

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EL11309**

**1HP,3480RPM,1PH,60HZ,56,3524LC,ODP,F1,N**

| Part Detail |                     |                |        |             |          |               |            |
|-------------|---------------------|----------------|--------|-------------|----------|---------------|------------|
| Revision:   | E                   | Status:        | PRD/A  | Change #:   |          | Proprietary:  | No         |
| Type:       | AC                  | Prod. Type:    | 3524LC | Elec. Spec: | 35WGN672 | CD Diagram:   | CD0055     |
| Enclosure:  | ODP                 | Mfg Plant:     |        | Mech. Spec: | 35M497   | Layout:       | 35LYM497   |
| Frame:      | 56                  | Mounting:      | F1     | Poles:      | 02       | Created Date: | 03-18-2014 |
| Base:       | RG                  | Rotation:      | R      | Insulation: | F        | Eff. Date:    | 03-08-2016 |
| Leads:      | 4#16 A PH,2#18 B PH |                |        |             |          | Replaced By:  |            |
| Literature: |                     | Elec. Diagram: |        |             |          |               |            |

## Nameplate NP3155L

|                |              |  |                |     |    |      |    |   |    |  |   |
|----------------|--------------|--|----------------|-----|----|------|----|---|----|--|---|
| CAT.NO.        | EL11309      |  |                |     |    |      |    |   |    |  |   |
| SPEC.          | 35M497N672G1 |  |                |     |    |      |    |   |    |  |   |
| HP             | 1            |  |                |     |    |      |    |   |    |  |   |
| VOLTS          | 115/230      |  |                |     |    |      |    |   |    |  |   |
| AMP            | 7.8/3.9      |  |                |     |    |      |    |   |    |  |   |
| RPM            | 3480         |  |                |     |    |      |    |   |    |  |   |
| FRAME          | 56           |  |                |     | HZ |      | 60 |   | PH |  | 1 |
| SER.F.         | 1.25         |  | CODE           |     | H  | DES  |    | N | CL |  | F |
| F.L. AVG. EFF. | 82           |  | PF             |     | 99 |      |    |   |    |  |   |
| RATING         | 40C AMB-CONT |  |                |     |    |      |    |   |    |  |   |
| CC             |              |  | USABLE AT 208V |     |    |      |    |   |    |  |   |
| DE             | 6205         |  |                | ODE |    | 6203 |    |   |    |  |   |
| ENCL           | ODP          |  | SN             |     |    |      |    |   |    |  |   |
|                | SFA 10/5     |  |                |     |    |      |    |   |    |  |   |

| Parts List  |                                          |          |
|-------------|------------------------------------------|----------|
| Part Number | Description                              | Quantity |
| SA278105    | SA 35M497N672G1                          | 1.000 EA |
| RA264650    | RA 35M497N672G1                          | 1.000 EA |
| OC3060C09   | CYL OIL CAP 60MFD/240V                   | 1.000 EA |
| EC1645B06   | ELEC CAP 165V 2.0 X 4.3                  | 1.000 EA |
| WD3006A01   | RSS-2-103JT 2W 10K RES. METAL OXIDE 5%   | 1.000 EA |
| NS2512A01   | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3007    | 35 CB CASTING W/.88 DIA. LEAD HOLE       | 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 | 2.000 EA |
| 35EP3201A03 | STD FR EP OPEN-203BRG-35L OR M FRAME--LE | 1.000 EA |
| SP1006A01   | TERM. BOARD, MODE 35 SW X H-23655        | 1.000 EA |
| NS2501A02   | INSULATOR, CAPACITOR BOX                 | 1.000 EA |
| 35CB3801    | CAPACITOR COVER, CAST                    | 1.000 EA |
| HA7010      | CAPACITOR RETENTION CLAMP                | 1.000 EA |
| 51XB1016A08 | 10-16X 1/2HXWSSLD SERTYB                 | 2.000 EA |
| HW5100A03   | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3200A02 | PUEP OPEN 205 BRG                        | 1.000 EA |
| XY1032A02   | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 EA |
| 35CB4521    | 35 LIPPED CB LID (GALV & PHOSPH)         | 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 |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| HA3100A18              | THRUBOLT 10-32 X 9.250                   | 4.000 EA |
| SP5181A01              | MODEL 35 LC TORQ STAT SWITCH LEAD ASSY   | 1.000 EA |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.017 GA |
| WD1000A15              | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 4.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |
| LC0001A01              | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 EA |
| NP3155L                | ALUM SUPER-E UL CSA CC "SEMS"            | 1.000 EA |
| 36PA1000               | PKG GRP, PRINT PK1016A06                 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 44952 - Typical performance - not guaranteed values

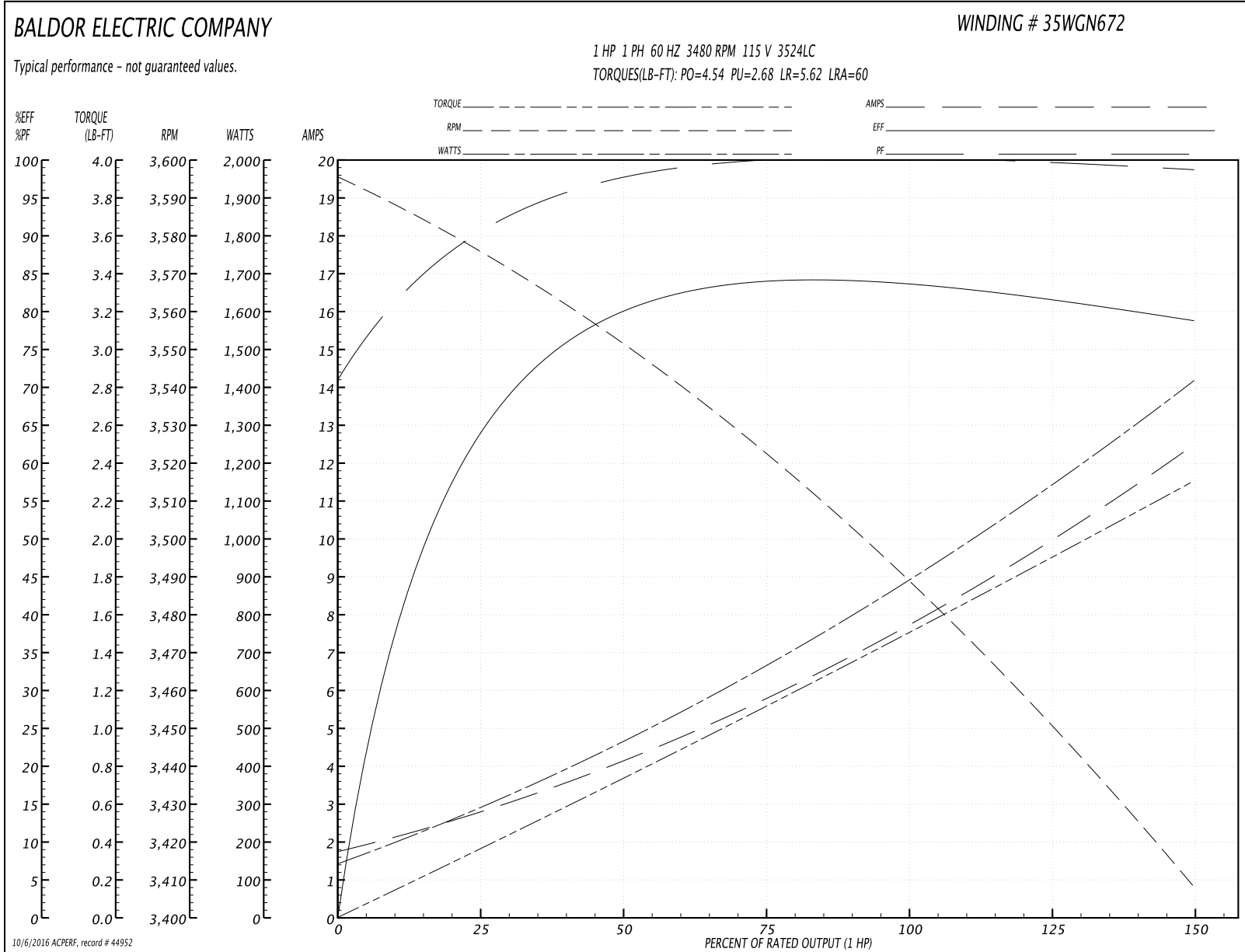
|                               |                     |                        |
|-------------------------------|---------------------|------------------------|
| <b>Winding:</b> 35WGN672-R002 | <b>Type:</b> 3524LC | <b>Enclosure:</b> OPEN |
|-------------------------------|---------------------|------------------------|

| Nameplate Data        |              |              |    | 115 V, 60 Hz:<br>Low Voltage Connection |                                  |
|-----------------------|--------------|--------------|----|-----------------------------------------|----------------------------------|
| Rated Output (HP)     | 1            |              |    | Full Load Torque                        | 1.51 LB-FT                       |
| Volts                 | 115/230      |              |    | Start Configuration                     | direct on line                   |
| Full Load Amps        | 7.8/3.9      |              |    | Breakdown Torque                        | 4.54 LB-FT                       |
| R.P.M.                | 3480         |              |    | Pull-up Torque                          | 2.68 LB-FT                       |
| Hz                    | 60           | Phase        | 1  | Locked-rotor Torque                     | 5.62 LB-FT                       |
| NEMA Design Code      | N            | KVA Code     | H  | Starting Current                        | 60 A                             |
| Service Factor (S.F.) | 1.25         |              |    | No-load Current                         | 1.8 A                            |
| NEMA Nom. Eff.        | 82           | Power Factor | 99 | Line-line Res. @ 25°C                   | 0.63772 Ω A Ph<br>0.97353 Ω B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                 | 11°C                             |
| S.F. Amps             | 10/5         |              |    | Temp. Rise @ S.F. Load                  | 15°C                             |

## Load Characteristics 115 V, 60 Hz, 1 HP

|                 |        |        |        |        |      |        |      |
|-----------------|--------|--------|--------|--------|------|--------|------|
| % of Rated Load | 25     | 50     | 75     | 100    | 125  | 150    | S.F. |
| Power Factor    | 90     | 98     | 99     | 100    | 99   | 99     | 99   |
| Efficiency      | 67.6   | 79.9   | 83.3   | 83.3   | 81.7 | 78.8   | 81.7 |
| Speed           | 3573.1 | 3548.4 | 3521.9 | 3491.7 | 3452 | 3405.5 | 3452 |
| Line amperes    | 2.72   | 4.17   | 5.87   | 7.77   | 9.99 | 12.5   | 9.99 |

## Performance Graph at 115V, 60Hz, 1.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 49833 - Typical performance - not guaranteed values

|                               |                     |                        |
|-------------------------------|---------------------|------------------------|
| <b>Winding:</b> 35WGN672-R002 | <b>Type:</b> 3524LC | <b>Enclosure:</b> OPEN |
|-------------------------------|---------------------|------------------------|

| Nameplate Data        |              |              |    | 230 V, 60 Hz:<br>High Voltage Connection |                              |
|-----------------------|--------------|--------------|----|------------------------------------------|------------------------------|
| Rated Output (HP)     | 1            |              |    | Full Load Torque                         | 1.51 LB-FT                   |
| Volts                 | 115/230      |              |    | Start Configuration                      | direct on line               |
| Full Load Amps        | 7.8/3.9      |              |    | Breakdown Torque                         | 4.54 LB-FT                   |
| R.P.M.                | 3480         |              |    | Pull-up Torque                           | 2.28 LB-FT                   |
| Hz                    | 60           | Phase        | 1  | Locked-rotor Torque                      | 4.78 LB-FT                   |
| NEMA Design Code      | N            | KVA Code     | H  | Starting Current                         | 29.9 A                       |
| Service Factor (S.F.) | 1.25         |              |    | No-load Current                          | 0.917 A                      |
| NEMA Nom. Eff.        | 82           | Power Factor | 99 | Line-line Res. @ 25°C                    | 0.599 Ω A Ph<br>0.913 Ω B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 12°C                         |
| S.F. Amps             | 10/5         |              |    | Temp. Rise @ S.F. Load                   | 16°C                         |
|                       |              |              |    | Rotor inertia                            | 0.0516 LB-FT <sup>2</sup>    |

**Load Characteristics 230 V, 60 Hz, 1 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 91   | 98   | 100  | 100  | 99   | 99   | 99   |
| Efficiency      | 65.8 | 78.6 | 82.1 | 82.8 | 81.4 | 78.3 | 81.4 |
| Speed           | 3573 | 3549 | 3522 | 3492 | 3452 | 3406 | 3452 |
| Line amperes    | 1.39 | 2.11 | 2.97 | 3.92 | 5.03 | 6.28 | 5.03 |

## Performance Graph at 230V, 60Hz, 1.0HP Typical performance - Not guaranteed values

