

**BALDOR • RELIANCE**

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# Customer information packet

## EL1409T

5HP, 3450RPM, 1PH, 60HZ, 184T, 3634LC, OPEN, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                           |
|--------------------------------|---------------------------|
| Enclosure                      | OPEN                      |
| Frame                          | 184T                      |
| Frame Material                 | Steel                     |
| Frequency                      | 60.00 Hz                  |
| Haz Area Class and Group       | None                      |
| Haz Area Division              | Not Applicable            |
| Motor Letter Type              | Cap Start, Cap Run        |
| Output @ Frequency             | 5.000 HP @ 60 HZ          |
| Phase                          | 1                         |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ          |
| Voltage @ Frequency            | 230.0 V @ 60 HZ           |
| Agency Approvals               | UR<br>CSA<br>CURUSEEV     |
| Ambient Temperature            | 40 °C                     |
| Auxillary Box                  | No Auxillary Box          |
| Auxillary Box Lead Termination | None                      |
| Base Indicator                 | Rigid                     |
| Bearing Grease Type            | Polyrex EM (-20F +300F)   |
| Blower                         | None                      |
| Current @ Voltage              | 20.000 A @ 230.0 V        |
| Design Code                    | L                         |
| Drip Cover                     | No Drip Cover             |
| Duty Rating                    | CONT                      |
| Efficiency @ 100% Load         | 81.5 %                    |
| 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    | 20.0 a                    |
| Insulation Class               | F                         |

## Part detail

|              |                     |
|--------------|---------------------|
| Revision     | W                   |
| Type         | AC                  |
| Mech. spec.  | 36E002              |
| Base         |                     |
| Status       | PRD/A               |
| Elec. spec.  | 36WGS116            |
| Layout       | 36LYE002            |
| Eff. date    | 09-20-2024          |
| CD Diagram   | CD0017A02           |
| Poles        | 02                  |
| Leads        | 2#14 A PH,2#16 B PH |
| Proprietary  | False               |
| Created date | 11-13-2008          |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Inverter Code</b>                 | Not Inverter        |
| <b>KVA Code</b>                      | F                   |
| <b>Lifting Lugs</b>                  | No Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing   |
| <b>Motor Lead Exit</b>               | Ko Box              |
| <b>Motor Lead Quantity/Wire Size</b> | 2 @ 14 AWG, A PH    |
| <b>Motor Lead Termination</b>        | Flying Leads        |
| <b>Motor Standards</b>               | NEMA                |
| <b>Motor Type</b>                    | 3634LC              |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 2                   |
| <b>Overall Length</b>                | 15.00 IN            |
| <b>Power Factor</b>                  | 97                  |
| <b>Product Family</b>                | General Purpose     |
| <b>Pulley End Bearing Type</b>       | Ball                |
| <b>Pulley Face Code</b>              | Standard            |
| <b>Pulley Shaft Indicator</b>        | Standard            |
| <b>Rodent Screen</b>                 | None                |
| <b>Service Factor</b>                | 1.15                |
| <b>Shaft Diameter</b>                | 1.125 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>      | None                |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor |
| <b>Winding Thermal 1</b>             | None                |
| <b>Winding Thermal 2</b>             | None                |

**Nameplate**

| <b>NP2116L</b>      |              |             |           |            |   |           |   |  |  |
|---------------------|--------------|-------------|-----------|------------|---|-----------|---|--|--|
| <b>CAT.NO.</b>      | EL1409T      |             |           |            |   |           |   |  |  |
| <b>SPEC.</b>        | 36E002S116E7 |             |           |            |   |           |   |  |  |
| <b>HP</b>           | 5            |             |           |            |   |           |   |  |  |
| <b>VOLTS</b>        | 230          |             |           |            |   |           |   |  |  |
| <b>AMP</b>          | 20           |             |           |            |   |           |   |  |  |
| <b>RPM</b>          | 3450         |             |           |            |   |           |   |  |  |
| <b>FRAME</b>        | 184T         |             | <b>HZ</b> | 60         |   | <b>PH</b> | 1 |  |  |
| <b>SER.F.</b>       | 1.15         | <b>CODE</b> | F         | <b>DES</b> | L | <b>CL</b> | F |  |  |
| <b>NEMA-NOM-EFF</b> | 81.5         | <b>PF</b>   | 97        |            |   |           |   |  |  |
| <b>RATING</b>       | 40C AMB-CONT |             |           |            |   |           |   |  |  |
| <b>CC</b>           |              |             |           |            |   |           |   |  |  |
| <b>DE</b>           | 6206         | <b>ODE</b>  | 6205      |            |   |           |   |  |  |
| <b>ENCL</b>         | OPEN         | <b>SN</b>   |           |            |   |           |   |  |  |

## Parts list

| Part number | Description                              | Quantity |
|-------------|--|----------|
| SA177109    | SA 36E002S116E7                          | 1.000 ea |
| RA165162    | RA 36E002S116E7                          | 1.000 ea |
| OC3030F11SP | CAPACITOR 30 MFD 370 VAC                 | 1.000 ea |
| EC1145C06SP | ELEC CAP 230V 2.0 X 4.3                  | 2.000 ea |
| HA6362ZP    | LIFTING LUG FOR 36 FRAME MOTORS.         | 2.000 ea |
| 36CB3004    | 36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0 | 1.000 ea |
| 51XB1016A08 | 10-16X 1/2HXWSSLD SERTYB                 | 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 |
| 36EP3204B00 | MASTER ODE,205 BRG,GRSR                  | 1.000 ea |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 ea |
| SP1008A01   | BAFFLE, MODEL 36 & 37                    | 1.000 ea |
| 13XF0832A08 | 8-32 X.50 PAN HD,SLTD, TYPE F SCREW, ZIN | 2.000 ea |
| 51XW2520A10 | .25-20 X .62, TAPTITE II, HEX WSHR SLTD  | 2.000 ea |
| HW5100A05   | WVY WSHR F/205 & 304 BRGS                | 1.000 ea |
| 36EP3205D00 | MASTER DE,206 BRG,1.197SH,GRSR           | 1.000 ea |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 ea |
| XY2520A12   | 1/4-20 HEX NUT, DIRECTIONAL SERRATIONS   | 4.000 ea |
| 36CB4516    | 750LIPPED CB LID - GALVANNEAL            | 1.000 ea |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea |
| HW2501E16   | KEY, 1/4 SQ X 1.750                      | 1.000 ea |
| HA7000A02   | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 ea |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| WD1000A15   | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 6.000 ea |
| 36CB3800SP  | CAPACITOR COVER, CAST                    | 1.000 ea |
| HA7010A01   | CAPACITOR RETENTION CLAMP, 6.562 LONG    | 1.000 ea |
| MJ1000A02   | GREASE, POLYREX EM EXXON                 | 0.050 lb |
| MG1050Y01   | CELEROL BALDOR GOLD *** NLA IN 5 GALLON  | 0.022 ga |
| HA3101A45   | THRUBOLT- 1/4-20 X 11.126                | 4.000 ea |
| SP5172A05   | 37 TYPE LC TORQ STAT SW LEAD ASSEMBLY    | 1.000 ea |
| LC0017      | CONN LABEL-1 PHASE-SINGLE VOLT-REV ROTNO | 1.000 ea |

|            |  |          |
|------------|--|----------|
| NP2116L    | ALUM SUPER-E UL CC                       | 1.000 ea |
| 36PA1001   | PKG GRP, PRINT PK1017A06                 | 1.000 ea |
| MN416A01   | TAG-INSTAL-MAINT no wire (2500bx)4/22    | 1.000 ea |
| PE-0000001 | ZRTG PE ASSEMBLY                         | 1.000 ea |
| FE-0000001 | ZRTG FE ASSEMBLY                         | 1.000 ea |
| LB1624     | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 61435

Typical performance - not guaranteed values

| <b>Winding: 36WGS116-R002</b> |                          | <b>Type: 3634LC</b>        |   | <b>Enclosure: OPEN</b>     |  |
|-------------------------------|--------------------------|----------------------------|---|----------------------------|--|
| <b>Nameplate Data</b>         |                          |                            | <b>230 V, 60 Hz:<br/>Single Voltage Motor</b> |                            |  |
| <b>Rated Output (HP)</b>      | 5                        | <b>Full Load Torque</b>    | 7.39 LB-FT                                    |                            |  |
| <b>Volts</b>                  | 230                      | <b>Start Configuration</b> | direct on line                                |                            |  |
| <b>Full Load Amps</b>         | 20                       | <b>Breakdown Torque</b>    | 19.7 LB-FT                                    |                            |  |
| <b>R.P.M.</b>                 | 3450                     | <b>Pull-up Torque</b>      | 14.3 LB-FT                                    |                            |  |
| <b>Hz</b>                     | 60 <b>Phase</b>          | 1                          | <b>Locked-rotor Torque</b>                    | 15.9 LB-FT                 |  |
| <b>NEMA Design Code</b>       | L <b>KVA Code</b>        | F                          | <b>Starting Current</b>                       | 114 A                      |  |
| <b>Service Factor (S.F.)</b>  |                          | 1.15                       | <b>No-load Current</b>                        | 2.2 A                      |  |
| <b>NEMA Nom. Eff.</b>         | 81.5 <b>Power Factor</b> | 97                         | <b>Line-line Res. @ 25°C</b>                  | 0.425 Ω A Ph<br>1.4 Ω B Ph |  |
| <b>Rating - Duty</b>          |                          | 40C AMB-CONT               | <b>Temp. Rise @ Rated Load</b>                | 45°C                       |  |
| <b>S.F. Amps</b>              |                          |                            | <b>Temp. Rise @ S.F. Load</b>                 | 57°C                       |  |

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

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 96        | 98        | 98        | 97         | 97         | 96         | 97          |
| <b>Efficiency</b>      | 67.6      | 79        | 82        | 81.6       | 79.3       | 74         | 80.2        |
| <b>Speed</b>           | 3556      | 3527      | 3493      | 3456       | 3409       | 3334       | 3428        |
| <b>Line amperes</b>    | 5.56      | 9.83      | 14.6      | 19.9       | 25.8       | 34.6       | 23.4        |

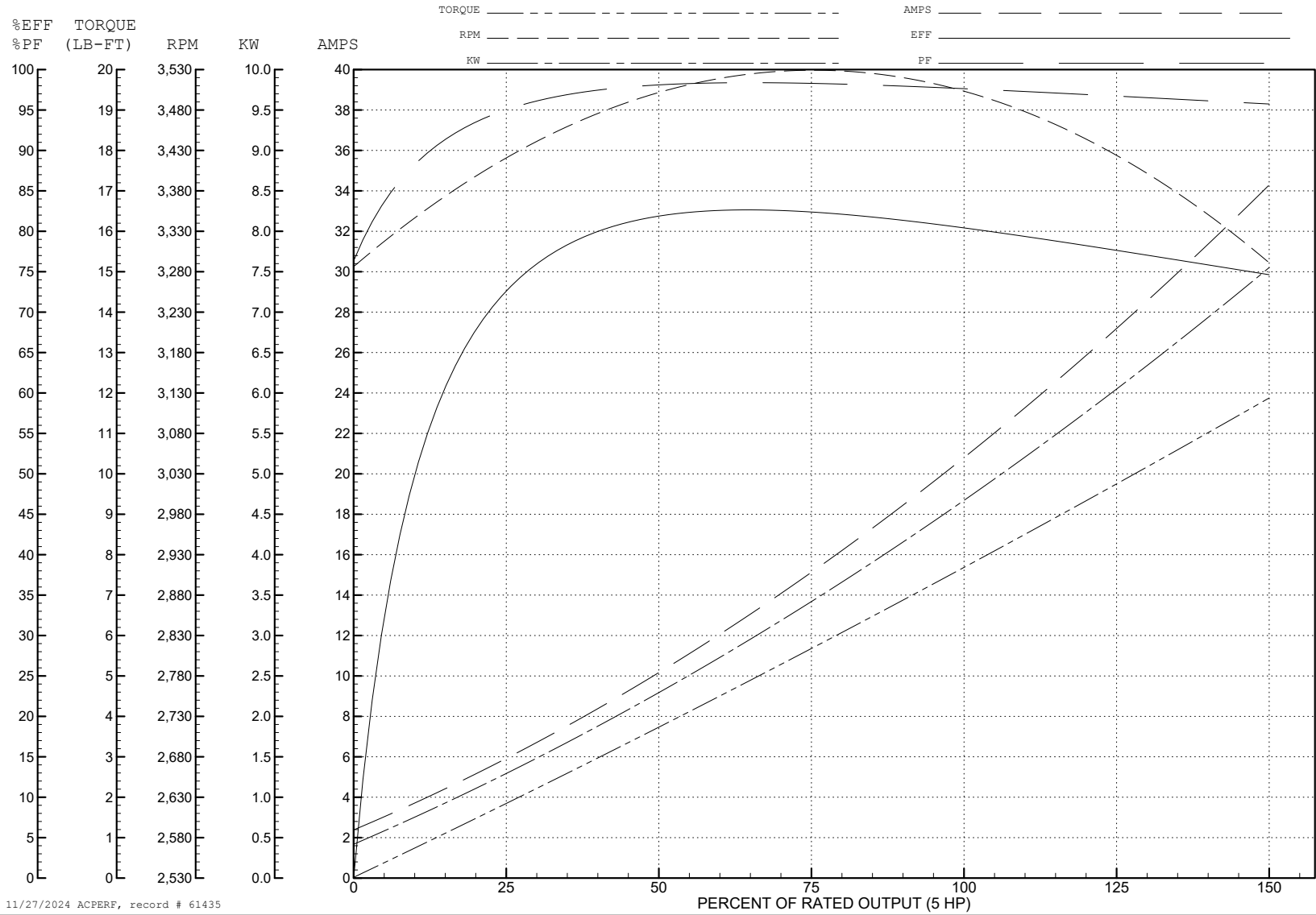
ABB Motors and Mechanical Inc.

WINDING # 36WGS116

Typical performance - not guaranteed values.

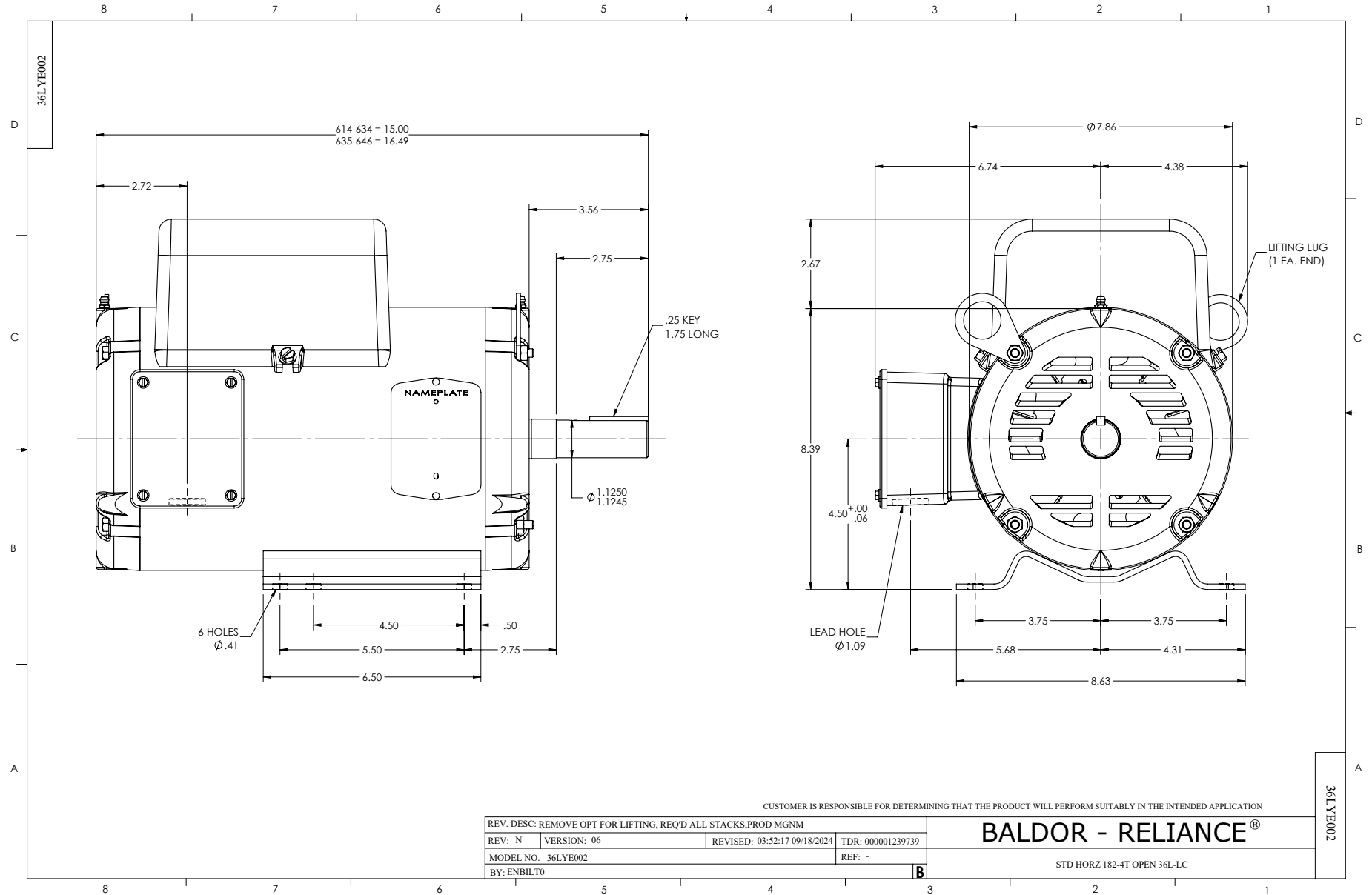
5 HP 1 PH 60 HZ 3450 RPM 230 V 3634LC

TORQUES (LB-FT): PO=19.7 PU=14.3 LR=15.9 LRA=114

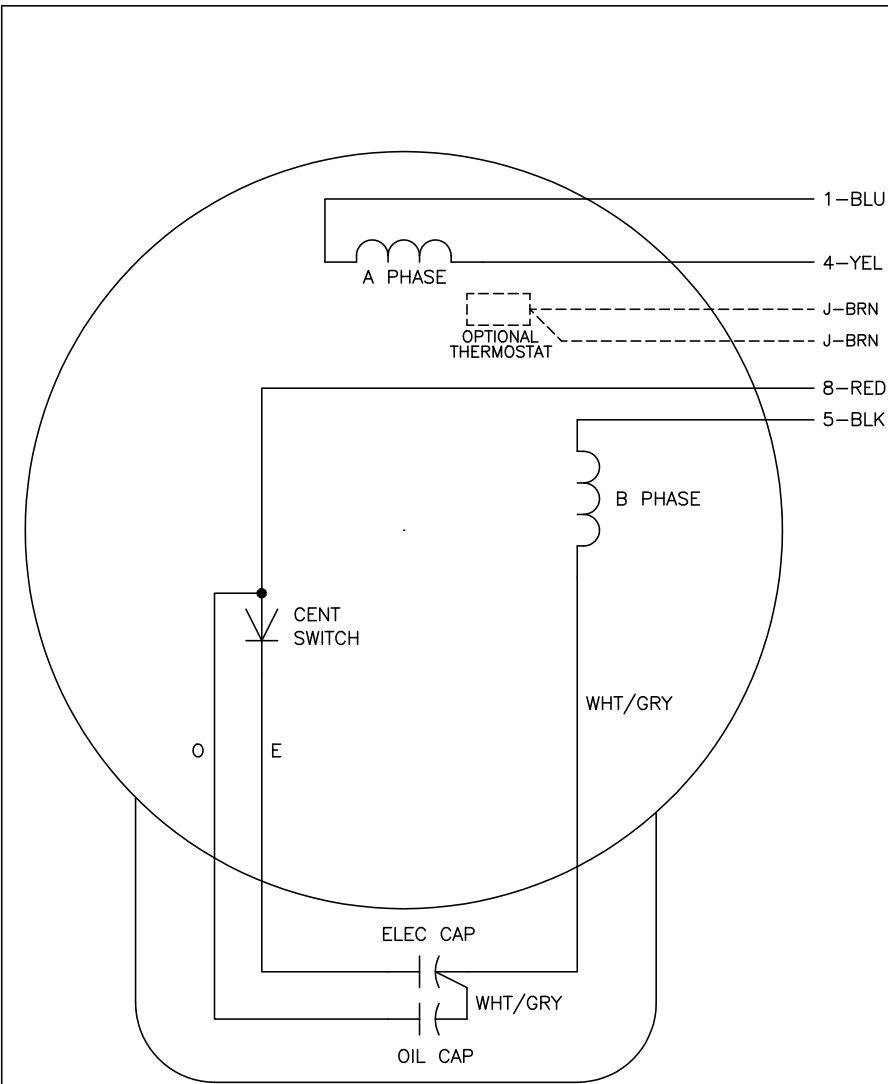


11/27/2024 ACPERF, record # 61435





CD0017A02



|     | LINE A | LINE B |
|-----|--------|--------|
| STD | 1,8    | 4,5    |
| OPP | 1,5    | 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.

CD0017A02

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: B                               | BY: JLP | REVISED: 04/09/99 11:30 | TDR: 0178636 |
| CD0017A02                                 |         | FILE: AAA00007514       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

TYPE LC, SV, REV, 4 LEADS