

# **BALDOR**® • *RELIANCE*

## **Product Information Packet**

# **EM2549T**

**75HP,3540RPM,3PH,60HZ,364TS,4254M,OPSB,F**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | J     | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 4254M | Elec. Spec: | 42WGW903 | CD Diagram:   | CD0180     |
| Enclosure:  | OPSB  | Mfg Plant:     |       | Mech. Spec: | 42E212   | Layout:       | 42LYE212   |
| Frame:      | 364TS | Mounting:      | F1    | Poles:      | 02       | Created Date: | 01-21-2011 |
| Base:       | RG    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 01-23-2017 |
| Leads:      | 9#6   |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP2138L |              |    |          |                |            |                         |       |           |      |  |        |      |
|-------------------|--------------|----|----------|----------------|------------|-------------------------|-------|-----------|------|--|--------|------|
| CAT.NO.           | EM2549T      |    |          | P/N            |            |                         |       | ENCLOSURE | OPSB |  |        |      |
| SPEC.             | 42E212W903   |    | CC       | 010A           |            | FRAME                   | 364TS |           | S/N  |  |        |      |
| HP                | 75           |    |          | CLASS          | F          |                         | HZ    | 60        |      |  |        |      |
| RPM               | 3540         |    |          | PH             | 3          |                         | DES   | A         |      |  |        |      |
| VOLT              | 230/460      |    |          |                | KVA-CODE   | G                       |       | ODE BRG   | 6311 |  | DE BRG | 6313 |
| AMP               | 164/82       |    |          | USABLE AT 208V | 178        |                         |       |           |      |  |        |      |
| RATING            | 40C AMB-CONT |    |          | GREASE         | POLYREX EM |                         |       |           |      |  |        |      |
| NEMA-NOM-EFF      | 93.6         | PF | 91       |                | SER.F.     | 1.15                    |       |           |      |  |        |      |
| HTR-VOLTS         |              |    | HTR-AMPS |                |            | MAX. SPACE HEATER TEMP. |       |           |      |  |        |      |

| Parts List     |  |          |
|----------------|--|----------|
| Part Number    | Description                              | Quantity |
| SA215622       | SA 42E212W903                            | 1.000 EA |
| RA202812       | RA 42E212W903                            | 1.000 EA |
| S/P107-000-004 | SUPER-E(284 FR. & UP)-CL PLANT,POLYREX E | 1.000 EA |
| HA6360         | LIFTING LUG FOR 42 FRAME MOTORS.         | 2.000 EA |
| HA6017         | CAST ADAPTER, 40,42 KOBX                 | 1.000 EA |
| 19XW3118A12    | .31-18 X .75 HEX WASHER HEAD TAPTITE II  | 2.000 EA |
| HW1001A31      | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 2.000 EA |
| 10CB3002       | CONDUIT BOX CAST W/3.625 LEAD HOLE       | 1.000 EA |
| 19XW3118A12    | .31-18 X .75 HEX WASHER HEAD TAPTITE II  | 4.000 EA |
| HW1001A31      | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| WD1000B16      | T&B CX70TN TERMINAL                      | 1.000 EA |
| 51XF2520A08    | SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L | 1.000 EA |
| 42EP3200A01    | FR ENDPLATE, MACH 324-6T                 | 1.000 EA |
| HW5100A13      | W4627-047 WVY WSHER                      | 1.000 EA |
| 42EP1202A01    | STD PU ENDPLATE MODEL 42 313 BRG.        | 1.000 EA |
| 10XN3816K44    | 3/8-16 X 2.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38      | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| XY5013A12      | NUT,1/2-13,HEX,STEEL,ZINCPLATED          | 8.000 EA |
| 10CB3500SP     | CONDUIT BOX LID, CAST                    | 1.000 EA |
| 51XW2520A12    | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 4.000 EA |
| HW2501H18      | KEY, 1/2 SQ X 2.000                      | 1.000 EA |
| LB1115N        | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| MN416A01       | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |
| HW4500A03      | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| HW4500A20                     | 1/8NPT SL PIPE PLUG                      | 1.000 EA        |
| HA4051A00                     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA        |
| MJ1000A02                     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.030 LB        |
| HW4500A03                     | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA        |
| HW4500A20                     | 1/8NPT SL PIPE PLUG                      | 1.000 EA        |
| HA4051A00                     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA        |
| MG1000Y03                     | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.050 GA        |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 EA        |
| 42AD2001B01                   | BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS  | 1.000 EA        |
| 42AD2001B01                   | BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS  | 1.000 EA        |
| HA3151A07                     | THRUBOLT STUD 1/2-13 X 20.000            | 4.000 EA        |
| LB1119N                       | WARNING LABEL                            | 1.000 EA        |
| LC0181                        | CONNECTION LABEL                         | 1.000 EA        |
| NP2138L                       | ALUM SUPER-E UL CSA-EEV PREM CC (300     | 1.000 EA        |
| 40PA1000                      | PACKAGING GROUP                          | 1.000 EA        |

| <b>Accessories</b> |                    |                   |
|--------------------|--------------------|-------------------|
| <b>Part Number</b> | <b>Description</b> | <b>Multiplier</b> |
| 42-1400            | C FACE KIT         | A8                |

**AC Induction Motor Performance Data**

Record # 33387 - Typical performance - not guaranteed values

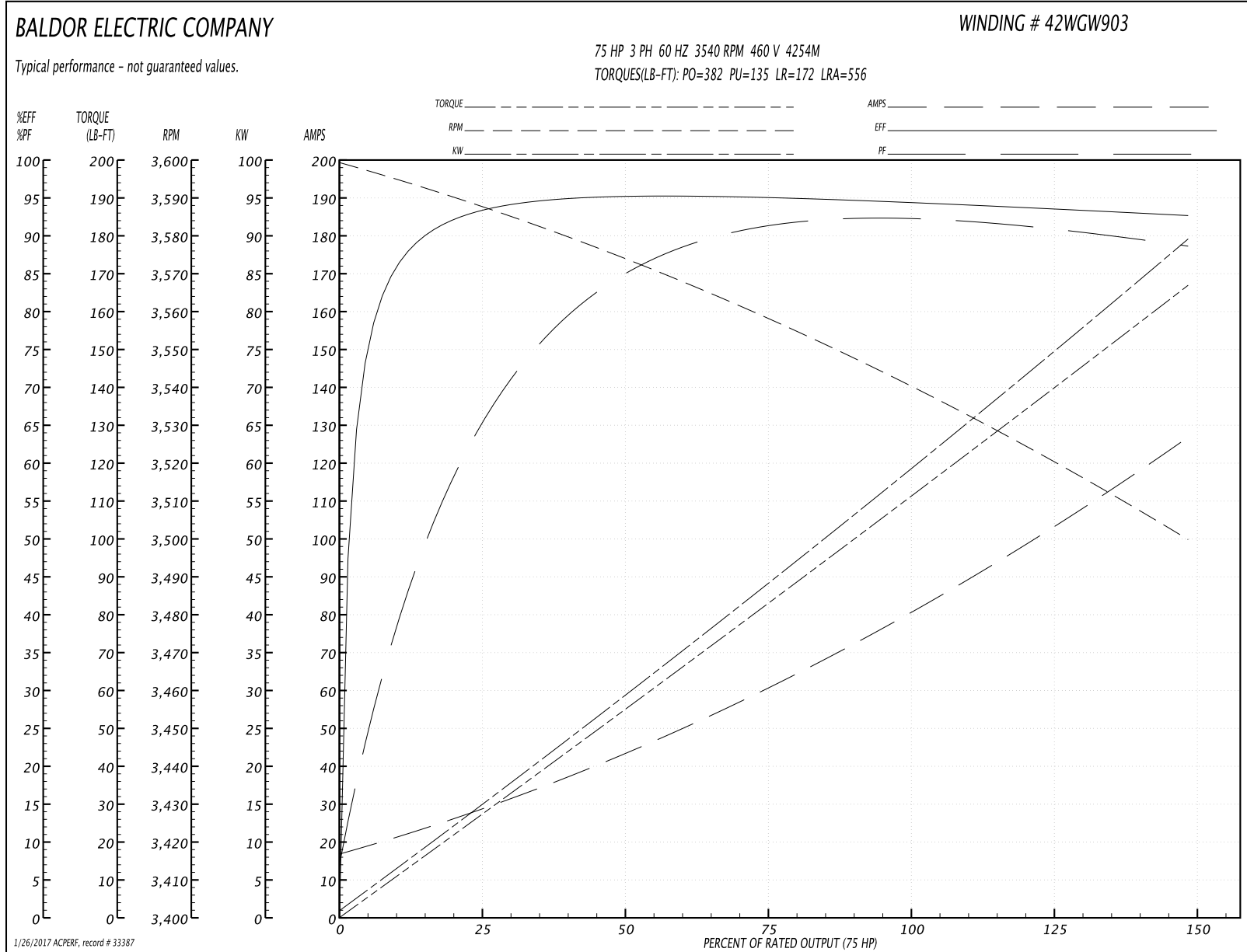
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 42WGW903-R001 | <b>Type:</b> 4254M | <b>Enclosure:</b> OPSB |
|-------------------------------|--------------------|------------------------|

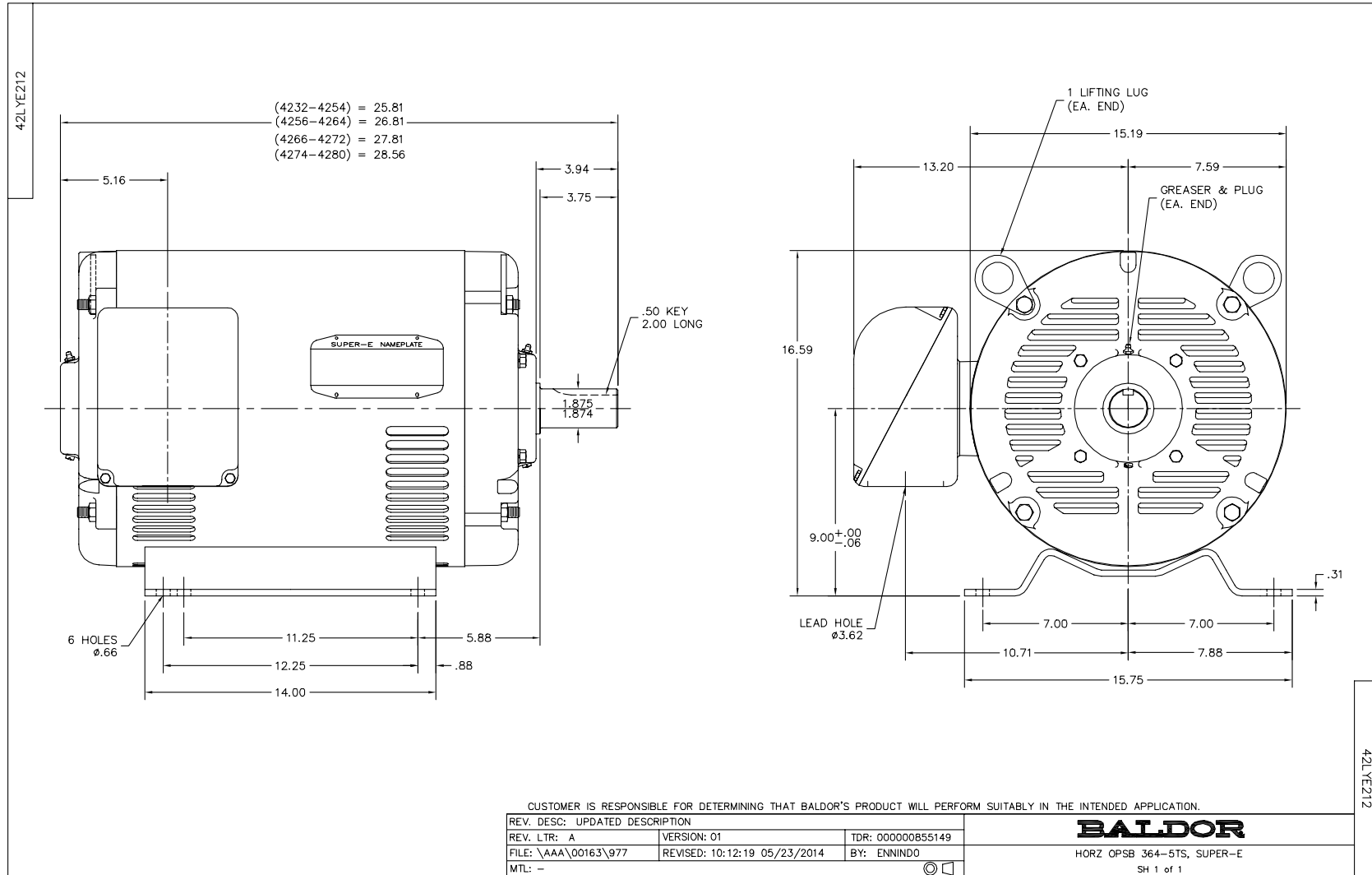
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                         |
|-----------------------|--------------|--------------|----|--|-------------------------|
| Rated Output (HP)     | 75           |              |    | Full Load Torque                         | 111 LB-FT               |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line          |
| Full Load Amps        | 164/82       |              |    | Breakdown Torque                         | 382 LB-FT               |
| R.P.M.                | 3540         |              |    | Pull-up Torque                           | 135 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 172 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | G  | Starting Current                         | 556 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 18.5 A                  |
| NEMA Nom. Eff.        | 93.6         | Power Factor | 91 | Line-line Res. @ 25°C                    | 0.0817 Ω                |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 42°C                    |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 52°C                    |
|                       |              |              |    | Locked-rotor Power Factor                | 22                      |
|                       |              |              |    | Rotor inertia                            | 4.22 LB-FT <sup>2</sup> |

Load Characteristics 460 V, 60 Hz, 75 HP

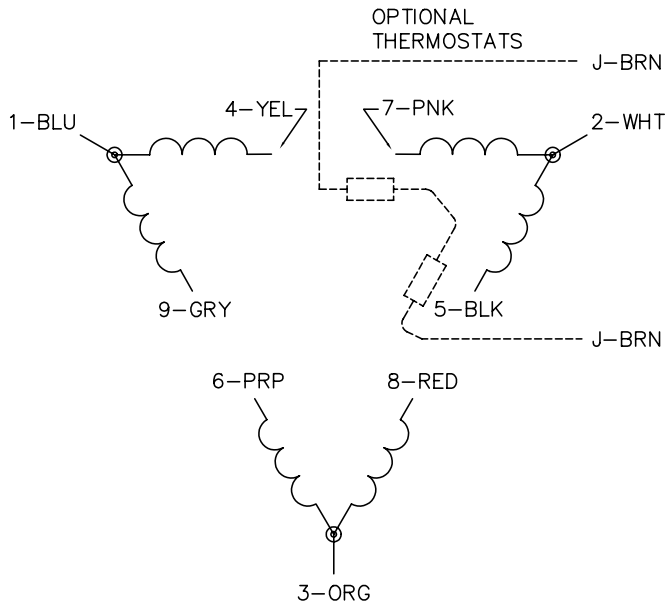
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 72   | 86   | 90   | 91   | 90   | 89   | 90   |
| Efficiency      | 93   | 95.1 | 95   | 94.3 | 93.7 | 92.6 | 94   |
| Speed           | 3588 | 3574 | 3558 | 3540 | 3521 | 3500 | 3529 |
| Line amperes    | 26.4 | 43   | 61.6 | 81.5 | 103  | 126  | 94.4 |

Performance Graph at 460V, 60Hz, 75.0HP Typical performance - Not guaranteed values

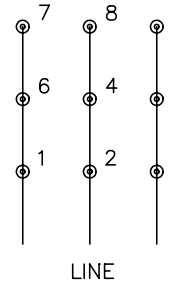




CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



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: C                               | BY: JLP | REVISED: 01/21/99 2:28 | TDR: 0171435 |
| 0810D0                                    |         | FILE: AAA00005148      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180