

# **BALDOR**® • *RELIANCE*

## **Product Information Packet**

# **VL3513**

**1.5HP,3450RPM,1PH,60HZ,56C,3524L,TEFC,F1**

| Part Detail |                     |                |       |             |          |               |            |
|-------------|---------------------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | AE                  | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC                  | Prod. Type:    | 3524L | Elec. Spec: | 35WGY748 | CD Diagram:   | CD0001     |
| Enclosure:  | TEFC                | Mfg Plant:     |       | Mech. Spec: | 35C013   | Layout:       | 35LYC013   |
| Frame:      | 56C                 | Mounting:      | F1    | Poles:      | 02       | Created Date: | 06-21-2007 |
| Base:       | N                   | Rotation:      | R     | Insulation: | B        | Eff. Date:    | 07-26-2016 |
| Leads:      | 4#16 A PH,2#18 B PH |                |       |             |          | Replaced By:  |            |
| Literature: |                     | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP1256L |              |  |      |     |      |    |  |                |     |   |
|-------------------|--------------|--|------|-----|------|----|--|----------------|-----|---|
| CAT.NO.           | VL3513       |  |      |     |      |    |  |                |     |   |
| SPEC.             | 35C013Y748   |  |      |     |      |    |  |                |     |   |
| HP                | 1.5          |  |      |     |      |    |  |                |     |   |
| VOLTS             | 115/230      |  |      |     |      |    |  |                |     |   |
| AMP               | 16/8         |  |      |     |      |    |  |                |     |   |
| RPM               | 3450         |  |      |     |      |    |  |                |     |   |
| FRAME             | 56C          |  |      |     | 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                |              |  |      |     |      |    |  | USABLE AT 208V | 8.4 |   |
| DE                | 6205         |  |      | ODE | 6203 |    |  |                |     |   |
| ENCL              | TEFC         |  | SN   |     |      |    |  |                |     |   |

| Parts List    |   |          |
|---------------|---|----------|
| Part Number   | Description                               | Quantity |
| SA040510      | SA 35C013Y748                             | 1.000 EA |
| RA036394      | RA 35C013Y748                             | 1.000 EA |
| EC1645A06SP   | ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.   | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                  | 1.000 EA |
| 35CB3007      | 35 CB CASTING W/.88 DIA. LEAD HOLE        | 1.000 EA |
| 36GS1000      | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE  | 1.000 EA |
| 51XB1016A07   | 10-16 X 7/16 HXWSSLD SERTYB               | 2.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U  | 1.000 EA |
| 35EP3100M02   | FREP TEFC 203 BRG W/O GR SR (RAISED FH MT | 1.000 EA |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE  | 2.000 EA |
| NS2501A01     | INSULATOR, CAPACITOR                      | 1.000 EA |
| 51XB1016A05   | 10-16X5/16HX WA SL SR TYB (F/S)           | 2.000 EA |
| HW5100A03SP   | WAVY WASHER (W1543-017)                   | 1.000 EA |
| 35EP3300A33   | SPL FACE MTD EP -ENCL-205 BRG             | 1.000 EA |
| 51XN1032A20   | 10-32 X 1 1/4 HX WS SL SR                 | 2.000 EA |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                 | 1.000 EA |
| 35FH4005A32SP | IEC FH NO GR SR W/3 HOLES - PRIMED        | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S  | 3.000 EA |
| 35CB4521      | 35 LIPPED CB LID (GALV & PHOSPH)          | 1.000 EA |
| 35GS1030      | 35 GS FOR CB LID - LEXIDE                 | 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 |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| WD1000A15                     | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 2.000 EA        |
| MJ1000A02                     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB        |
| 34FN3002A01SP                 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA        |
| MG1000G27                     | MED CHARCOAL METALLIC GREY 400-0096      | 0.017 GA        |
| SP5055A67                     | MODEL 35 TYPE L STATIONARY SWITCH        | 1.000 EA        |
| 35CB4802A02SP                 | CAPACITOR COVER, STAMPED X               | 1.000 EA        |
| 35GS3001A02                   | GASKET, CA.COVER, 5.38 LONG .06 CS301    | 1.000 EA        |
| HA3100A15                     | THRUBOLT 10-32 X 8.375                   | 4.000 EA        |
| LC0001A01                     | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 EA        |
| NP1256L                       | ALUM UL CSA CC                           | 1.000 EA        |
| 36PA1000                      | PKG GRP, PRINT PK1016A06                 | 1.000 EA        |
| PK3083T                       | STYROFOAM PACKING CRADLE W/TAPE          | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 10315 - Typical performance - not guaranteed values

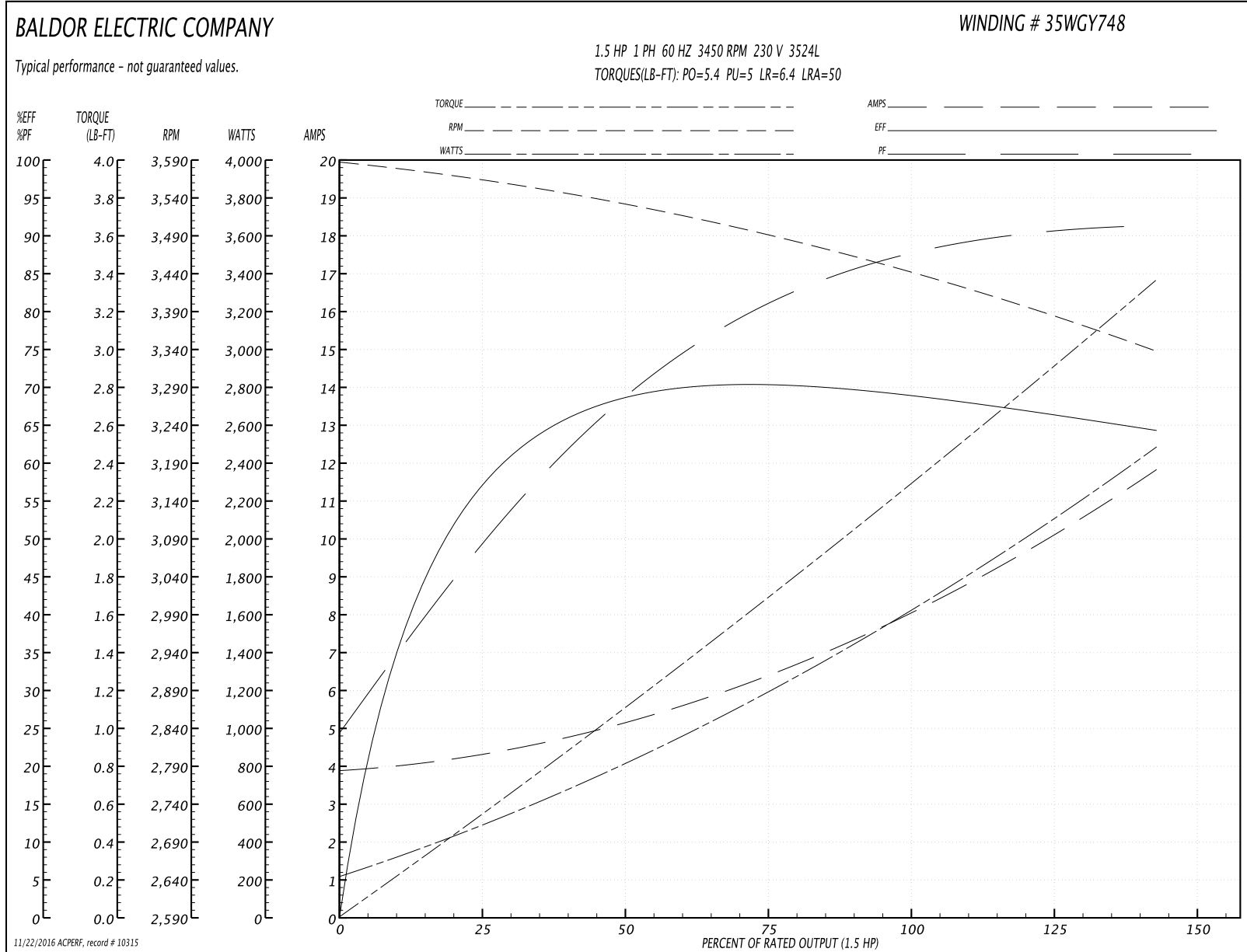
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGY748-R001 | <b>Type:</b> 3524L | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

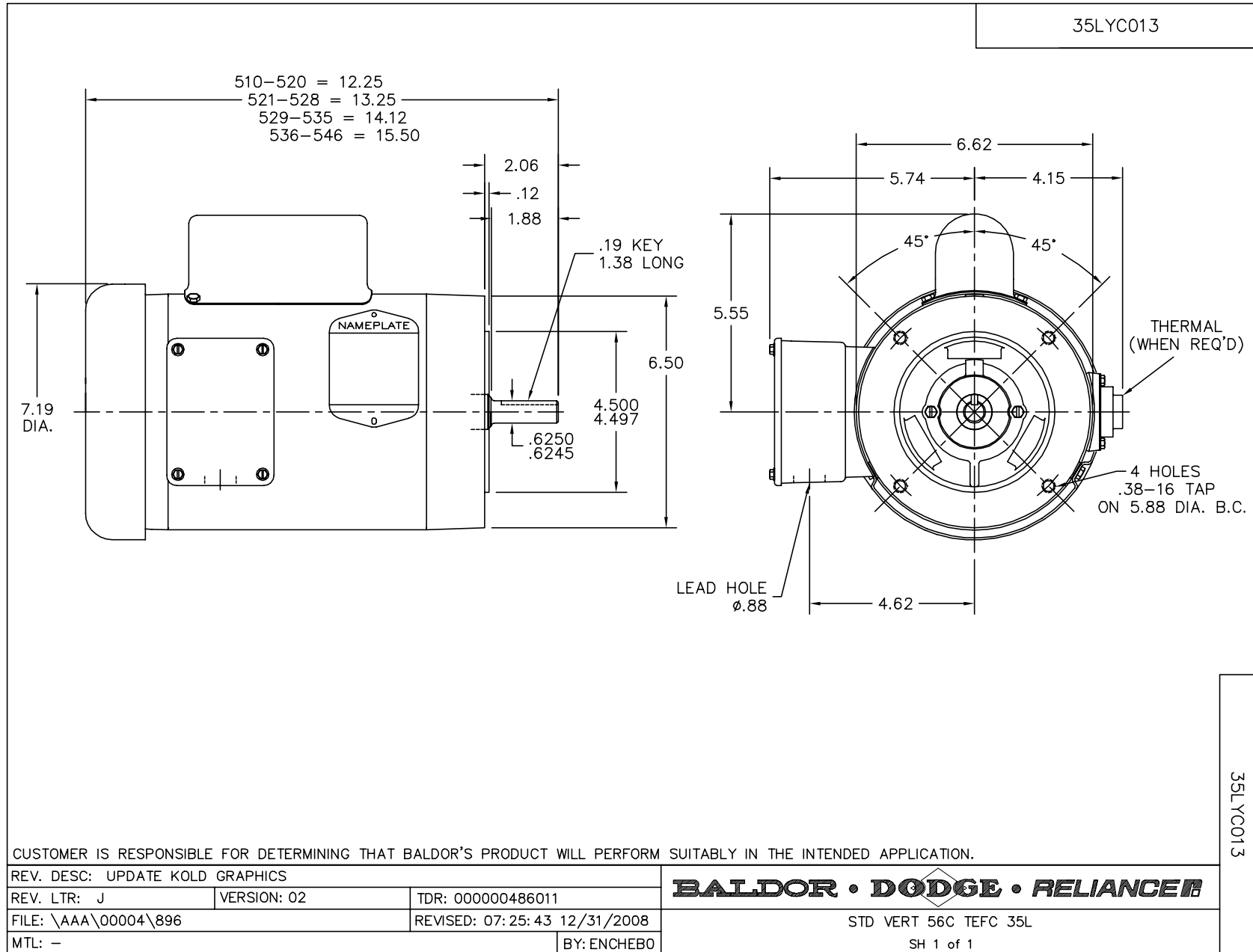
| Nameplate Data        |              |              |    | 230 V, 60 Hz:<br>High Voltage Connection |                            |
|-----------------------|--------------|--------------|----|--|----------------------------|
| Rated Output (HP)     | 1.5          |              |    | Full Load Torque                         | 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. @ 25°C                    | 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    |

Performance Graph at 230V, 60Hz, 1.5HP Typical performance - Not guaranteed values





CD0001



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.

CD0001

|   |         |                        |              |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                        |              |
| REV. LTR: D                               | BY: JLP | REVISED: 04/08/99 1:16 | TDR: 0178636 |
| 100000                                    |         | FILE: AAA00007405      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

TYPE L, DV, REV, 6 LEADS