

# ABB BALDOR RELIANCE III

---

## Customer information packet

### PCL1327M

5HP, 3450RPM, 1PH, 60HZ, 56HCY, 3535LC, ODTF

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                          |
|---------------------------------------|------------------------------------------|
| <b>Enclosure</b>                      | ODTF                                     |
| <b>Frame</b>                          | 56HCY                                    |
| <b>Frame Material</b>                 | Steel                                    |
| <b>Frequency</b>                      | 60.00 Hz                                 |
| <b>Haz Area Class and Group</b>       | None                                     |
| <b>Haz Area Division</b>              | Not Applicable                           |
| <b>Motor Letter Type</b>              | Cap Start, Cap Run                       |
| <b>Output @ Frequency</b>             | 5.000 HP @ 60 HZ                         |
| <b>Phase</b>                          | 1                                        |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                         |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | UR<br>CSA                                |
| <b>Ambient Temperature</b>            | 40 °C                                    |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                         |
| <b>Auxiliary Box Lead Termination</b> | None                                     |
| <b>Base Indicator</b>                 | Rigid                                    |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                  |
| <b>Blower</b>                         | None                                     |
| <b>Current @ Voltage</b>              | 23.000 A @ 230.0 V<br>24.000 A @ 208.0 V |
| <b>Drip Cover</b>                     | Drip Cover                               |
| <b>Duty Rating</b>                    | CONT                                     |
| <b>Efficiency @ 100% Load</b>         | 74.2 %                                   |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                |
| <b>Feedback Device</b>                | NO FEEDBACK                              |
| <b>Front Face Code</b>                | Drip Cover Mounting                      |
| <b>Front Shaft Indicator</b>          | None                                     |
| <b>Heater Indicator</b>               | No Heater                                |
| <b>High Voltage Full Load Amps</b>    | 23.0 a                                   |
| <b>Insulation Class</b>               | F                                        |
| <b>Inverter Code</b>                  | Not Inverter                             |

**Part Detail**

|                     |                    |
|---------------------|--------------------|
| <b>Revision</b>     | AR                 |
| <b>Type</b>         | AC                 |
| <b>Mech. spec.</b>  | 35L263             |
| <b>Base</b>         |                    |
| <b>Status</b>       | PRD/A              |
| <b>Elec. spec.</b>  | 35WGS322           |
| <b>Layout</b>       | 35LYL263           |
| <b>Eff. date</b>    | 05-14-2024         |
| <b>CD Diagram</b>   | CD0002A02          |
| <b>Poles</b>        | 02                 |
| <b>Leads</b>        | 2#12 A PH,3#18 B&J |
| <b>Proprietary</b>  | False              |
| <b>Created date</b> | 06-22-2007         |

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>KVA Code</b>                      | <b>F</b>                |
| <b>Lifting Lugs</b>                  | No Lifting Lugs         |
| <b>Locked Bearing Indicator</b>      | Locked Bearing          |
| <b>Motor Lead Exit</b>               | Cap Box                 |
| <b>Motor Lead Quantity/Wire Size</b> | 2 @ 12 AWG, A PH        |
| <b>Motor Lead Termination</b>        | Flying Leads            |
| <b>Motor Standards</b>               | NEMA                    |
| <b>Motor Type</b>                    | 3535LC                  |
| <b>Mounting Arrangement</b>          | F1                      |
| <b>Number of Poles</b>               | 2                       |
| <b>Overall Length</b>                | 14.11 IN                |
| <b>Power Factor</b>                  | 95                      |
| <b>Product Family</b>                | General Purpose         |
| <b>Pulley End Bearing Type</b>       | Ball                    |
| <b>Pulley Face Code</b>              | C-Face                  |
| <b>Pulley Shaft Indicator</b>        | Standard                |
| <b>Rodent Screen</b>                 | None                    |
| <b>Service Factor</b>                | 1.00                    |
| <b>Shaft Diameter</b>                | 0.625 IN                |
| <b>Shaft Extension Location</b>      | Pulley End              |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding      |
| <b>Shaft Rotation</b>                | Reversible              |
| <b>Shaft Slinger Indicator</b>       | No Slinger              |
| <b>Speed</b>                         | 3450 rpm                |
| <b>Speed Code</b>                    | Single Speed            |
| <b>Starting Method</b>               | Direct on line          |
| <b>Thermal Device - Bearing</b>      | None                    |
| <b>Thermal Device - Winding</b>      | Do Not Use              |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor     |
| <b>Winding Thermal 1</b>             | Manual Thermal Overload |
| <b>Winding Thermal 1 Location</b>    | KO                      |
| <b>Winding Thermal 2</b>             | None                    |

**Nameplate**

| NP1257L      |              |      |      |     |   |    |   |  |  |
|--------------|--------------|------|------|-----|---|----|---|--|--|
| CAT.NO.      | PCL1327M     |      |      |     |   |    |   |  |  |
| SPEC.        | 35L263S322   |      |      |     |   |    |   |  |  |
| HP           | 5            |      |      |     |   |    |   |  |  |
| VOLTS        | 230          |      |      |     |   |    |   |  |  |
| AMP          | 23           |      |      |     |   |    |   |  |  |
| RPM          | 3450         |      |      |     |   |    |   |  |  |
| FRAME        | 56HCY        |      | HZ   | 60  |   | PH | 1 |  |  |
| SER.F.       | 1.00         | CODE | F    | DES | - | CL | F |  |  |
| NEMA-NOM-EFF | 74.2         | PF   | 95   |     |   |    |   |  |  |
| RATING       | 40C AMB-CONT |      |      |     |   |    |   |  |  |
| CC           |              |      |      |     |   |    |   |  |  |
| DE           | 6205         | ODE  | 6203 |     |   |    |   |  |  |
| ENCL         | ODTF         | SN   |      |     |   |    |   |  |  |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA026879      | SA 35L263S322                            | 1.000 ea |
| RA022928      | RA 35L263S322                            | 1.000 ea |
| OC3050F09SP   | CAPACITOR 50 MFD 370 VAC                 | 1.000 ea |
| TPBRT34DA     | THERMAL 1PH 1.25 MAN 105C                | 1.000 ea |
| EC1161C06SP   | ELEC CAP, 161-193 MFD, 250V, 2.06D X 4.  | 2.000 ea |
| WD3006A01     | RSS-2-103JT 2W 10K RES. METAL OXIDE 5%   | 1.000 ea |
| TP5059A02     | GENERIC THERMAL KIT - 12 GAUGE           | 1.000 ea |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 ea |
| 36CB3802B01   | CPBX 36 W/1.09 DIA LEAD @ 6              | 1.000 ea |
| 51XB1016A07   | 10-16 X 7/16 HXWSSLD SERTYB              | 3.000 ea |
| HA6003A28     | CAPAC. CLAMP MODEL 36 MOTORS PLATED      | 1.000 ea |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 1.000 ea |
| HA6015A08     | THERMAL RETAINER (PLATED)                | 1.000 ea |
| 51XB1214A10   | 12-14 X 5/8HX WS SL SR TYBX              | 2.000 ea |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| HW3001B01     | BRASS CUP WASHER, FOR #10 SCREW          | 1.000 ea |
| 35EP3209D00   | MASTER ODE,203 BRG,.683SH,DRIP CVR       | 1.000 ea |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 ea |
| 35CB4802A02SP | CAPACITOR COVER, STAMPED X               | 1.000 ea |
| 51XB1016A05   | 10-16X5/16HX WA SL SR TYB (F/S)          | 2.000 ea |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 ea |
| 35EP3402C00   | MASTER DE,205 BRG,OPEN                   | 1.000 ea |
| 35AD2000      | AIR BAFFLE - GALVANNEAL                  | 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 |
| 35FN3002A05SP | EXFN, PLASTIC, 6.376 OD, .638 ID         | 1.000 ea |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 ea |
| 35FH4006A01SP | DRIP COVER,STAMPED,W/ PRIMER             | 1.000 ea |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea |
| 36CB4505      | CONDUIT BOX LID, STAMPED                 | 1.000 ea |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea |

|             |                                          |          |
|-------------|------------------------------------------|----------|
| HW2501D13   | KEY, 3/16 SQ X 1.375                     | 1.000 ea |
| HA7000A04   | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 ea |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| LB1087      | LABEL,MANUAL RESET (ROLL LABEL)          | 1.000 ea |
| MJ1000A02   | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| MG1050G01   | CELEROL MEDIUM CHARCOAL METALLIC GRAY    | 0.017 ga |
| WD1000A16   | 2-520128-2 AMP FLAG TERMINAL(4M/RL)      | 6.000 ea |
| SP5181A27   | MODEL 35 LC TORQ STAT SWITCH LEAD ASSY   | 1.000 ea |
| HA3100A18   | THRUBOLT 10-32 X 9.250                   | 4.000 ea |
| LB1624      | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0002      | CONNECTION LABEL                         | 1.000 ea |
| NP1257L     | ALUM UL CC THERMAL REV MTG               | 1.000 ea |
| 36PA1000    | PKG GRP, PRINT PK1016A08                 | 1.000 ea |
| PE-0000011  | ZRTG PE ASSEMBLY                         | 1.000 ea |
| FE-0000001  | ZRTG FE ASSEMBLY                         | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 8979

Typical performance - not guaranteed values

| Winding: 35WGS322-R001 |      |              | Type: 3535LC                          |  | Enclosure: ODTF |                            |
|------------------------|------|--------------|---------------------------------------|--|-----------------|----------------------------|
| Nameplate Data         |      |              | 230 V, 60 Hz:<br>Single Voltage Motor |  |                 |                            |
| Rated Output (HP)      |      | 5            | Full Load Torque                      |  |                 | 7.7 LB-FT                  |
| Volts                  |      | 230          | Start Configuration                   |  |                 | direct on line             |
| Full Load Amps         |      | 23           | Breakdown Torque                      |  |                 | 18.8 LB-FT                 |
| R.P.M.                 |      | 3450         | Pull-up Torque                        |  |                 | 12.8 LB-FT                 |
| Hz                     | 60   | Phase        | Locked-rotor Torque                   |  |                 | 14.7 LB-FT                 |
| NEMA Design Code       |      | -            | Starting Current                      |  |                 | 122 A                      |
| Service Factor (S.F.)  |      | 1            | No-load Current                       |  |                 | 8.9 A                      |
| NEMA Nom. Eff.         | 74.2 | Power Factor | Line-line Res. @ 25°C                 |  |                 | 0.535 Ω A Ph<br>1.1 Ω B Ph |
| Rating - Duty          |      | 40C AMB-CONT | Temp. Rise @ Rated Load               |  |                 | 89°C                       |

**Load Characteristics 230 V, 60 Hz, 5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 78   | 89   | 94   | 95   | 96   | 95   |
| Efficiency      | 56.5 | 69.5 | 74.5 | 74.2 | 72.5 | 66   |
| Speed           | 3570 | 3535 | 3500 | 3450 | 3390 | 3275 |
| Line amperes    | 10.4 | 13.7 | 17.8 | 23   | 28.6 | 36.2 |

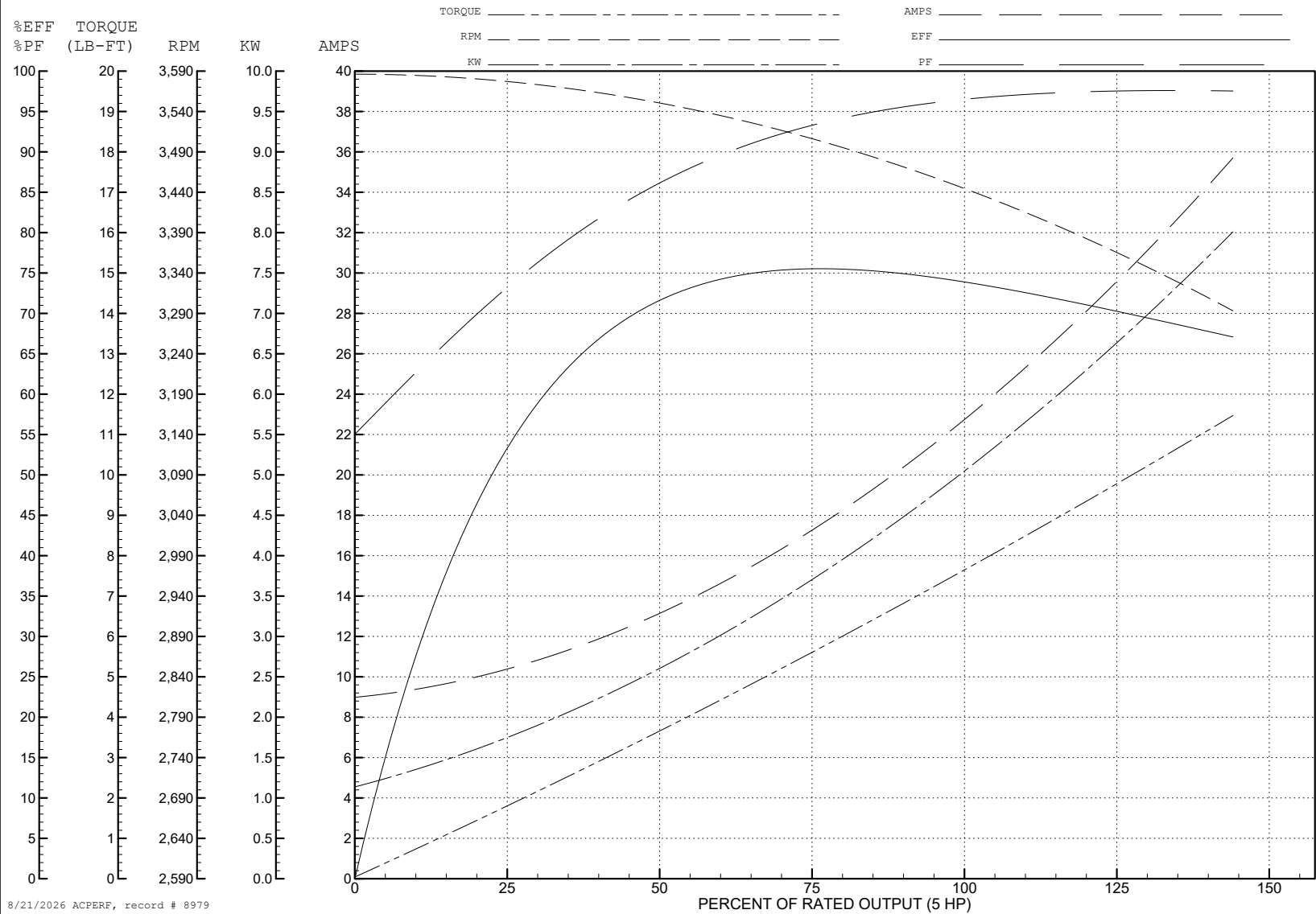
ABB Motors and Mechanical Inc.

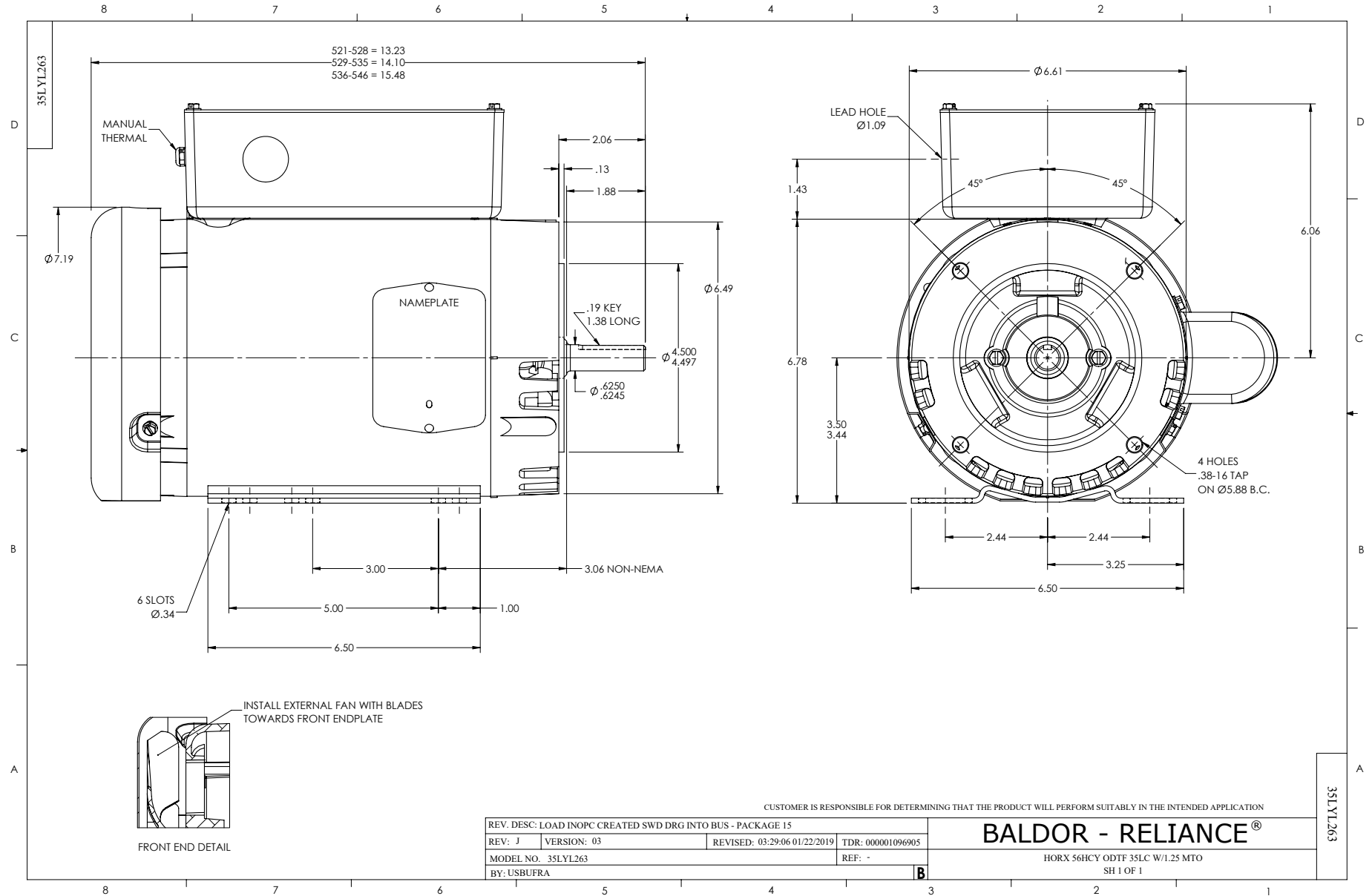
WINDING # 35WGS322

Typical performance - not guaranteed values.

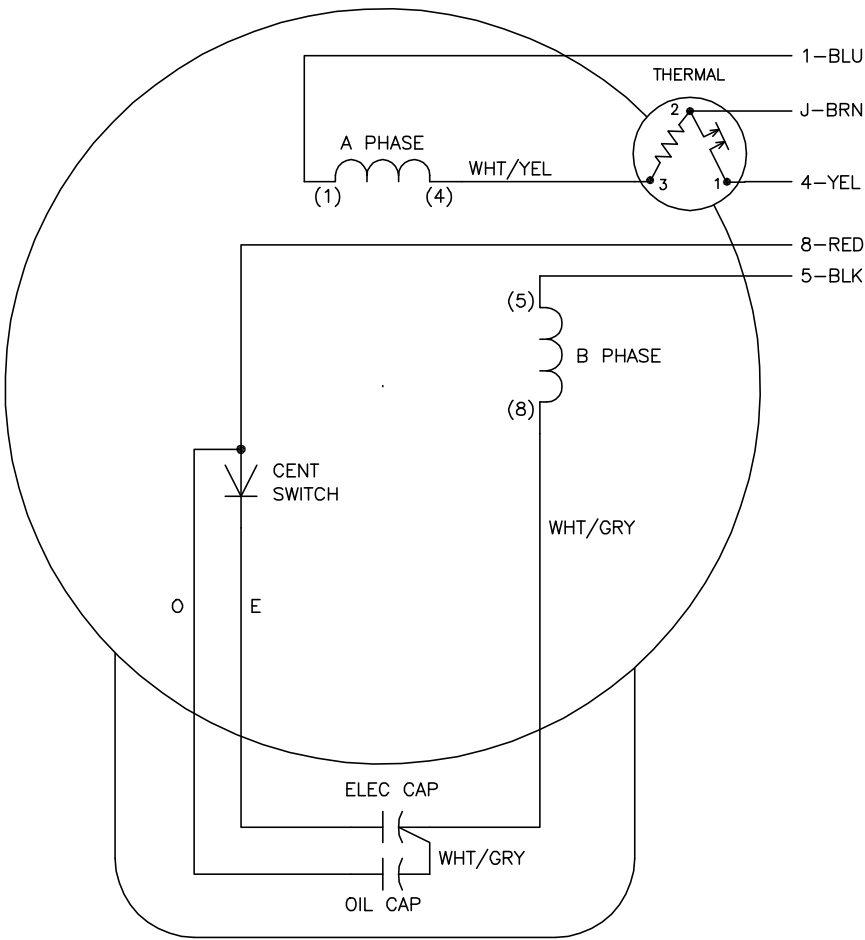
5 HP 1 PH 60 HZ 3450 RPM 230 V 3535LC

TORQUES (LB-FT): PO=18.8 PU=12.8 LR=14.7 LRA=122





CD0002A02



|     | LINE A | LINE B | JOIN |
|-----|--------|--------|------|
| STD | 1,8    | 4      | J,5  |
| OPP | 1,5    | 4      | 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 CD0002A04 |                      |                              |
| REV. LTR: D                                                | VERSION: 01          | TDR: 000000360649            |
| CD0002A02                                                  | FILE: \AAA\00007\520 | REVISED: 17:11:40 04/15/2005 |
|                                                            | MTL: -               | BY: ENJOEPO                  |

BALDOR ELECTRIC Co.

TYPE LC, SV, REV, THERMAL, 5 LEADS

CD0002A02