

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **VBM3546-S**

**1HP,1750RPM,3PH,60HZ,56C,3516M,TEFC,F3,B**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | P    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3516M | Elec. Spec: | 35WGP674 | CD Diagram:   | CD0005     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 35X055   | Layout:       | 35LYX055   |
| Frame:      | 56C  | Mounting:      | F3    | Poles:      | 04       | Created Date: | 11-30-2007 |
| Base:       | N    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 10-08-2013 |
| Leads:      | 9#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

|                          |                   |      |      |     |   |    |   |  |  |
|--------------------------|-------------------|------|------|-----|---|----|---|--|--|
| <b>Nameplate NP1372L</b> |                   |      |      |     |   |    |   |  |  |
| CAT.NO.                  | VBM3546-S         |      |      |     |   |    |   |  |  |
| SPEC.                    | 35X055P674H1      |      |      |     |   |    |   |  |  |
| HP                       | 1                 |      |      |     |   |    |   |  |  |
| VOLTS                    | 208-230/460       |      |      |     |   |    |   |  |  |
| AMP                      | 3.38-3.12/1.56    |      |      |     |   |    |   |  |  |
| RPM                      | 1750              |      |      |     |   |    |   |  |  |
| FRAME                    | 56C               | HZ   | 60   | PH  | 3 |    |   |  |  |
| SER.F.                   | 1.15              | CODE | M    | DES | B | CL | F |  |  |
| NEMA-NOM-EFF             | 82.5              | PF   | 73   |     |   |    |   |  |  |
| RATING                   | 40C AMB-CONT      |      |      |     |   |    |   |  |  |
| CC                       | USABLE AT 208V    |      |      |     |   |    |   |  |  |
| DE                       | 6205              | ODE  | 6205 |     |   |    |   |  |  |
| ENCL                     | TEFC              | SN   |      |     |   |    |   |  |  |
|                          | IP22, BRK 6 FT-LB |      |      |     |   |    |   |  |  |

| Parts List     |  |          |
|----------------|--|----------|
| Part Number    | Description                              | Quantity |
| SA166376       | SA 35X055P674H1                          | 1.000 EA |
| RA154754       | RA 35X055P674H1                          | 1.000 EA |
| S/P111-000-002 | CORONA TEST, SUPER E MOTORS - FT. SMITH  | 1.000 EA |
| NS2512A01      | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB4007       | KOBX, AUTOPHORETIC (REL# 79097-49-C)     | 1.000 EA |
| 35GS3009       | GASKET, KOBX 35CB4006 (411881-15A)       | 1.000 EA |
| 51XB1016A05    | 10-16X5/16HX WA SL SR TYB (F/S)          | 2.000 EA |
| WD4101A13      | STEEL CAPLUG,BP-1 1/8, PLUG D3561S       | 1.000 EA |
| 11XW1032G06    | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW5100A05      | WVY WSHR F/205 & 304 BRGS                | 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 |
| HW1001A10      | WASHER, #10 SPLT LK, ZN X                | 4.000 EA |
| BR2003D01      | SPLINED HUB 7/8 W/O KEY                  | 1.000 EA |
| 35FN3003A02    | EXFN, PLASTIC, 5.88 OD, .876 ID (REL)    | 1.000 EA |
| 35FH4007A01    | FAN CVR SSB (REL# 60200449A)             | 1.000 EA |
| 51XW1032A06    | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 4.000 EA |
| 35CB4519       | CB LID RAW & UNPRIMED, REL# 79097-50-B   | 1.000 EA |
| 35GS3019       | GASKET, FOR KOBX LID 35CB4519            | 1.000 EA |
| 51XW0832A07    | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501D13SP    | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| WD4006A01      | WIRE JOINT,T&B RB-4 OR RB-44             | 1.000 EA |
| HW2501D13SP    | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A04      | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA        |
| LB1418                        | INTEGRAL BRK ADJ LABEL (REL# 41171617A)  | 1.000 EA        |
| MJ1000A75                     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB        |
| MG1000N49                     | MUNSELL 8.5BG 3.57/2.0, GLOSS 30, B/G,   | 0.017 GA        |
| LB1419                        | CONNECTION LABEL                         | 1.000 EA        |
| HA3100A47                     | THRUBOLT 10-32 X 7.625                   | 4.000 EA        |
| 43BK0200B02                   | SSB-6-230/460(205) L HUB                 | 1.000 EA        |
| LB1424A02                     | BRAKE VOLT LABEL 230/460V SSB            | 1.000 EA        |
| LB1125C01                     | STD (STOCK) CARTON LABEL BALDOR WITH FLA | 1.000 EA        |
| LB1119N                       | WARNING LABEL                            | 1.000 EA        |
| LC0005                        | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING  | 1.000 EA        |
| NP1372L                       | ALUM UL CSA CE CC                        | 1.000 EA        |
| 36PA1000                      | PACK GROUP W/LB5001                      | 1.000 EA        |
| PK3082                        | STYROFOAM CRADLE                         | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 10/13 | 1.000 EA        |
| LB1506                        | LABEL "AMERICAN MADE" 1.50 X 1.00        | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 25215 - Typical performance - not guaranteed values

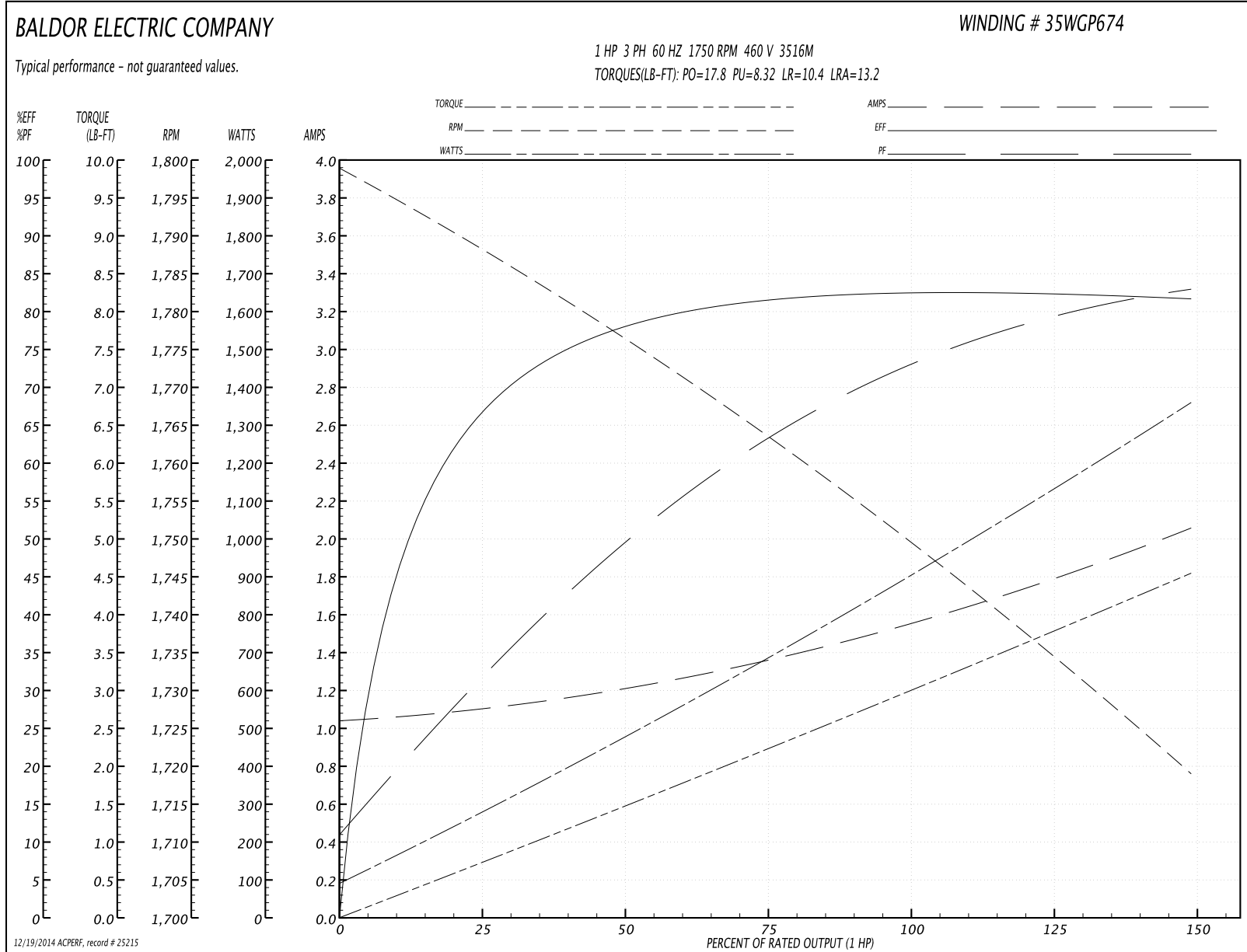
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGP674-R001 | <b>Type:</b> 3516M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

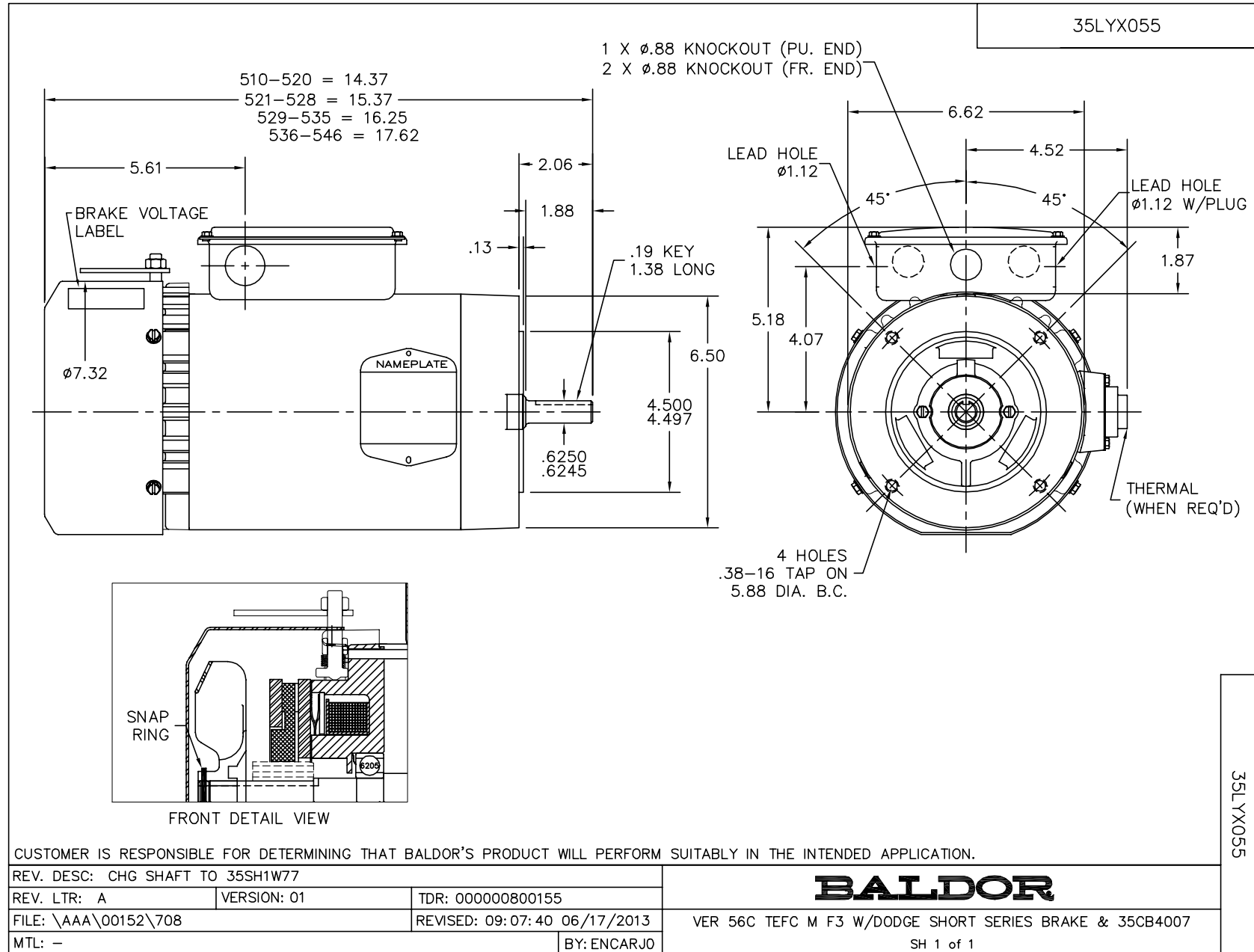
| Nameplate Data        |                |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                        |
|-----------------------|----------------|--------------|----|--|------------------------|
| Rated Output (HP)     | 1              |              |    | Full Load Torque                         | 2.99 LB-FT             |
| Volts                 | 208-230/460    |              |    | Start Configuration                      | direct on line         |
| Full Load Amps        | 3.38-3.12/1.56 |              |    | Breakdown Torque                         | 17.8 LB-FT             |
| R.P.M.                | 1750           |              |    | Pull-up Torque                           | 8.32 LB-FT             |
| Hz                    | 60             | Phase        | 3  | Locked-rotor Torque                      | 10.4 LB-FT             |
| NEMA Design Code      | B              | KVA Code     | M  | Starting Current                         | 13.2 A                 |
| Service Factor (S.F.) | 1.15           |              |    | No-load Current                          | 1.04 A                 |
| NEMA Nom. Eff.        | 82.5           | Power Factor | 73 | Line-line Res. @ 25°C                    | 16.3 Ω                 |
| Rating - Duty         | 40C AMB-CONT   |              |    | Temp. Rise @ Rated Load                  | 41°C                   |
| S.F. Amps             |                |              |    | Temp. Rise @ S.F. Load                   | 50°C                   |
|                       |                |              |    | Rotor inertia                            | 0.0946 LF <sup>2</sup> |

Load Characteristics 460 V, 60 Hz, 1 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 32   | 50   | 63   | 73   | 79   | 83   | 77   |
| Efficiency      | 66.7 | 77.9 | 81.3 | 82.6 | 82.6 | 81.6 | 82.6 |
| Speed           | 1788 | 1776 | 1764 | 1750 | 1735 | 1719 | 1741 |
| Line amperes    | 1.11 | 1.2  | 1.36 | 1.56 | 1.77 | 2.06 | 1.69 |

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values



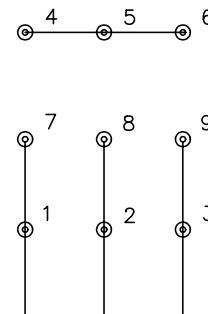




CD0005

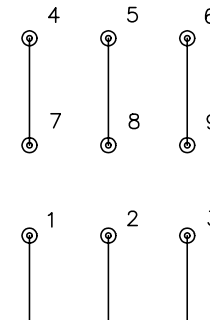


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 90000                                     |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005