

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **VL3510T**

**1HP,1725RPM,1PH,60HZ,143TC,3524L,TEFC,F1**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | J     | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 3524L | Elec. Spec: | 35WGX945 | CD Diagram:   | CD0001     |
| Enclosure:  | TEFC  | Mfg Plant:     |       | Mech. Spec: | 35CC003  | Layout:       | 35LYCC003  |
| Frame:      | 143TC | Mounting:      | F1    | Poles:      | 04       | Created Date: | 12-21-2009 |
| Base:       | N     | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 09-04-2015 |
| Leads:      | 6#18  |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP1256L

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA188982      | SA 35CC003X945                           | 1.000 EA |
| RA176702      | RA 35CC003X945                           | 1.000 EA |
| EC1645A06SP   | ELEC CAP, 645-774 MFD, 125V, 2.06D X 4.  | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3009      | 35 CB W/1.09 DIA. LEAD HOLE @ 6:         | 1.000 EA |
| 36GS1000      | 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 |
| 35FE3100M01   | FREP TEFC ASSEMBLY FOR ROUTING           | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| NS2501A01     | INSULATOR, CAPACITOR                     | 1.000 EA |
| 51XB1016A05   | 10-16X5/16HX WA SL SR TYB (F/S)          | 2.000 EA |
| 35CB4802A02SP | CAPACITOR COVER, STAMPED X               | 1.000 EA |
| 35GS3001A02   | GASKET, CA.COVER, 5.38 LONG .06 CS301    | 1.000 EA |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3300A46   | PULLEY ENDPLATE, MACH                    | 1.000 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 |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| 35FH4005A84SP | IEC FH W/GRSR, NO DIMPLES PRIMED         | 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 |
| HW2501D13     | KEY, 3/16 SQ X 1.375                     | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HA7000A01              | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| 51XW0832A07            | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 EA |
| WD1000A15              | 3-520132-2 AMP FLAG (4M/RL NON-CANC/NON- | 2.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| 35FN3002A05            | EXFN, PLASTIC, 6.376 OD, .638 ID         | 1.000 EA |
| MG1000G27              | MED CHARCOAL METALLIC GREY 400-0096      | 0.017 GA |
| SP5051A24              | MODEL 35 TORQ STATIONARY SWITCH FOR "L"  | 1.000 EA |
| HA3100A15              | THRUBOLT 10-32 X 8.375                   | 4.000 EA |
| LC0001A01              | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 EA |
| NP1256L                | ALUM UL CSA CC                           | 1.000 EA |
| 35PA1066               | PKG GRP, PRINT PK1008A06                 | 1.000 EA |
| PK3082                 | STYROFOAM CRADLE                         | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 33217 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGX945-R003 | <b>Type:</b> 3524L | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 230 V, 60 Hz:<br>High Voltage Connection |                                        |
|-----------------------|--------------|--------------|----|------------------------------------------|----------------------------------------|
| Rated Output (HP)     | 1            |              |    | Full Load Torque                         | 3 LB-FT                                |
| Volts                 | 115/230      |              |    | Start Configuration                      | direct on line                         |
| Full Load Amps        | 12.8/6.4     |              |    | Breakdown Torque                         | 6.9 LB-FT                              |
| R.P.M.                | 1725         |              |    | Pull-up Torque                           | 5.9 LB-FT                              |
| Hz                    | 60           | Phase        | 1  | Locked-rotor Torque                      | 10 LB-FT                               |
| NEMA Design Code      | L            | KVA Code     | K  | Starting Current                         | 39 A                                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 4.1 A                                  |
| NEMA Nom. Eff.        | 68           | Power Factor | 74 | Line-line Res. @ 25°C                    | 2.6 $\Omega$ A Ph<br>1.8 $\Omega$ B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 79°C                                   |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 96°C                                   |

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

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 39   | 53   | 67   | 75   | 81   | 84   | 79   |
| Efficiency      | 52.9 | 67.6 | 70   | 70.3 | 68.6 | 64.9 | 69.3 |
| Speed           | 1781 | 1765 | 1746 | 1726 | 1701 | 1666 | 1711 |
| Line amperes    | 4.3  | 4.7  | 5.3  | 6.2  | 7.4  | 8.9  | 6.9  |

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





