

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **VEDM3558**

**2HP,1755RPM,3PH,60HZ,56C,3528M,TEFC,F1,N**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | D    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3528M | Elec. Spec: | 35WGN909 | CD Diagram:   | CD0005     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 35E4312  | Layout:       | 35LYE4312  |
| Frame:      | 56C  | Mounting:      | F1    | Poles:      | 04       | Created Date: | 04-08-2016 |
| Base:       | N    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 11-21-2016 |
| Leads:      | 9#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP3504E

|              |               |          |      |            |      |
|--------------|---------------|----------|------|------------|------|
| CAT NO       | VEDM3558      |          |      |            |      |
| SPEC.        | 35E4312N909G1 |          |      | ENCL       | TEFC |
| FRAME        | 56C           | HP       | 2    |            |      |
| VOLTS        | 230/460       |          |      |            |      |
| FLA          | 5.8/2.9       |          | I.P. | 56         |      |
| RPM          | 1755          | RPM MAX  | 2700 |            |      |
| HZ           | 60            | PH       | 3    | CLASS      | F    |
| SER.F.       | 1.15          | DES      | B    | CC         | 010A |
| NEMA-NOM-EFF | 86.5          |          |      |            |      |
| RATING       | 40C AMB-CONT  |          |      |            |      |
| DE BRG       | 6205          | ODE BRG  | 6203 |            |      |
| GREASE       | POLYREX EM    |          |      |            |      |
| C HP FR      | 60            | C HP TO  | 90   |            |      |
| CT HZ FROM   | 6             | CT HZ TO | 60   | VT HZ FROM | 6    |
| SER.NO       |               |          |      | VT HZ TO   | 60   |
|              | 50C AT 1.0 SF |          |      |            |      |

| Parts List     |                                          |          |
|----------------|------------------------------------------|----------|
| Part Number    | Description                              | Quantity |
| SA319741       | SA 35E4312N909G1                         | 1.000 EA |
| RA307450       | RA 35E4312N909G1                         | 1.000 EA |
| NS2512A01      | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB1001A01E   | SPL CONDUIT BOX, MACHINED (E-COAT)       | 1.000 EA |
| 35GS1022A02    | GASKET BOX .06 THK NEOP BLK HDN 30-40 DU | 1.000 EA |
| 51XB1016A08    | 10-16X 1/2HXWSSLD SERTYB                 | 2.000 EA |
| 11XW1032G06    | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| HW3001B01      | BRASS CUP WASHER, FOR #8 SCREW           | 1.000 EA |
| 35EP1100F12LP2 | FRONT TEFC 203 BRG W/ SEAL               | 1.000 EA |
| HW4606A01      | JM CLIPPER/SEAL (WDE-0667-1064-BH49)     | 1.000 EA |
| HW4500A33      | 1/8 NPT STAINLESS,HOLO-KROME #13002,PRES | 3.000 EA |
| HA4054         | SHORT T-DRAIN FITTING, .125" N.P.T.      | 1.000 EA |
| HW5100A03SP    | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP1300A113E  | PUEP ENCL 205 BRG F/SEAL, (4).125 NPT    | 1.000 EA |
| HW4500A33      | 1/8 NPT STAINLESS,HOLO-KROME #13002,PRES | 3.000 EA |
| HW4606A02      | JM CLIPPER/SEAL (LWE-0938-1624-AL23)     | 1.000 EA |
| HA4054         | SHORT T-DRAIN FITTING, .125" N.P.T.      | 1.000 EA |
| 12XN1032S20    | 10-32 X 1-1/4 HEX M.S. , STAINLESS STEEL | 2.000 EA |
| 35FH4005A01LP2 | IEC FH NO GREASER                        | 1.000 EA |
| 10XN1032S08    | 10-32X1/2 HEX HEAD S STL                 | 3.000 EA |
| 35CB4516E      | CONDUIT BOX LID, E-COAT                  | 1.000 EA |
| 36GS1002       | GASKET, 1/16" NEOPRENE CONDUIT BOX LID   | 1.000 EA |
| 59XW0832S07    | TAPTITE II,HEX WSHR UNSLTD SER,410 S.S., | 4.000 EA |
| HW2502D13      | SS 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 |
| MJ5001A02              | 732 CL SEALANT 3 OZ DIXIE BEARING 289100 | 0.001 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| LB1164                 | LABEL,WARNING AND DRAIN                  | 1.000 EA |
| MJ5001A23              | P.D. GEORGE B-276 AIR DRY VARNISH        | 0.001 GA |
| LB1000                 | LABEL, DIRTY DUTY                        | 1.000 EA |
| WD1000D21              | TRM,T&B #B71M,RING,18-14,.25,NON-INSL    | 9.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1500Y02              | PRIMER,347.29+347.29C ACTIVATOR WILKOPON | 0.010 GA |
| MG1025L01              | WILKOFAS FD, 786.04, BLACK               | 0.010 GA |
| 51XB1214A16            | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| 35FN3002A05SP          | EXFN, PLASTIC, 6.376 OD, .638 ID         | 1.000 EA |
| HA3100S07              | THRUBOLT 10-32 X 8.375 SS                | 4.000 EA |
| LC0005                 | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING  | 1.000 EA |
| NP3504E                | SS DIRTY DUTY PLUS INV UL CSA-C US EEV   | 1.000 EA |
| 36PA1000               | PKG GRP, PRINT PK1016A06                 | 1.000 EA |
| PK3082                 | STYROFOAM CRADLE                         | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 55769 - Typical performance - not guaranteed values

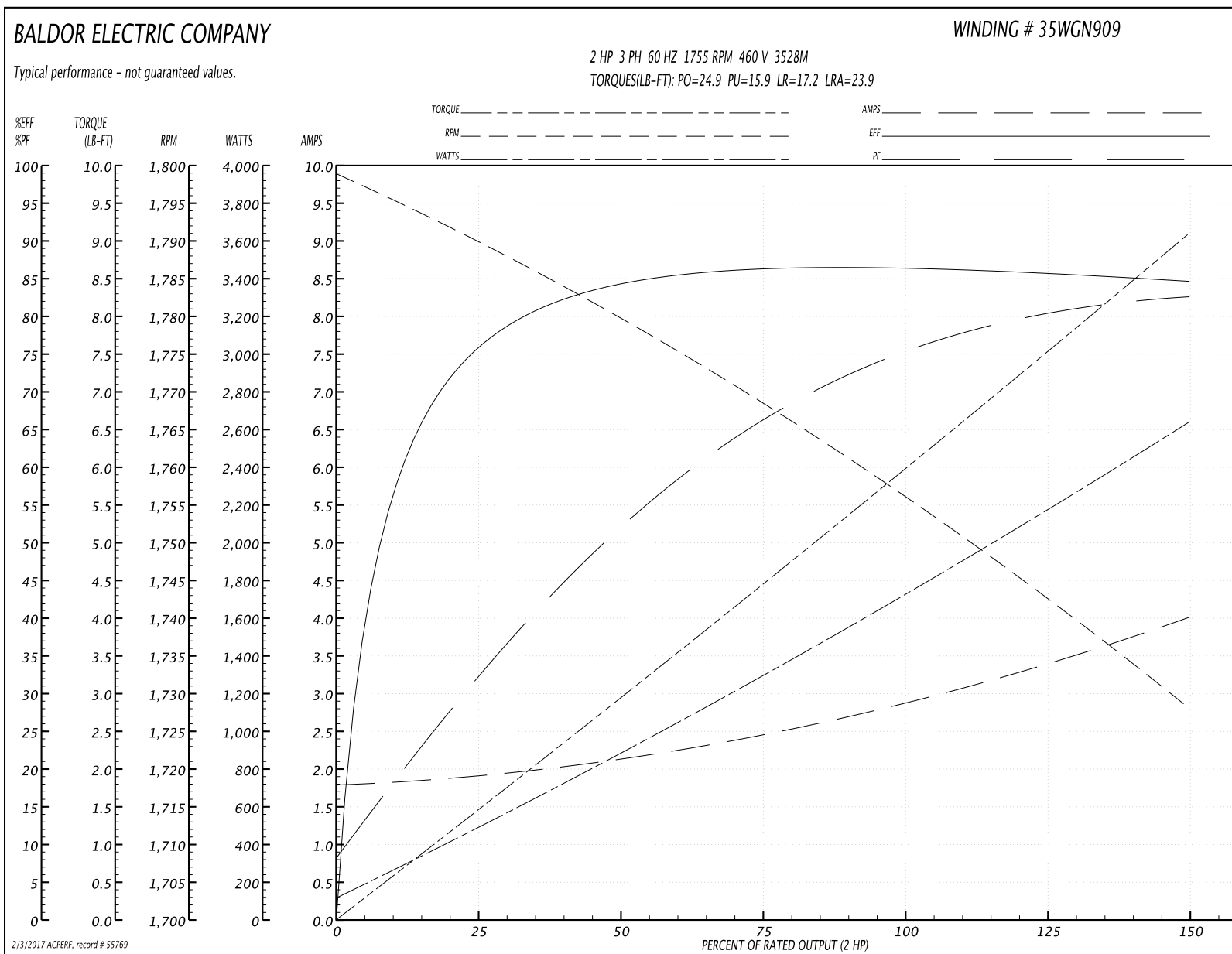
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGN909-R039 | <b>Type:</b> 3528M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

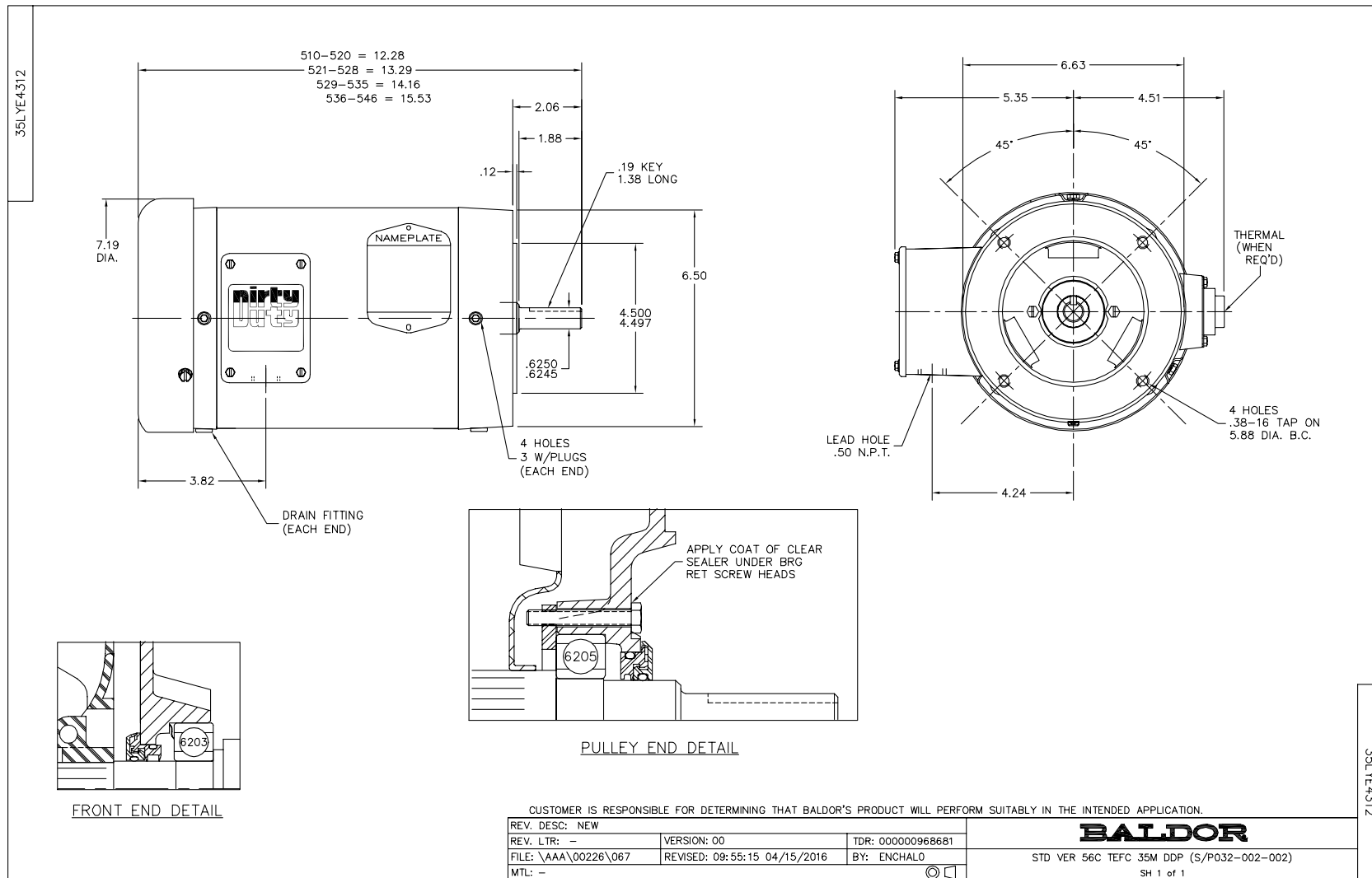
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|------------------------------------------|--------------------------|
| Rated Output (HP)     | 2            |              |    | Full Load Torque                         | 5.985 LB-FT              |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 5.8/2.9      |              |    | Breakdown Torque                         | 24.9 LB-FT               |
| R.P.M.                | 1755         |              |    | Pull-up Torque                           | 15.9 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 17.2 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | L  | Starting Current                         | 23.9 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.81 A                   |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 75 | Line-line Res. @ 25°C                    | 8.1641 Ω                 |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 65°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 77°C                     |
|                       |              |              |    | Locked-rotor Power Factor                | 52.4                     |
|                       |              |              |    | Rotor inertia                            | 0.165 LB-FT <sup>2</sup> |

## Load Characteristics 460 V, 60 Hz, 2 HP

| % of Rated Load | 25   | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|------|--------|--------|--------|--------|--------|------|
| Power Factor    | 33   | 53     | 66     | 75     | 80     | 83     | 78   |
| Efficiency      | 75.7 | 84.1   | 86.3   | 86.5   | 85.9   | 84.6   | 86.1 |
| Speed           | 1790 | 1779.4 | 1768.5 | 1756.1 | 1742.7 | 1727.9 | 1748 |
| Line amperes    | 1.89 | 2.11   | 2.46   | 2.91   | 3.4    | 4      | 3.2  |

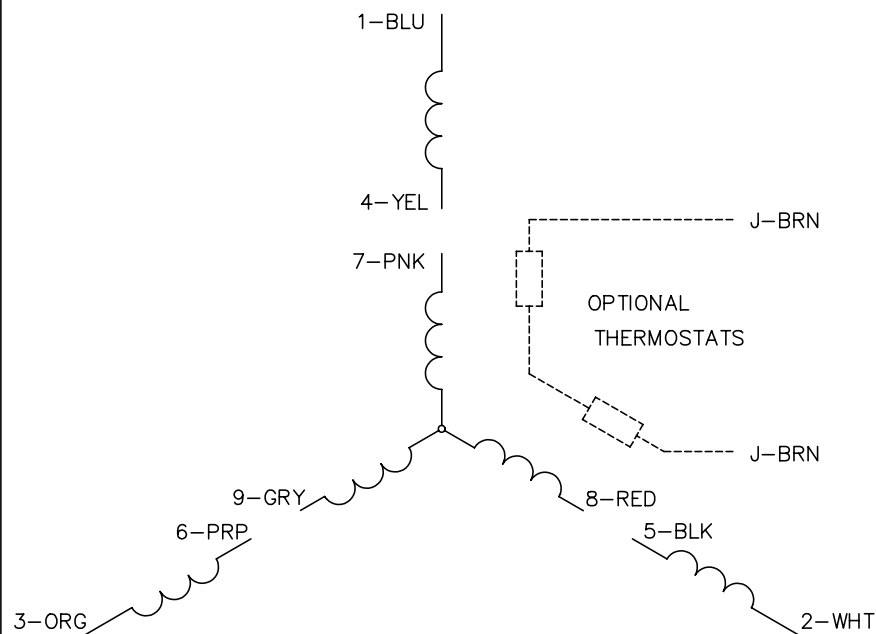
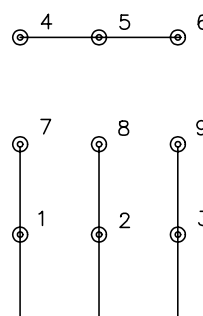
## Performance Graph at 460V, 60Hz, 2.0HP Typical performance - Not guaranteed values



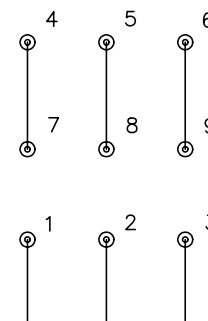




CD0005


 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

900000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005