

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM3546T-BG**

**1HP,1760RPM,3PH,60HZ,143T,3519M,TEFC,F1**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | H    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3520M | Elec. Spec: | 35WGM492 | CD Diagram:   | CD0005     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 35E2208  | Layout:       | 35LYE2208  |
| Frame:      | 143T | Mounting:      | F1    | Poles:      | 04       | Created Date: | 10-04-2013 |
| Base:       | RG   | Rotation:      | R     | Insulation: | H        | Eff. Date:    | 08-24-2016 |
| Leads:      | 9#18 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP1259L

|              |               |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
|--------------|---------------|--|--|--|--|------|----------------|------|--|---|--|----|-----|---|--|
| CAT.NO.      | EM3546T-BG    |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
| SPEC.        | 35E2208M492G1 |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
| HP           | 1             |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
| VOLTS        | 230/460       |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
| AMP          | 3/1.5         |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
| RPM          | 1760          |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
| FRAME        | 143T          |  |  |  |  | HZ   |                | 60   |  |   |  |    | PH  | 3 |  |
| SER.F.       | 1.15          |  |  |  |  | CODE | L              | DES  |  | B |  | CL |     | H |  |
| NEMA-NOM-EFF | 85.5          |  |  |  |  |      | PF             | 71   |  |   |  |    |     |   |  |
| RATING       | 40C AMB-CONT  |  |  |  |  |      |                |      |  |   |  |    |     |   |  |
| CC           | 010A          |  |  |  |  |      | USABLE AT 208V |      |  |   |  |    | 3.1 |   |  |
| DE           | 6205          |  |  |  |  |      | ODE            | 6203 |  |   |  |    |     |   |  |
| ENCL         | TEFC          |  |  |  |  | SN   |                |      |  |   |  |    |     |   |  |

| Parts List    |                                          |          |
|---------------|------------------------------------------|----------|
| Part Number   | Description                              | Quantity |
| SA270522      | SA 35E2208M492G1                         | 1.000 EA |
| RA257156      | RA 35E2208M492G1                         | 1.000 EA |
| 34FN3002B01   | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3009      | 35 CB W/1.09 DIA. LEAD HOLE @ 6:         | 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 |
| 35FE3100M01   | FREP TEFC ASSEMBLY FOR ROUTING           | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A03SP   | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3101A49   | SPL PUEP-ENCL-205 BRG W/GREASER          | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 51XN1032A18   | 10-32 X 1 1/8 HX WS SL SR (ESKAY)        | 2.000 EA |
| XY1032A02     | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 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 |
| HA7000A01     | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| LB1508        | LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81 | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.017 GA |
| HA3100A18              | THRUBOLT 10-32 X 9.250                   | 4.000 EA |
| LC0005E01              | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP1259L                | ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM  | 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 # 35572 - Typical performance - not guaranteed values

|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGM492-R004 | <b>Type:</b> 3520M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                |
|-----------------------|--------------|--------------|----|------------------------------------------|----------------|
| Rated Output (HP)     | 1            |              |    | Full Load Torque                         | 2.99 LB-FT     |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line |
| Full Load Amps        | 3/1.5        |              |    | Breakdown Torque                         | 13.5 LB-FT     |
| R.P.M.                | 1760         |              |    | Pull-up Torque                           | 8.25 LB-FT     |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 8.52 LB-FT     |
| NEMA Design Code      | B            | KVA Code     | L  | Starting Current                         | 12.4 A         |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.07 A         |
| NEMA Nom. Eff.        | 85.5         | Power Factor | 71 | Line-line Res. @ 25°C                    | 15 Ω           |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 36°C           |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 42°C           |
|                       |              |              |    | Locked-rotor Power Factor                | 53.8           |
|                       |              |              |    | Rotor inertia                            | 0.118 LB-FT2   |

**Load Characteristics 460 V, 60 Hz, 1 HP**

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 29   | 46   | 60   | 69   | 75   | 79   | 74   |
| Efficiency      | 74.2 | 82.9 | 85.4 | 85.8 | 85.4 | 84.5 | 85.6 |
| Speed           | 1790 | 1781 | 1771 | 1760 | 1749 | 1736 | 1754 |
| Line amperes    | 1.11 | 1.24 | 1.39 | 1.59 | 1.83 | 2.11 | 1.69 |

## Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values







