

# ABB BALDOR RELIANCE III

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## Customer information packet

JL1306A

.75HP, 3450RPM, 1PH, 60HZ, 56J, 3424L, OPEN, F1

Class - None

Division - Not Applicable

**Specifications**

|                                |                                         |
|--------------------------------|-----------------------------------------|
| Enclosure                      | OPEN                                    |
| Frame                          | 56J                                     |
| 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             | .750 HP @ 60 HZ                         |
| Phase                          | 1                                       |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                        |
| Voltage @ Frequency            | 115.0 V @ 60 HZ<br>230.0 V @ 60 HZ      |
| Agency Approvals               | UR<br>CSA                               |
| Ambient Temperature            | 40 °C                                   |
| Auxiliary Box                  | NO AUXILLARY BOX                        |
| Auxiliary Box Lead Termination | None                                    |
| Base Indicator                 | No Mounting                             |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                 |
| Blower                         | None                                    |
| Current @ Voltage              | 11.000 A @ 115.0 V<br>5.500 A @ 230.0 V |
| Design Code                    | N                                       |
| Drip Cover                     | Drip Cover                              |
| Duty Rating                    | CONT                                    |
| Efficiency @ 100% Load         | 69.0 %                                  |
| Electrically Isolated Bearing  | Not Electrically Isolated               |
| Feedback Device                | NO FEEDBACK                             |
| Front Face Code                | Terminal Panel                          |
| Front Shaft Indicator          | None                                    |
| Heater Indicator               | No Heater                               |
| High Voltage Full Load Amps    | 5.5 a                                   |

**Part Detail**

|              |                |
|--------------|----------------|
| Revision     | AM             |
| Type         | AC             |
| Mech. spec.  | 34F036         |
| Base         |                |
| Status       | PRD/A          |
| Elec. spec.  | 34WG2414       |
| Layout       | 34LYF036       |
| Eff. date    | 12-31-2024     |
| CD Diagram   | CD0307         |
| Poles        | 02             |
| Leads        | 5#18,1#14 #1TH |
| Proprietary  | False          |
| Created date | 01-01-0001     |

|                                      |                                    |
|--------------------------------------|------------------------------------|
| <b>Insulation Class</b>              | <b>B</b>                           |
| <b>Inverter Code</b>                 | <b>Not Inverter</b>                |
| <b>KVA Code</b>                      | <b>J</b>                           |
| <b>Lifting Lugs</b>                  | <b>No Lifting Lugs</b>             |
| <b>Locked Bearing Indicator</b>      | <b>Locked Bearing</b>              |
| <b>Motor Lead Exit</b>               | <b>Terminal Panel Or Lead Hole</b> |
| <b>Motor Lead Quantity/Wire Size</b> | <b>5 @ 18 AWG</b>                  |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>                |
| <b>Motor Standards</b>               | <b>NEMA</b>                        |
| <b>Motor Type</b>                    | <b>3424L</b>                       |
| <b>Mounting Arrangement</b>          | <b>F1</b>                          |
| <b>Number of Poles</b>               | <b>2</b>                           |
| <b>Overall Length</b>                | <b>13.39 IN</b>                    |
| <b>Power Factor</b>                  | <b>68</b>                          |
| <b>Product Family</b>                | <b>General Purpose</b>             |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                        |
| <b>Pulley Face Code</b>              | <b>C-Face</b>                      |
| <b>Pulley Shaft Indicator</b>        | <b>Ext Thread</b>                  |
| <b>Rodent Screen</b>                 | <b>None</b>                        |
| <b>Service Factor</b>                | <b>1.50</b>                        |
| <b>Shaft Diameter</b>                | <b>0.625 IN</b>                    |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>                  |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>          |
| <b>Shaft Rotation</b>                | <b>Fixed Opposite Standard</b>     |
| <b>Shaft Slinger Indicator</b>       | <b>No Slinger</b>                  |
| <b>Speed</b>                         | <b>3450 rpm</b>                    |
| <b>Speed Code</b>                    | <b>Single Speed</b>                |
| <b>Starting Method</b>               | <b>Direct on line</b>              |
| <b>Thermal Device - Bearing</b>      | <b>None</b>                        |
| <b>Thermal Device - Winding</b>      | <b>None</b>                        |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b>         |
| <b>Winding Thermal 1</b>             | <b>Automatic Thermal Overload</b>  |
| <b>Winding Thermal 1 Location</b>    | <b>ES</b>                          |

**Nameplate**

| NP1257L      |              |      |      |     |    |    |   |    |   |  |  |
|--------------|--------------|------|------|-----|----|----|---|----|---|--|--|
| CAT.NO.      | JL1306A      |      |      |     |    |    |   |    |   |  |  |
| SPEC.        | 34F36-2414   |      |      |     |    |    |   |    |   |  |  |
| HP           | .75          |      |      |     |    |    |   |    |   |  |  |
| VOLTS        | 115/230      |      |      |     |    |    |   |    |   |  |  |
| AMP          | 11/5.5       |      |      |     |    |    |   |    |   |  |  |
| RPM          | 3450         |      |      |     |    |    |   |    |   |  |  |
| FRAME        | 56J          |      |      | HZ  | 60 |    |   | PH | 1 |  |  |
| SER.F.       | 1.50         | CODE | J    | DES | N  | CL | B |    |   |  |  |
| NEMA-NOM-EFF | 69           | PF   | 68   |     |    |    |   |    |   |  |  |
| RATING       | 40C AMB-CONT |      |      |     |    |    |   |    |   |  |  |
| CC           |              |      |      |     |    |    |   |    |   |  |  |
| DE           | 6203         | ODE  | 6203 |     |    |    |   |    |   |  |  |
| ENCL         | OPEN         | SN   |      |     |    |    |   |    |   |  |  |
|              | SFA 13/6.5   |      |      |     |    |    |   |    |   |  |  |

**Parts List**

| <b>Part number</b> | <b>Description</b>                       | <b>Quantity</b> |
|--------------------|------------------------------------------|-----------------|
| SA005854           | SA 34F36-2414                            | 1.000 ea        |
| RA002600           | RA 34F36-2414                            | 1.000 ea        |
| EC1270A02SP        | ELEC CAP, 270-324 MFD, 125V, 1.48D X 3.  | 1.000 ea        |
| 34EP3202A02        | FR ENDPLATE, MACH                        | 1.000 ea        |
| 11XW0832G06        | #8-32 X 3/8, TAPTITE II, HEX WSHR SLTD   | 1.000 ea        |
| 51XW0832A07        | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 3.000 ea        |
| WD4100A01          | DP-875 HEYCO PLUG OR 62MP0875 MICRO PLAS | 1.000 ea        |
| 34CB4800SP         | CAPACITOR COVER, STAMPED PRIMED          | 1.000 ea        |
| 51XB1016A05        | 10-16X5/16HX WA SL SR TYB (F/S)          | 2.000 ea        |
| 34EP3401A01SP      | PU ENDPLATE, MACH                        | 1.000 ea        |
| HW5100A03          | WAVY WASHER (W1543-017)                  | 1.000 ea        |
| HW4600B39SP        | V-RING SLINGER 0.550 X 0.790 X .18 VITON | 1.000 ea        |
| 34AD2000           | BAFFLE PLATE, STAMPED                    | 1.000 ea        |
| 60XW0632A06        | 6-32 X 3/8 TORX HEAD SCREW TAPTITE II    | 4.000 ea        |
| 51XN1032A20        | 10-32 X 1 1/4 HX WS SL SR                | 2.000 ea        |
| 34FH4500A02P       | DRIPCOVER, MODEL 34                      | 1.000 ea        |
| 51XW0832A07        | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 ea        |
| 34CB4501SP         | TERMINAL BOX LID, STAMPED X (PLATED)     | 1.000 ea        |
| 51XW0832A07        | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 ea        |
| RM1010A01          | 35-968-1 VINYL CLS                       | 1.000 ea        |
| MG1050G01          | CELEROL MEDIUM CHARCOAL METALLIC GRAY    | 0.014 ga        |
| LB1009N            | LABEL,ROTATION DIRECTION (ON ROLLS)      | 1.000 ea        |
| 85XU0407S04        | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea        |
| SP5068A01          | 34L TERM PANEL STAT SWITCH #E-6"         | 1.000 ea        |
| HA3100A38          | THRUBOLT 10-32 X 9.375                   | 4.000 ea        |
| LB1118             | LABEL,WARNING (ROLL LABEL)               | 1.000 ea        |
| LC0307             | 1PH, DV, FIX, W & W/O THERM, TERM PLATE, | 1.000 ea        |
| NP1257L            | ALUM UL CC THERMAL REV MTG               | 1.000 ea        |
| 35PA1066           | PKG GRP, PRINT PK1008A07                 | 1.000 ea        |
| WD1000A16          | 2-520128-2 AMP FLAG TERMINAL(4M/RL)      | 5.000 ea        |
| WD1000A15          | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 1.000 ea        |

|        |                               |          |
|--------|-------------------------------|----------|
| PK3083 | STYROFOAM PACKING CRADLE      | 1.000 ea |
| PK3088 | MICROFOAM, 8"X"8 PERF. SHEETS | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 6649

Typical performance - not guaranteed values

| Winding: 34WG2414-R001 |    |              | Type: 3424L                              |                         | Enclosure: OPEN       |            |                            |
|------------------------|----|--------------|------------------------------------------|-------------------------|-----------------------|------------|----------------------------|
| Nameplate Data         |    |              | 230 V, 60 Hz:<br>High Voltage Connection |                         |                       |            |                            |
| Rated Output (HP)      |    | .75          | Full Load Torque                         |                         | 1.15 LB-FT            |            |                            |
| Volts                  |    | 115/230      | Start Configuration                      |                         | direct on line        |            |                            |
| Full Load Amps         |    | 11/5.5       | Breakdown Torque                         |                         | 3.98 LB-FT            |            |                            |
| R.P.M.                 |    | 3450         | Pull-up Torque                           |                         | 1.63 LB-FT            |            |                            |
| Hz                     | 60 | Phase        | 1                                        | Locked-rotor Torque     |                       | 2.45 LB-FT |                            |
| NEMA Design Code       |    | N            | KVA Code                                 | J                       | Starting Current      |            | 31.2 A                     |
| Service Factor (S.F.)  |    | 1.5          |                                          | No-load Current         |                       | 3.7 A      |                            |
| NEMA Nom. Eff.         |    | 69           | Power Factor                             | 68                      | Line-line Res. @ 25°C |            | 2.33 Ω A Ph<br>1.65 Ω B Ph |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load |                       | 75°C       |                            |
| S.F. Amps              |    | 13/6.5       |                                          | Temp. Rise @ S.F. Load  |                       | 108°C      |                            |

**Load Characteristics 230 V, 60 Hz, 0.75 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 39   | 52   | 64   | 73   | 79   | 83   | 85   |
| Efficiency      | 41.7 | 57.6 | 65.5 | 69.2 | 69.8 | 69.3 | 70.4 |
| Speed           | 3558 | 3536 | 3508 | 3479 | 3447 | 3410 | 3415 |
| Line amperes    | 3.78 | 4    | 4.4  | 4.91 | 5.61 | 6.37 | 6.31 |

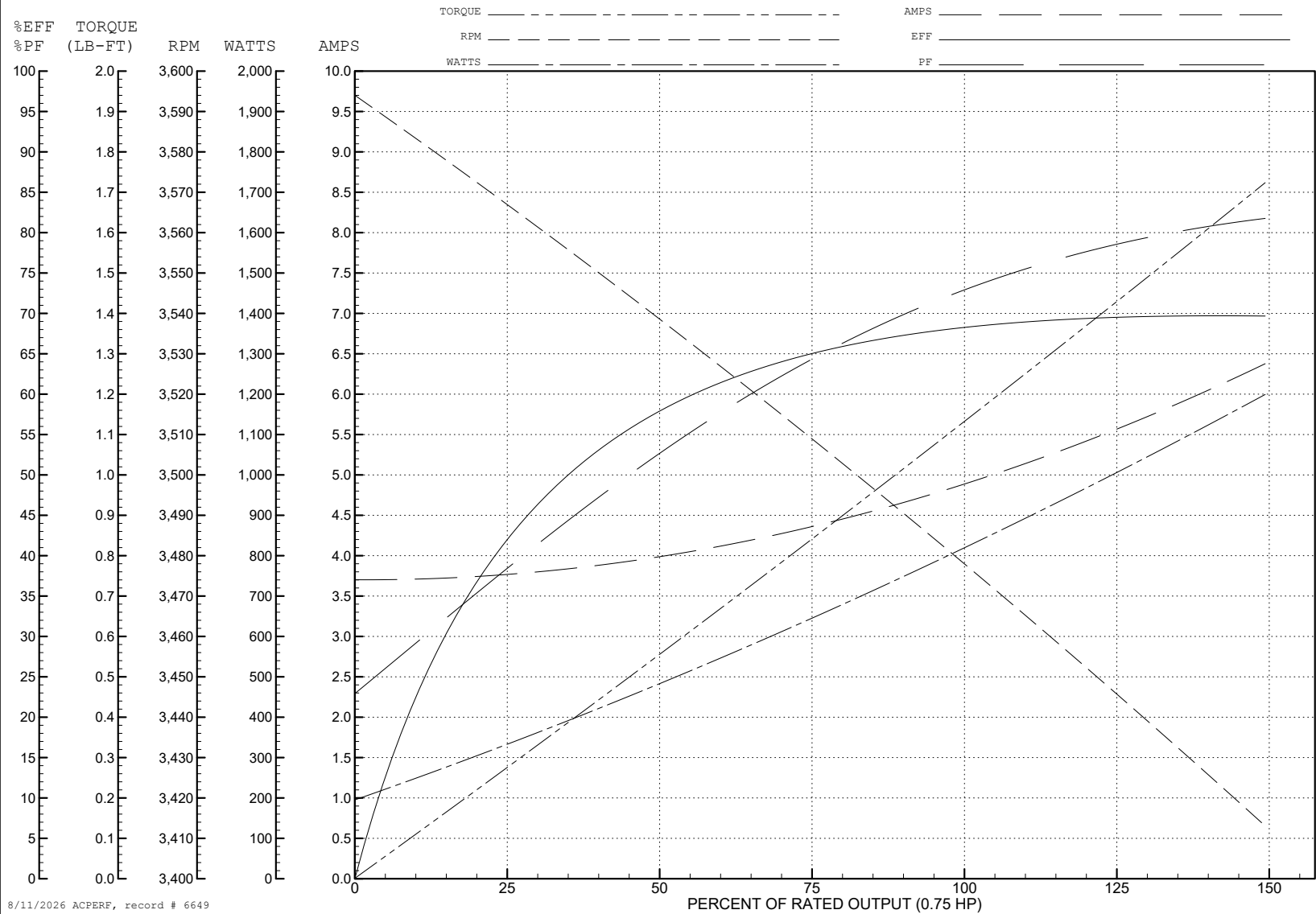
ABB Motors and Mechanical Inc.

WINDING # 34WG2414

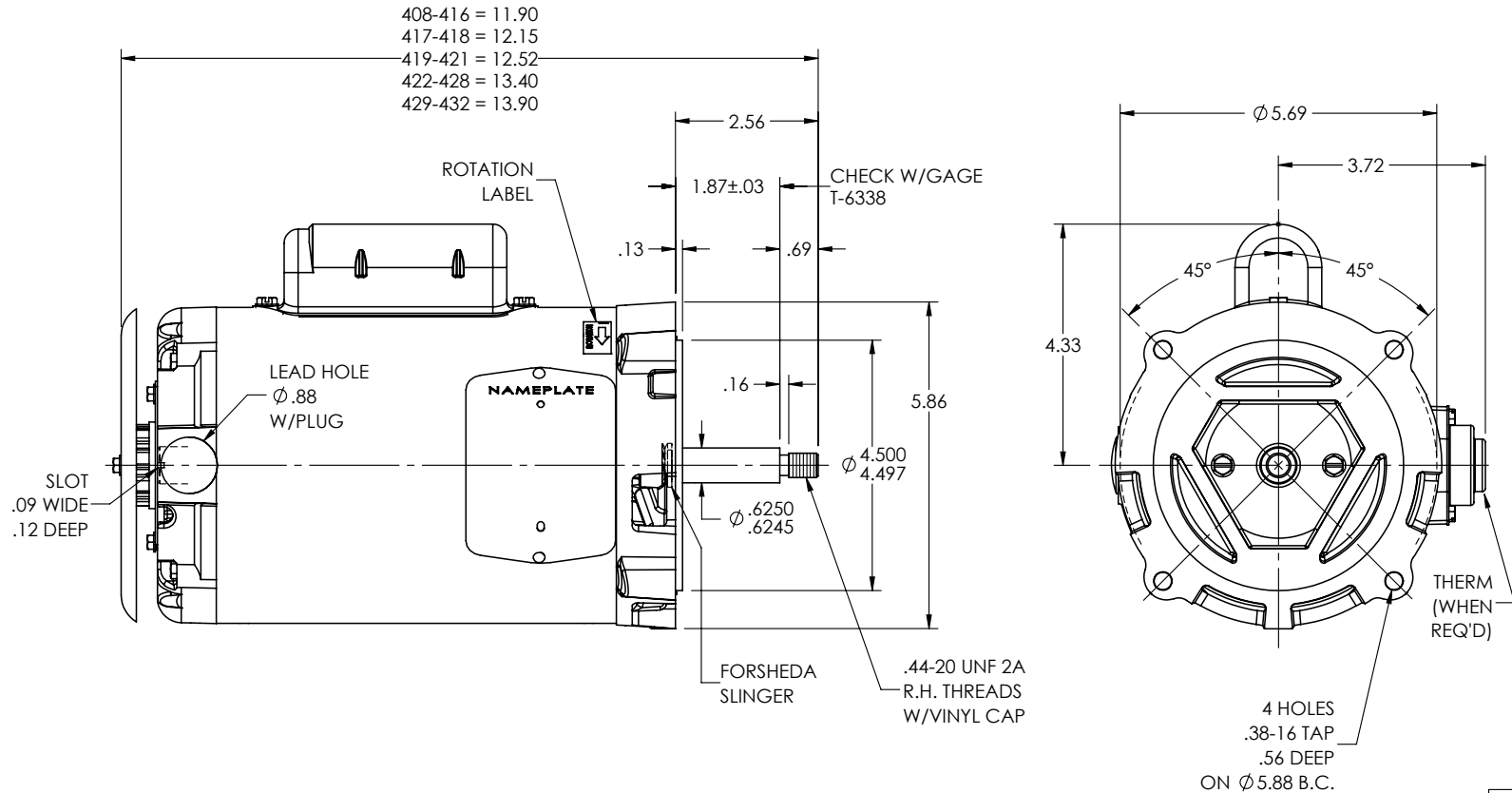
Typical performance - not guaranteed values.

0.75 HP 1 PH 60 HZ 3450 RPM 230 V 3424L

TORQUES (LB-FT) : PO=3.98 PU=1.63 LR=2.45 LRA=31.2



34LYF036



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: CLEAN UP DIMENSIONING

REV: L VERSION: 04 REVISED: 03:37:02 08/29/2025 TDR: 000001262510

34LYF036

MODEL NO. 34LYF036

BY: ENJEFD0

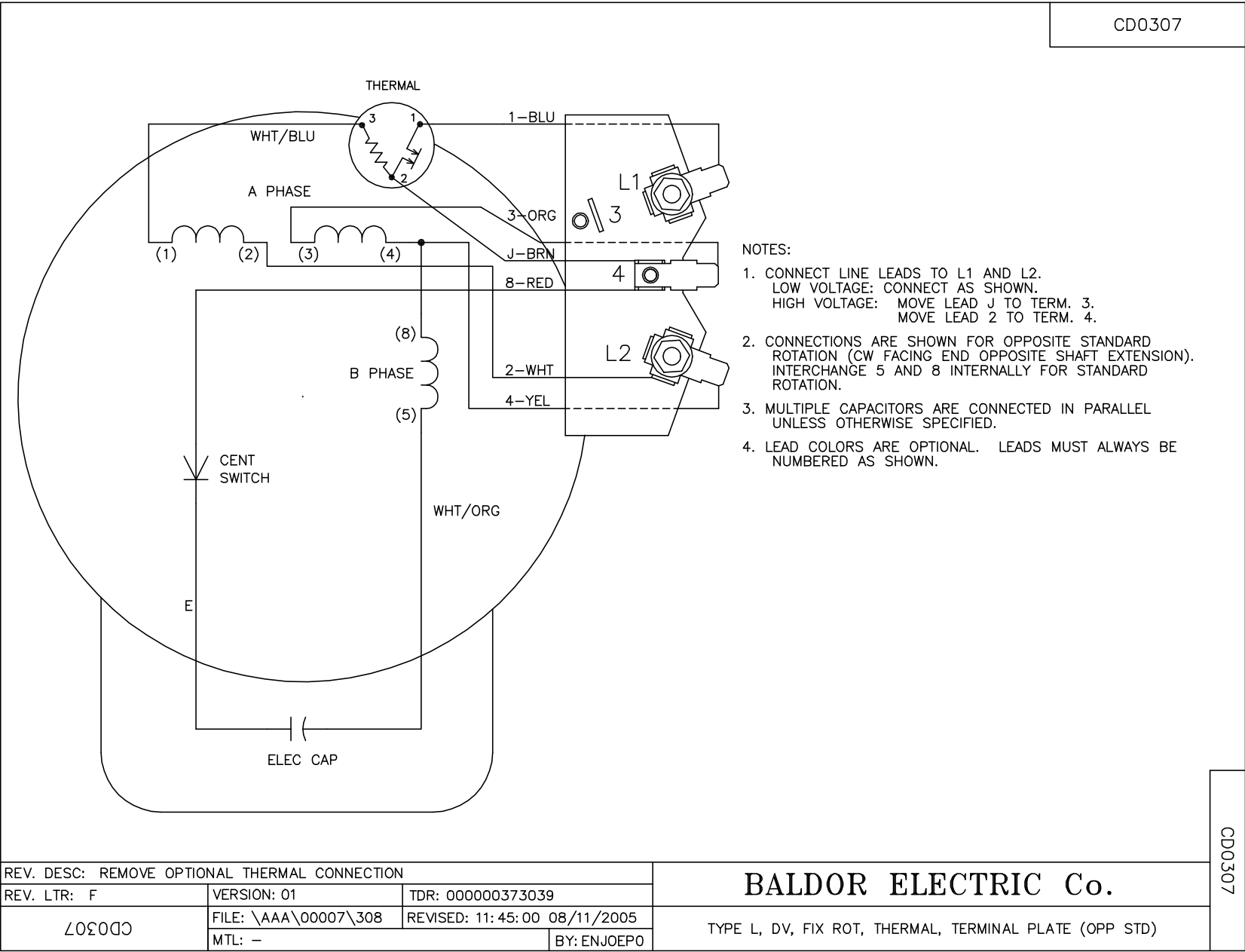
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**BALDOR - RELIANCE®**

STD VERT 34L NEMA 56J OPEN W/DRIP COVER & TERM PLATE

34LYF036

CD0307



CD0307