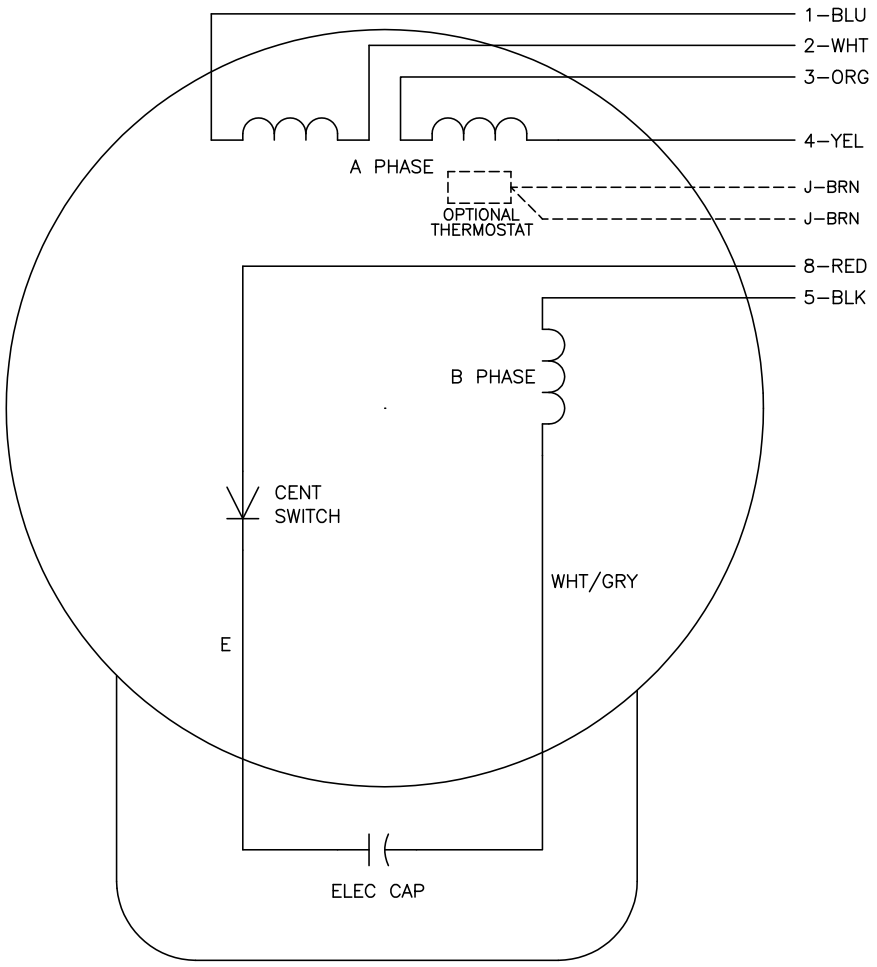
TORQUES(LB-FT): PO=5.4 PU=5 LR=6.4 LRA=50




11/5/2026 ACPERF, record # 10315


35LYY521
510-520 = 12.29
521-528 = 13.29
529-535 = 14.16
536-546 = 15.54
GREASE FITTING
(EA. END)
2.50
2.25
Ø7.19
NAMEPLATE
.19 KEY
1.38 LONG
Ø .8750
.8745
3.75
6 HOLES
Ø.34
4.00
2.25
5.00
.50
5.94
6.61
5.75
2.25
6.77
3.50
3.44
LEAD HOLE
Ø1.09
2.75
2.75
4.63
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV D, NO CHG TO 2D PRINT
REV: C
VERSION: 03
REVISED: 01:19:00 03/09/2022
TDR: 000001187335
MODEL NO. 35LYY521
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD HORZ 143-5T TEFC 35L 2 POLE "W" BASE, W/1.09 LEAD HOLE
SH 1 OF 1
35LYY521

CD0001




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

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.

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: D | BY: JLP | REVISED: 04/08/99 1:16 | TDR: 0178636 |
| CD0001 | | FILE: AAA00007405 | MDL: – |
| | | MTL: – | TYPE L, DV, REV, 6 LEADS |

CD0001