

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **WDL3510T**

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

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | C    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3524L | Elec. Spec: | 35WGX945 | CD Diagram:   | CD0001     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 35S649   | Layout:       | 35LYS649   |
| Frame:      | 143T | Mounting:      | F1    | Poles:      | 04       | Created Date: | 07-11-2014 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 03-17-2016 |
| Leads:      | 6#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP1496L

|              |              |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
|--------------|--------------|--|------|----|----------------|-----|------|---|-------|----|---|---|---|--|--|--|
| CAT.NO.      | WDL3510T     |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
| SPEC.        | 35S649X945G2 |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
| HP           | 1            |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
| VOLTS        | 115/230      |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
| AMP          | 12.8/6.4     |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
| RPM          | 1725         |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
| FRAME        | 143T         |  |      |    | HZ             |     | 60   |   |       | PH | 1 |   |   |  |  |  |
| SER.F.       | 1.15         |  | CODE |    | K              | DES |      | L | CLASS |    |   | F |   |  |  |  |
| NEMA-NOM-EFF | 67           |  |      | PF |                | 73  |      |   |       |    |   |   |   |  |  |  |
| RATING       | 40C AMB-CONT |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
| CC           |              |  |      |    | USABLE AT 208V |     |      |   |       |    |   |   | 7 |  |  |  |
| DE           | 6205         |  |      |    | ODE            |     | 6203 |   |       |    |   |   |   |  |  |  |
| ENCL         | TEFC         |  | SN   |    |                |     |      |   |       |    |   |   |   |  |  |  |
|              |              |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |
|              |              |  |      |    |                |     |      |   |       |    |   |   |   |  |  |  |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA283726      | SA 35S649X945G2                          | 1.000 EA |
| RA270008      | RA 35S649X945G2                          | 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 |
| 35CB3008A01W  | 35 CB .50 NPT @ 6, MACH WHITE EPOXY      | 1.000 EA |
| 35GS1039      | 05 MOLDED GASKET W/LIP, 1.12 LEAD HOLE,  | 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 |
| 35EP3100M04MW | FREP TEFC,"O" DRILLS,NO GRSR, MACH.WHITE | 1.000 EA |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 EA |
| HW4032A01     | BLACK DRAIN PLUG FOR WASH DOWN MOTORS    | 3.000 EA |
| NS2501A01     | INSULATOR, CAPACITOR                     | 1.000 EA |
| 35CB4802A02SP | CAPACITOR COVER, STAMPED X               | 1.000 EA |
| 51XB1016A06   | 10-16X3/8 HXWSSLD SERTYB                 | 4.000 EA |
| HW5100A03SP   | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35PE3101A55MW | PUEP ASSEMBLY FOR ROUTING                | 1.000 EA |
| HW4032A01     | BLACK DRAIN PLUG FOR WASH DOWN MOTORS    | 3.000 EA |
| HW4600B49     | SEAL 0.938 X 1.624 X 0.250 SINGLE LIP DB | 1.000 EA |
| XY1032S02     | 10-32 HEX NUT R.H. S STL                 | 4.000 EA |
| 51XB1214A16   | 12-14X1.00 HXWSSLD SERTYB                | 1.000 EA |
| 35FH4005A32SP | IEC FH NO GRSR W/3 HOLES - PRIMED        | 1.000 EA |
| 11XW1032S06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 3.000 EA |
| 35CB4522      | 35 LIPPED CB LID PRIMED                  | 1.000 EA |
| 35GS1030A02   | 35 GS FOR CB LID - WHITE NEOPRENE        | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| 59XW0832S07            | TAPTITE II,HEX WSHR UNSLTD SER,410 S.S., | 4.000 EA |
| HA1005A05SP            | SLINGER, OD 1.50, ID .659, 203 BRG       | 1.000 EA |
| HW4600B32SP            | V-RING SLINGER 1.000 X 1.540 X .24 VITON | 1.000 EA |
| HW2502D13              | SS KEY, 3/16 SQ X 1.375                  | 1.000 EA |
| HA7000A01              | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |
| MJ5001A27              | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 QT |
| LB1164                 | LABEL,WARNING AND DRAIN                  | 1.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| SP5056SP               | MODEL 34/35 SINGLE ARM STAT. SWITCH W/ T | 1.000 EA |
| HA5027A01              | HA4066A01 T-DRAIN X2 BAGGED              | 1.000 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 |
| 35FN3002A05SP          | EXFN, PLASTIC, 6.376 OD, .638 ID         | 1.000 EA |
| 35GS1016A02            | GASKET-1/16 THK WHITE RUBBER USED W/HOSE | 1.000 EA |
| MG1025Z02              | ACTIVATOR WILKOFAS 060.02HF              | 0.010 GA |
| MG1025W01              | WILKOFAS 781.01, SIGNAL WHITE #9003      | 0.017 GA |
| SP5055A67              | MODEL 35 TYPE L STATIONARY SWITCH        | 1.000 EA |
| HA3100S09              | THRUBOLT 9.25 LENGTH SS                  | 4.000 EA |
| LC0001                 | CONN LABEL TYPE L, 6 LEAD, DUAL VOLTS, R | 1.000 EA |
| NP1496L                | SS WD UL CSA CC                          | 1.000 EA |
| 36PA1000               | PKG GRP, PRINT PK1016A06                 | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 20604 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGX945-R004 | <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.        | 67           | Power Factor | 73 | Line-line Res. @ 25°C                    | 2.6 Ω A Ph<br>1.8 Ω 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





