

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EL3503**

**.5HP,3450RPM,1PH,60HZ,56,3413LC,TEFC,F1**

| Part Detail |      |                |        |             |          |               |            |
|-------------|------|----------------|--------|-------------|----------|---------------|------------|
| Revision:   | D    | Status:        | PRD/A  | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3413LC | Elec. Spec: | 34WGS431 | CD Diagram:   | CD0055     |
| Enclosure:  | TEFC | Mfg Plant:     |        | Mech. Spec: | 34L277   | Layout:       | 34LYL277   |
| Frame:      | 56   | Mounting:      | F1     | Poles:      | 02       | Created Date: | 11-10-2008 |
| Base:       | RG   | Rotation:      | R      | Insulation: | B        | Eff. Date:    | 03-20-2012 |
| Leads:      | 6#18 |                |        |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |        |             |          |               |            |

## Nameplate NP2116L

|              |              |  |  |                |     |      |     |   |    |    |    |   |
|--------------|--------------|--|--|----------------|-----|------|-----|---|----|----|----|---|
| CAT.NO.      | EL3503       |  |  |                |     |      |     |   |    |    |    |   |
| SPEC.        | 34L277S431G1 |  |  |                |     |      |     |   |    |    |    |   |
| HP           | .5           |  |  |                |     |      |     |   |    |    |    |   |
| VOLTS        | 115/230      |  |  |                |     |      |     |   |    |    |    |   |
| AMP          | 4.9/2.5      |  |  |                |     |      |     |   |    |    |    |   |
| RPM          | 3450         |  |  |                |     |      |     |   |    |    |    |   |
| FRAME        | 56           |  |  |                | HZ  |      |     |   | 60 |    | PH | 1 |
| SER.F.       | 1.25         |  |  | CODE           | L   |      | DES | N |    | CL | B  |   |
| NEMA-NOM-EFF | 68           |  |  | PF             | 84  |      |     |   |    |    |    |   |
| RATING       | 40C AMB-CONT |  |  |                |     |      |     |   |    |    |    |   |
| CC           |              |  |  | USABLE AT 208V |     |      |     |   |    |    |    |   |
| DE           | 6203         |  |  |                | ODE | 6203 |     |   |    |    |    |   |
| ENCL         | TEFC         |  |  | SN             |     |      |     |   |    |    |    |   |
|              | SFA 5.8/2.9  |  |  |                |     |      |     |   |    |    |    |   |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA177298      | SA 34L277S431G1                          | 1.000 EA |
| RA165340      | RA 34L277S431G1                          | 1.000 EA |
| OC3025F11     | CYL OIL CAP 25MFD/370V                   | 1.000 EA |
| EC1400A03     | ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.  | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 34CB3002A     | CB CAST W/.88 DIA HOLE                   | 1.000 EA |
| 34GS1029A01   | GASKET, CONDUIT BOX                      | 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 |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 3.000 EA |
| 34EP3102A01SP | FR ENDPLATE, MACH                        | 1.000 EA |
| 34CB3801      | CAPACITOR BOX, DIE CAST                  | 1.000 EA |
| 34GS3002      | GASKET, CAPACITOR BOX                    | 1.000 EA |
| 51XB1214A08   | 12-14 X 1/2HX WS SL SR TYBX              | 2.000 EA |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 34EP3102A02SP | FR/PU ENDPLATE, MACH                     | 1.000 EA |
| XY1032A02     | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 EA |
| 34FN3002A01SP | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA |
| 34FH4002A01   | IEC FH NO GREASER PRIMED                 | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 34CB4517      | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 EA |
| 34GS1031A01   | GASKET, FLAT CONDUIT BOX 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 |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HA7000A04              | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 EA |
| 34GS5003A01            | FOAM SLEEVE, ID = 2 1/16" X 4 3/8"       | 1.000 EA |
| 10XF0440S02            | 04-40 X 1/8 TYPE F HEX HD STAINLESS STIC | 2.000 EA |
| SP5056A18              | MODEL 34 TYPE LC STATIONARY SWITCH WITH  | 1.000 EA |
| HA3100A44              | THRUBOLT 10-32 X 8.000                   | 4.000 EA |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.014 GA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |
| LC0001A01              | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 EA |
| NP2116L                | ALUM SUPER-E UL CSA CC                   | 1.000 EA |
| 35PA1000               | PKG GRP, PRINT     PK1008A06             | 1.000 EA |

**AC Induction Motor Performance Data**  
Record # 27898 - Preliminary Data Sheet

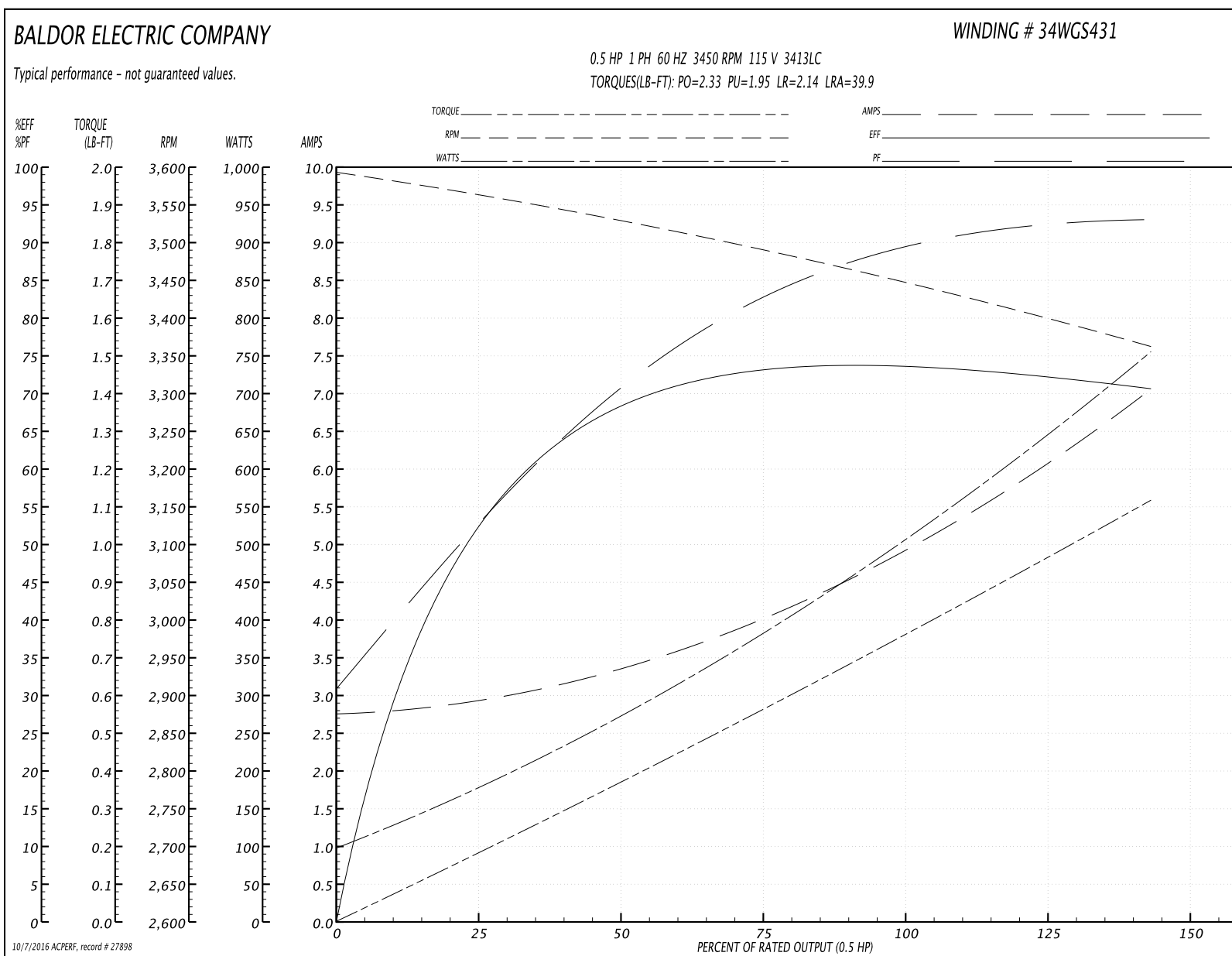
|                               |                     |                        |
|-------------------------------|---------------------|------------------------|
| <b>Winding:</b> 34WGS431-R001 | <b>Type:</b> 3413LC | <b>Enclosure:</b> TEFC |
|-------------------------------|---------------------|------------------------|

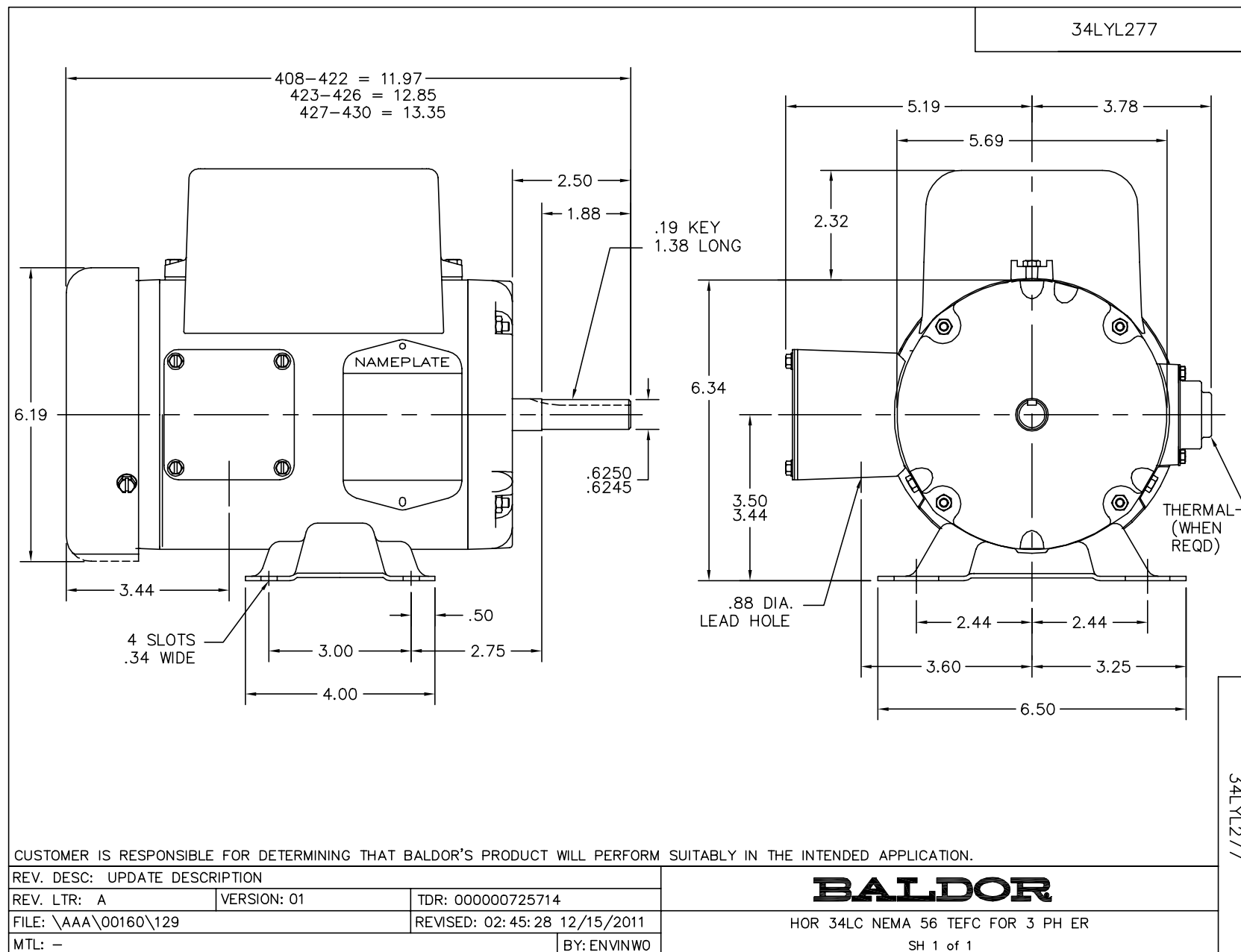
| Nameplate Data        |              |              |    | 115 V, 60 Hz:<br>Low Voltage Connection |                                          |
|-----------------------|--------------|--------------|----|-----------------------------------------|------------------------------------------|
| Rated Output (HP)     | .5           |              |    | Full Load Torque                        | 0.748 LB-FT                              |
| Volts                 | 115/230      |              |    | Start Configuration                     | direct on line                           |
| Full Load Amps        | 4.9/2.5      |              |    | Breakdown Torque                        | 2.33 LB-FT                               |
| R.P.M.                | 3450         |              |    | Pull-up Torque                          | 1.95 LB-FT                               |
| Hz                    | 60           | Phase        | 1  | Locked-rotor Torque                     | 2.14 LB-FT                               |
| NEMA Design Code      | N            | KVA Code     | K  | Starting Current                        | 39.9 A                                   |
| Service Factor (S.F.) | 1.25         |              |    | No-load Current                         | 2.72 A                                   |
| NEMA Nom. Eff.        | 68           | Power Factor | 84 | Line-line Res. @ 25°C                   | 1.06 $\Omega$ A Ph<br>4.65 $\Omega$ B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                 | 46°C                                     |
| S.F. Amps             | 5.8/2.9      |              |    | Temp. Rise @ S.F. Load                  | 53°C                                     |

Load Characteristics 115 V, 60 Hz, 0.5 HP

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 47   | 72   | 83   | 90   | 94   | 92   | 94   |
| Efficiency      | 59   | 66.6 | 72.5 | 73.4 | 72.5 | 70.8 | 72.5 |
| Speed           | 3551 | 3524 | 3494 | 3456 | 3413 | 3355 | 3413 |
| Line amperes    | 2.97 | 3.39 | 4.02 | 4.85 | 5.8  | 7.13 | 5.8  |

Performance Graph at 115V, 60Hz, 0.5HP Typical performance - Not guaranteed values







CD0055

