

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **VM3554-5**

**1.5HP,1735RPM,3PH,60HZ,56C,3520M,TEFC,F1**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | E    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3520M | Elec. Spec: | 35WGM270 | CD Diagram:   | CD0006     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 35A013   | Layout:       | 35LYA013   |
| Frame:      | 56C  | Mounting:      | F1    | Poles:      | 04       | Created Date: | 08-06-2010 |
| Base:       | N    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 07-16-2014 |
| Leads:      | 3#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

|                   |              |                |  |  |      |     |  |   |       |   |
|-------------------|--------------|----------------|--|--|------|-----|--|---|-------|---|
| Nameplate NP1256L |              |                |  |  |      |     |  |   |       |   |
| CAT.NO.           | VM3554-5     |                |  |  |      |     |  |   |       |   |
| SPEC.             | 35A013M270G1 |                |  |  |      |     |  |   |       |   |
| HP                | 1.5          |                |  |  |      |     |  |   |       |   |
| VOLTS             | 575          |                |  |  |      |     |  |   |       |   |
| AMP               | 1.8          |                |  |  |      |     |  |   |       |   |
| RPM               | 1735         |                |  |  |      |     |  |   |       |   |
| FRAME             | 56C          | HZ             |  |  | 60   | PH  |  | 3 |       |   |
| SER.F.            | 1.15         | CODE           |  |  | L    | DES |  | B | CLASS | F |
| NEMA-NOM-EFF      | 81.5         | PF             |  |  | 74   |     |  |   |       |   |
| RATING            | 40C AMB-CONT |                |  |  |      |     |  |   |       |   |
| CC                |              | USABLE AT 208V |  |  |      |     |  |   |       |   |
| DE                | 6205         | ODE            |  |  | 6203 |     |  |   |       |   |
| ENCL              | TEFC         | SN             |  |  |      |     |  |   |       |   |
|                   |              |                |  |  |      |     |  |   |       |   |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA201502      | SA 35A013M270G1                          | 1.000 EA |
| RA188797      | RA 35A013M270G1                          | 1.000 EA |
| 35FN3002A05SP | EXFN, PLASTIC, 6.376 OD, .638 ID         | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3007      | 35 CB CASTING W/.88 DIA. LEAD HOLE       | 1.000 EA |
| 36GS1000SP    | 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 GRSR (RAISED FH MT | 1.000 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 GRSR W/3 HOLES - W/AUTOPHERETI | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 35CB4521GX    | CONDUIT BOX LID KIT                      | 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 |
| HA7000A04     | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| MJ1000A75     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1000G27     | MED CHARCOAL METALLIC GREY               | 0.017 GA |
| HA3100A12     | THRUBOLT 10-32 X 7.375                   | 4.000 EA |
| LB1119N       | WARNING LABEL                            | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| LB1125C01              | STD (STOCK) CARTON LABEL BALDOR WITH FLA | 1.000 EA |
| LC0006                 | CONNECTION LABEL                         | 1.000 EA |
| NP1256L                | ALUM UL CSA CC                           | 1.000 EA |
| 35PA1066               | PACKING GROUP COMBINED PRINT             | 1.000 EA |
| PK3082                 | STYROFOAM CRADLE                         | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 10/13 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 34482 - Typical performance - not guaranteed values

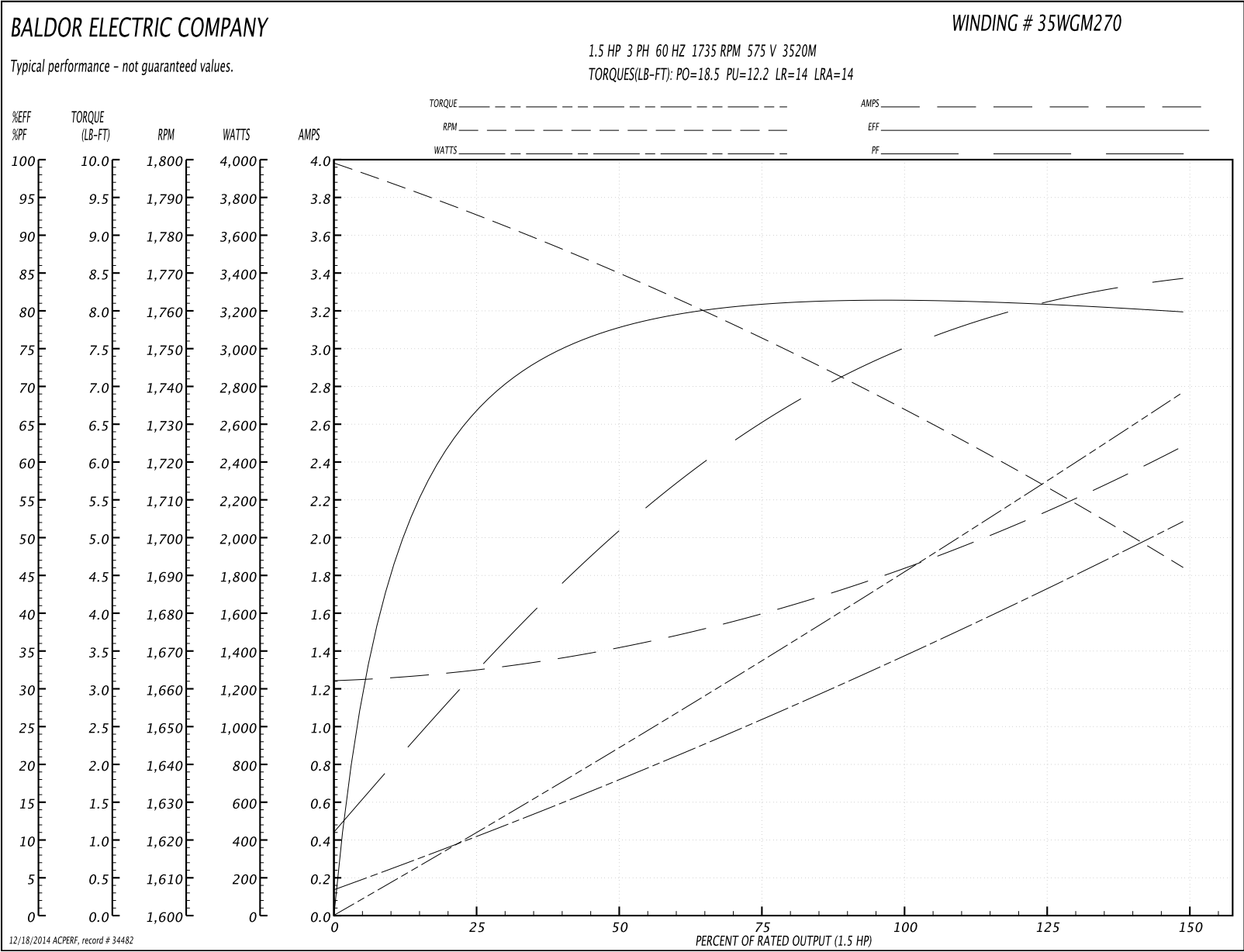
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGM270-R001 | <b>Type:</b> 3520M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

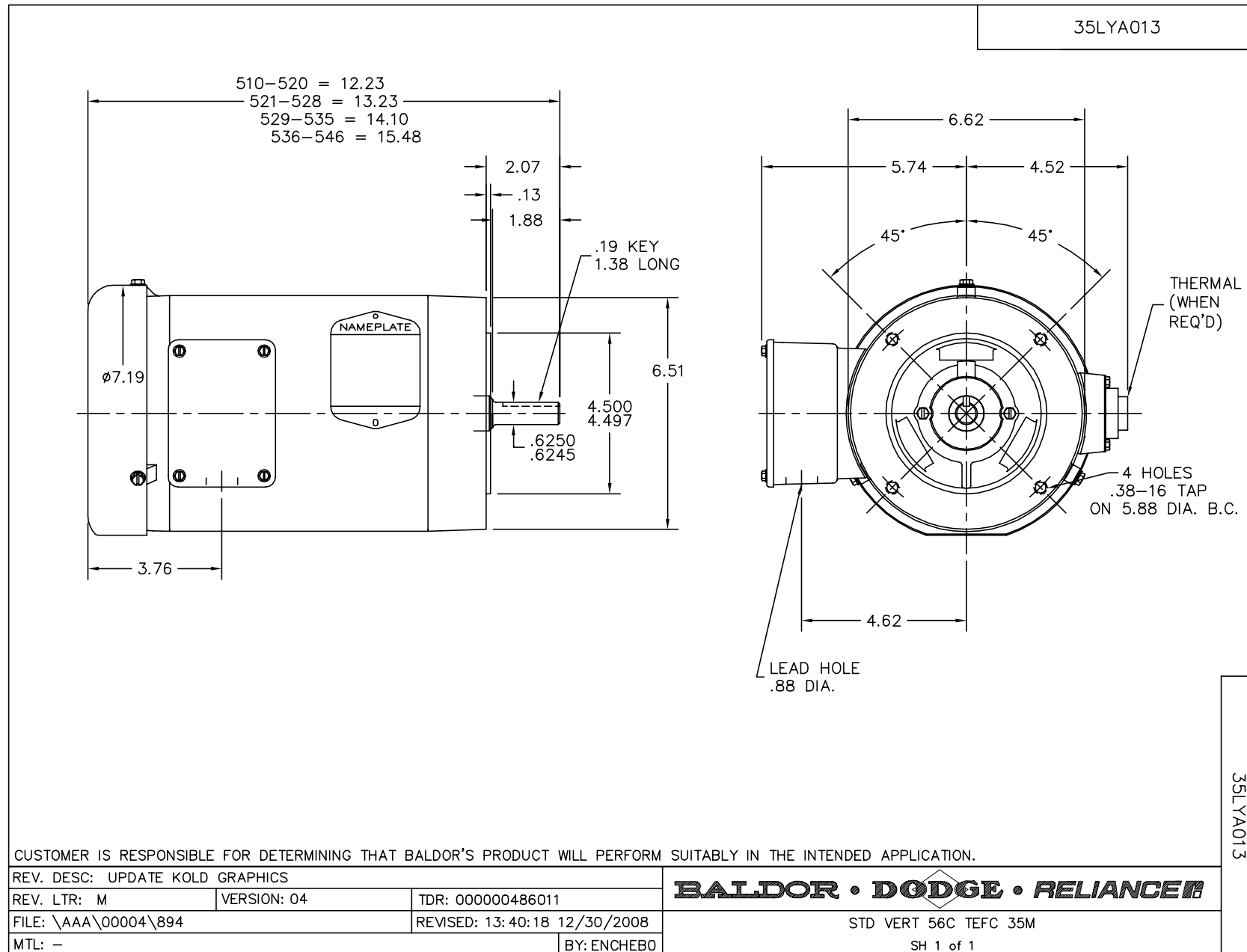
| Nameplate Data        |              |              |    | 575 V, 60 Hz:<br>Single Voltage Motor |                       |
|-----------------------|--------------|--------------|----|---------------------------------------|-----------------------|
| Rated Output (HP)     | 1.5          |              |    | Full Load Torque                      | 4.5 LB-FT             |
| Volts                 | 575          |              |    | Start Configuration                   | direct on line        |
| Full Load Amps        | 1.8          |              |    | Breakdown Torque                      | 18.5 LB-FT            |
| R.P.M.                | 1735         |              |    | Pull-up Torque                        | 12.2 LB-FT            |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                   | 14 LB-FT              |
| NEMA Design Code      | B            | KVA Code     | L  | Starting Current                      | 14 A                  |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                       | 1.25 A                |
| NEMA Nom. Eff.        | 81.5         | Power Factor | 74 | Line-line Res. @ 25°C                 | 20.4 Ω                |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load               | 71°C                  |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                | 82°C                  |
|                       |              |              |    | Rotor inertia                         | 0.118 LF <sup>2</sup> |

**Load Characteristics 575 V, 60 Hz, 1.5 HP**

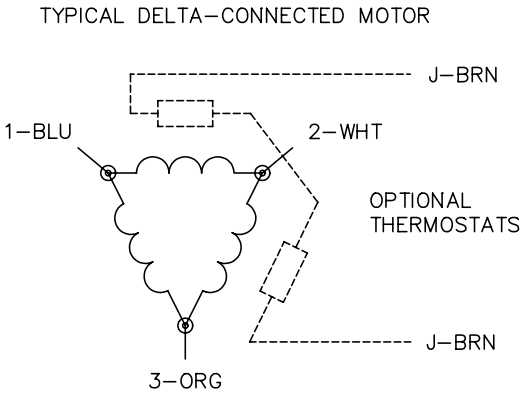
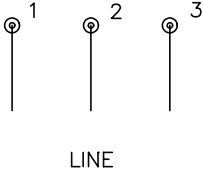
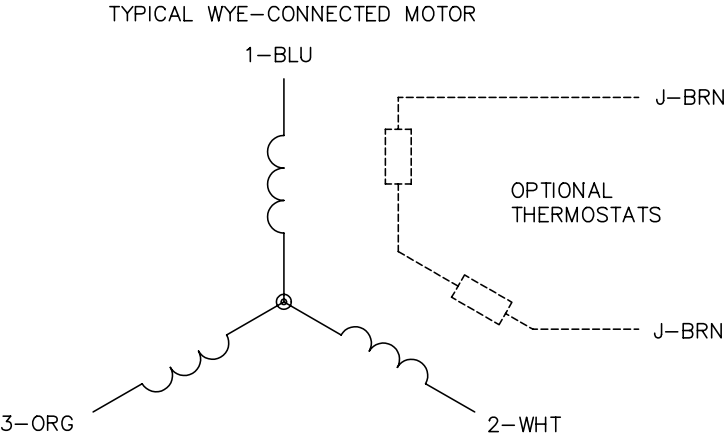
|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 32   | 51   | 65   | 74   | 81   | 85   | 78   |
| Efficiency      | 66.5 | 77.2 | 80.8 | 81.5 | 81.1 | 79.7 | 81.3 |
| Speed           | 1786 | 1770 | 1753 | 1735 | 1714 | 1692 | 1722 |
| Line amperes    | 1.29 | 1.41 | 1.59 | 1.84 | 2.13 | 2.48 | 2.01 |

Performance Graph at 575V, 60Hz, 1.5HP Typical performance - Not guaranteed values





CD0006



- NOTES:
1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
  2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
  5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

|                                           |         |                        |              |
|-------------------------------------------|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                        |              |
| REV. LTR: D                               | BY: JLP | REVISED: 01/21/99 4:02 | TDR: 0171435 |
| 9000D                                     |         | FILE: AAA00005141      | MDL: -       |
|                                           |         | MTL: -                 |              |

BALDOR ELECTRIC Co.

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006