

# ABB BALDOR RELIANCE III

---

## Customer information packet

### CJL1317A

2HP, 3450RPM, 1PH, 60HZ, 56J, 3528L, 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             | 2.000 HP @ 60 HZ                         |
| Phase                          | 1                                        |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                         |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>115.0 V @ 60 HZ       |
| Agency Approvals               | CSA<br>UR                                |
| 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              | 26.000 A @ 115.0 V<br>13.000 A @ 230.0 V |
| Design Code                    | L                                        |
| Drip Cover                     | Drip Cover                               |
| Duty Rating                    | CONT                                     |
| Efficiency @ 100% Load         | 70.0 %                                   |
| 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    | 13.0 a                                   |

**Part Detail**

|              |                              |
|--------------|------------------------------|
| Revision     | AG                           |
| Type         | AC                           |
| Mech. spec.  | 35T951                       |
| Base         |                              |
| Status       | PRD/A                        |
| Elec. spec.  | 35WGW183                     |
| Layout       | 35LYT951                     |
| Eff. date    | 05-07-2024                   |
| CD Diagram   | CD0307                       |
| Poles        | 02                           |
| Leads        | 4#14 A&J,1#18 B PH,1#10 #1TH |
| Proprietary  | False                        |
| Created date | 06-22-2007                   |

|                                      |                                    |
|--------------------------------------|------------------------------------|
| <b>Insulation Class</b>              | <b>B</b>                           |
| <b>Inverter Code</b>                 | <b>Not Inverter</b>                |
| <b>KVA Code</b>                      | <b>G</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>4 @ 14 AWG, A&amp;J</b>         |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>                |
| <b>Motor Standards</b>               | <b>NEMA</b>                        |
| <b>Motor Type</b>                    | <b>3528L</b>                       |
| <b>Mounting Arrangement</b>          | <b>F1</b>                          |
| <b>Number of Poles</b>               | <b>2</b>                           |
| <b>Overall Length</b>                | <b>13.25 IN</b>                    |
| <b>Power Factor</b>                  | <b>69</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>RoHS Status</b>                   | <b>ROHS COMPLIANT</b>              |
| <b>Service Factor</b>                | <b>1.20</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>Do Not Use Eve-Not Valid</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>SB</b>                          |

Winding Thermal 2

None

---

**Nameplate**

| NP1257L      |               |      |      |     |    |    |   |    |   |
|--------------|---------------|------|------|-----|----|----|---|----|---|
| CAT.NO.      | C JL1317A     |      |      |     |    |    |   |    |   |
| SPEC.        | 35T951W183G1  |      |      |     |    |    |   |    |   |
| HP           | 2             |      |      |     |    |    |   |    |   |
| VOLTS        | 115/230       |      |      |     |    |    |   |    |   |
| AMP          | 26/13         |      |      |     |    |    |   |    |   |
| RPM          | 3450          |      |      |     |    |    |   |    |   |
| FRAME        | 56J           |      |      | HZ  | 60 |    |   | PH | 1 |
| SER.F.       | 1.20          | CODE | G    | DES | L  | CL | B |    |   |
| NEMA-NOM-EFF | 70            | PF   | 69   |     |    |    |   |    |   |
| RATING       | 40C AMB-CONT  |      |      |     |    |    |   |    |   |
| CC           |               |      |      |     |    |    |   |    |   |
| DE           | 6205          | ODE  | 6203 |     |    |    |   |    |   |
| ENCL         | OPEN          | SN   |      |     |    |    |   |    |   |
|              | SFA 27.6/13.8 |      |      |     |    |    |   |    |   |

**AC Induction Motor Performance Data**

Record # 9776

Typical performance - not guaranteed values

| Winding: 35GW183-R001 |    |           | Type: 3528L                              |                     | Enclosure: OPEN         |                       |      |                              |
|-----------------------|----|-----------|------------------------------------------|---------------------|-------------------------|-----------------------|------|------------------------------|
| Nameplate Data        |    |           | 230 V, 60 Hz:<br>High Voltage Connection |                     |                         |                       |      |                              |
| Rated Output (HP)     |    | 2         | Full Load Torque                         |                     | 3 LB-FT                 |                       |      |                              |
| Volts                 |    | 115/230   | Start Configuration                      |                     | direct on line          |                       |      |                              |
| Full Load Amps        |    | 26/13     | Breakdown Torque                         |                     | 10.4 LB-FT              |                       |      |                              |
| R.P.M.                |    | 3450      | Pull-up Torque                           |                     | 5.9 LB-FT               |                       |      |                              |
| Hz                    | 60 | Phase     | 1                                        | Locked-rotor Torque |                         | 7.1 LB-FT             |      |                              |
| NEMA Design Code      |    | L         | KVA Code                                 | G                   | Starting Current        |                       | 79 A |                              |
| Service Factor (S.F.) |    | 1.2       | No-load Current                          |                     | 9.3 A                   |                       |      |                              |
| NEMA Nom. Eff.        |    | 70        | Power Factor                             |                     | 69                      | Line-line Res. @ 25°C |      | 0.842 Ω A Ph<br>0.843 Ω B Ph |
| Rating - Duty         |    | 40C       | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |                       | 77°C |                              |
| S.F. Amps             |    | 27.6/13.8 | Temp. Rise @ S.F. Load                   |                     | 87°C                    |                       |      |                              |

**Load Characteristics 230 V, 60 Hz, 2 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 38   | 53   | 65   | 71   | 80   | 84   | 78   |
| Efficiency      | 46   | 60   | 66   | 70   | 68   | 67.5 | 68.4 |
| Speed           | 3569 | 3547 | 3523 | 3498 | 3469 | 3436 | 3475 |
| Line amperes    | 9.5  | 10.3 | 11.4 | 13   | 14.7 | 16.8 | 13.8 |

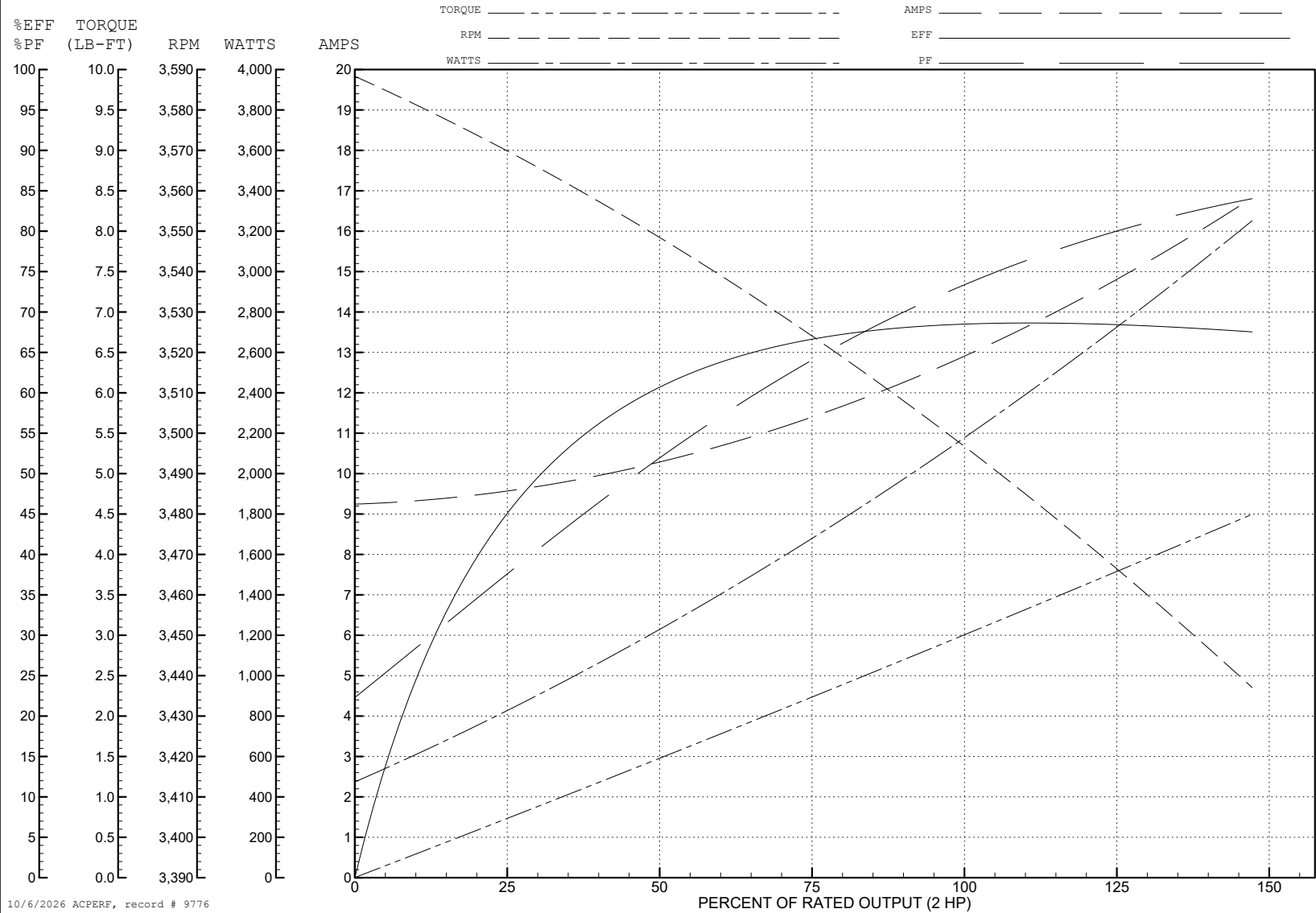
ABB Motors and Mechanical Inc.

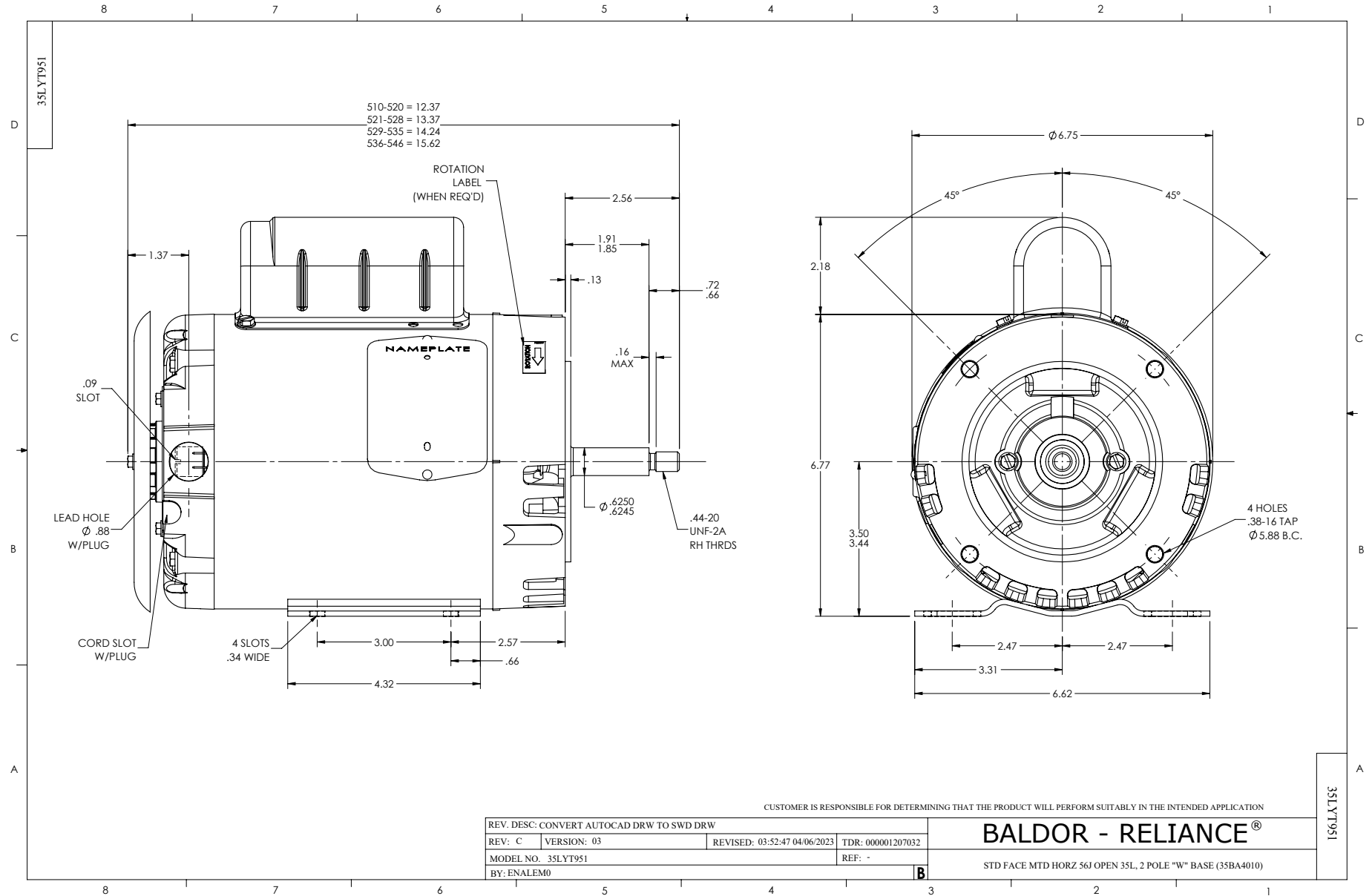
WINDING # 35WGW183

Typical performance - not guaranteed values.

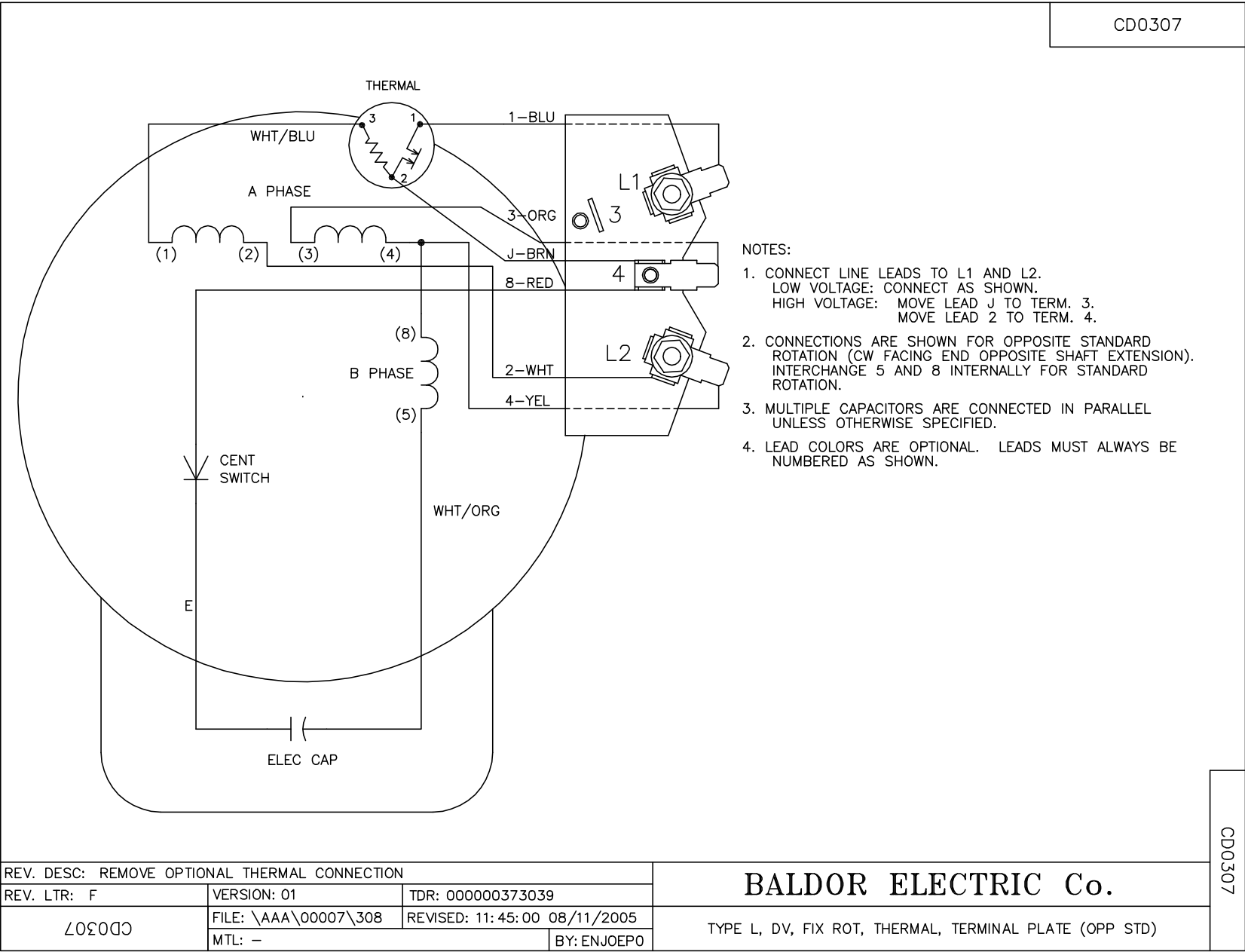
2 HP 1 PH 60 HZ 3450 RPM 230 V 3528L

TORQUES (LB-FT): PO=10.4 PU=5.9 LR=7.1 LRA=79





CD0307



CD0307