

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **VEM3155T**

**2HP,3450RPM,3PH,60HZ,143TC,3524M,ODP,F1**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | D     | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 3524M | Elec. Spec: | 35WGS095 | CD Diagram:   | CD0005     |
| Enclosure:  | ODP   | Mfg Plant:     |       | Mech. Spec: | 35Z413   | Layout:       | 35LYZ413   |
| Frame:      | 143TC | Mounting:      | F1    | Poles:      | 02       | Created Date: | 04-24-2015 |
| Base:       | N     | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 11-09-2016 |
| Leads:      | 9#18  |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

**Nameplate NP3553L**

|                                  |              |  |                       |  |            |            |      |   |           |  |     |
|----------------------------------|--------------|--|-----------------------|--|------------|------------|------|---|-----------|--|-----|
| <b>CAT.NO.</b>                   | VEM3155T     |  |                       |  |            |            |      |   |           |  |     |
| <b>SPEC.</b>                     | 35Z413S095G1 |  |                       |  |            |            |      |   |           |  |     |
| <b>HP</b>                        | 2            |  |                       |  |            |            |      |   |           |  |     |
| <b>VOLTS</b>                     | 230/460      |  |                       |  |            |            |      |   |           |  |     |
| <b>AMP</b>                       | 5/2.5        |  |                       |  |            |            |      |   |           |  |     |
| <b>RPM</b>                       | 3450         |  |                       |  |            |            |      |   |           |  |     |
| <b>FRAME</b>                     | 143TC        |  |                       |  | <b>HZ</b>  |            | 60   |   | <b>PH</b> |  | 3   |
| <b>SER.F.</b>                    | 1.15         |  | <b>CODE</b>           |  | K          | <b>DES</b> |      | B | <b>CL</b> |  | F   |
| <b>NEMA-NOM-EFF</b>              | 86.5         |  | <b>PF</b>             |  | 90         |            |      |   |           |  |     |
| <b>RATING</b>                    | 40C AMB-CONT |  |                       |  |            |            |      |   |           |  |     |
| <b>CC</b>                        | 010A         |  | <b>USABLE AT 208V</b> |  |            |            |      |   |           |  | 5.5 |
| <b>DE</b>                        | 6205         |  |                       |  | <b>ODE</b> |            | 6203 |   |           |  |     |
| <b>ENCL</b>                      | ODP          |  | <b>SN</b>             |  |            |            |      |   |           |  |     |
| <b>VPWM INVERTER READY</b>       |              |  |                       |  |            |            |      |   |           |  |     |
| <b>CT30-60(2:1) VT3-60(20:1)</b> |              |  |                       |  |            |            |      |   |           |  |     |

| Parts List     |                                          |          |
|----------------|------------------------------------------|----------|
| Part Number    | Description                              | Quantity |
| SA299635       | SA 35Z413S095G1                          | 1.000 EA |
| RA286663       | RA 35Z413S095G1                          | 1.000 EA |
| S/P107-000-001 | SUPER E PROC'S-FS, WS & CK PLTS          | 1.000 EA |
| NS2512A01      | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3009       | 35 CB W/1.09 DIA. LEAD HOLE @ 6:         | 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 |
| 35EP3201A85    | 35 FREP W/DRIP COVER & GREASER           | 1.000 EA |
| HW4500A01      | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A03SP    | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3400A14    | SPL FACE MTD END PLATE - OPEN-143-5TC-05 | 1.000 EA |
| 35AD2000       | AIR BAFFLE                               | 1.000 EA |
| 60XW0632A06    | 6-32 X 3/8 TORX HEAD SCREW TAPTITE II    | 4.000 EA |
| HW4500A01      | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 51XN1032A20    | 10-32 X 1 1/4 HX WS SL SR                | 2.000 EA |
| 35FH4006A09    | DRIP COVER W/FLAT, W/ PRIMER             | 1.000 EA |
| 51XW1032A06    | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 2.000 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 |
| HA7000A01      | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |
| 85XU0407S04    | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| MJ1000A02      | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1000Y03      | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.017 GA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HA3100A15              | THRUBOLT 10-32 X 8.375                   | 4.000 EA |
| LC0005E01              | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3553L                | ALUM SUPER-E VPWM INVERTER READY UL      | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |
| 36PA1000               | PKG GRP, PRINT PK1016A06                 | 1.000 EA |
| PK3082                 | STYROFOAM CRADLE                         | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 53136 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGS095-R007 | <b>Type:</b> 3524M | <b>Enclosure:</b> OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                           |
|-----------------------|--------------|--------------|----|------------------------------------------|---------------------------|
| Rated Output (HP)     | 2            |              |    | Full Load Torque                         | 3 LB-FT                   |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line            |
| Full Load Amps        | 5/2.5        |              |    | Breakdown Torque                         | 11 LB-FT                  |
| R.P.M.                | 3450         |              |    | Pull-up Torque                           | 7.6 LB-FT                 |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 9.8 LB-FT                 |
| NEMA Design Code      | B            | KVA Code     | K  | Starting Current                         | 22 A                      |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 0.9 A                     |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 90 | Line-line Res. @ 25°C                    | 7.37 $\Omega$             |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 23°C                      |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 28°C                      |
|                       |              |              |    | Locked-rotor Power Factor                | 48.6                      |
|                       |              |              |    | Rotor inertia                            | 0.0664 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    | 52   | 77   | 84   | 85   | 89   | 88   | 87   |
| Efficiency      | 83.8 | 87.8 | 88.1 | 87.2 | 85.6 | 83.6 | 86.2 |
| Speed           | 3569 | 3540 | 3509 | 3475 | 3438 | 3398 | 3453 |
| Line amperes    | 1.1  | 1.4  | 1.9  | 2.5  | 3    | 3.7  | 2.8  |

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







