

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **EHF2543T**

**50HP,1775RPM,3PH,60HZ,326T,4256M,OPSB,F2**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | R    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 4256M | Elec. Spec: | 42WGW387 | CD Diagram:   | CD0180     |
| Enclosure:  | OPSB | Mfg Plant:     |       | Mech. Spec: | 42E133   | Layout:       | 42LYE133   |
| Frame:      | 326T | Mounting:      | F2    | Poles:      | 04       | Created Date: | 06-16-2006 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 04-06-2016 |
| Leads:      | 9#8  |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

|                               |              |  |      |                |   |      |      |   |      |  |
|-------------------------------|--------------|--|------|----------------|---|------|------|---|------|--|
| <b>Nameplate NP2094E06B03</b> |              |  |      |                |   |      |      |   |      |  |
| CAT.NO.                       | EHFM2543T    |  |      |                |   |      |      |   |      |  |
| SPEC.                         | 42E133W387G1 |  |      |                |   |      |      |   |      |  |
| HP                            | 50           |  |      |                |   |      |      |   |      |  |
| VOLTS                         | 230/460      |  |      |                |   |      |      |   |      |  |
| AMPS                          | 114/57       |  |      |                |   |      |      |   |      |  |
| RPM                           | 1775         |  |      |                |   |      |      |   |      |  |
| FRAME                         | 326T         |  |      | HZ             |   |      | 60   |   | PH 3 |  |
| SER.F.                        | 1.15         |  | CODE |                | G | DES  |      | A | CL F |  |
| NEMA-NOM-EFF                  | 94.5         |  |      | PF             |   | 87   |      |   |      |  |
| RATING                        | 40C AMB-CONT |  |      |                |   |      |      |   |      |  |
| CC                            | 010A         |  |      | USABLE AT 208V |   |      | 121  |   |      |  |
| DE                            | 6312         |  |      | ODE            |   | 6311 |      |   |      |  |
| AUTO                          |              |  |      | MANUAL         |   |      | NONE |   |      |  |
| ENCL                          | OPSB         |  |      | SN             |   |      |      |   |      |  |
| BLANK                         |              |  |      |                |   |      |      |   |      |  |

| Parts List     |  |          |
|----------------|--|----------|
| Part Number    | Description                              | Quantity |
| SA144128       | SA 42E133W387G1                          | 1.000 EA |
| RA133339       | RA 42E133W387G1                          | 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 |
| 42CB4000A01    | CONDUIT BOX 40, STAMPED                  | 1.000 EA |
| 19XW2520A08    | SCREW,1/4-20X1/2 TAPTITE-II OR ROLOC 91  | 2.000 EA |
| HW1001A25      | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| WD1000B16      | T&B CX70TN TERMINAL                      | 1.000 EA |
| 42EP3200A01    | FR ENDPLATE, MACH 324-6T                 | 1.000 EA |
| HW5100A13      | W4627-047 WVY WSHER                      | 1.000 EA |
| 42EP3200B13    | PUEP, MACH FOR 1/2 SH GND MTG            | 1.000 EA |
| XY5013A12      | NUT,1/2-13,HEX,STEEL,ZINCPLATED          | 8.000 EA |
| 42CB4500A01    | CONDUIT BOX LID 42, STAMPED, W/ PRIMER   | 1.000 EA |
| 51XF2520A08    | SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L | 2.000 EA |
| HW2501H33      | KEY, 1/2 SQ X 3.875                      | 1.000 EA |
| 84XN0540J08    | 5-40 X 1/2" SHCS, BLACK OXIDE            | 2.000 EA |
| MN416A01       | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |
| HW4500A20      | 1/8NPT SL PIPE PLUG                      | 2.000 EA |
| MJ1000A02      | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.030 LB |
| HW4500A20      | 1/8NPT SL PIPE PLUG                      | 2.000 EA |
| MG1000G27      | MED CHARCOAL METALLIC GREY 400-0096      | 0.080 GA |
| HA3151A03      | THRUBOLT STUD 1/2-13 X 20.5              | 4.000 EA |
| 42AD2001A01    | BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS  | 1.000 EA |
| 42AD2001A01    | BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS  | 1.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                     | <b>Quantity</b> |
| LC0181                        | CONNECTION LABEL                       | 1.000 EA        |
| NP2094E06B03                  | NP LABEL W/BARCODE (PREM EFF HVAC MTR) | 1.000 EA        |
| 40PA1000                      | PACKAGING GROUP                        | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 53755 - Typical performance - not guaranteed values

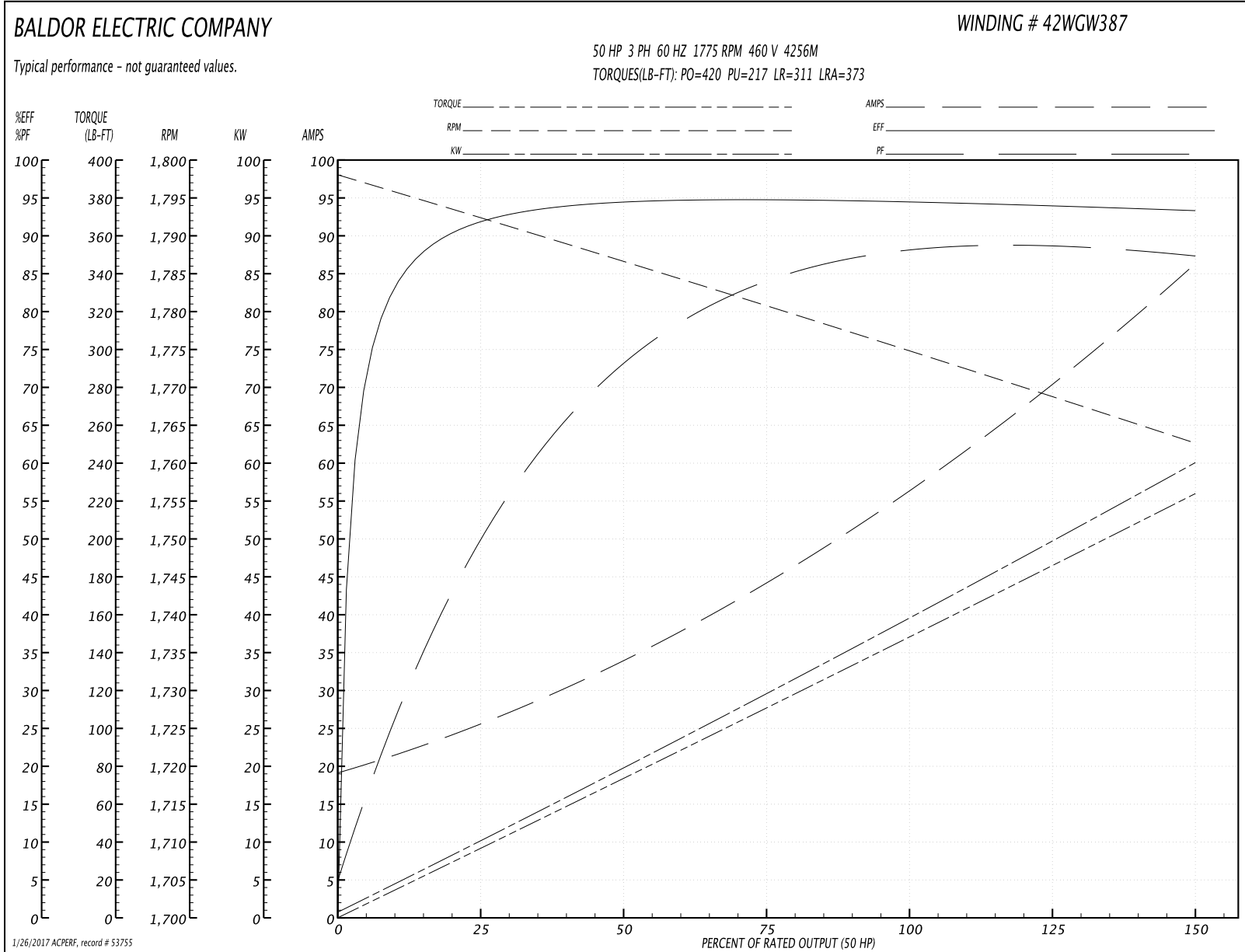
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 42WGW387-R001 | <b>Type:</b> 4256M | <b>Enclosure:</b> OPSB |
|-------------------------------|--------------------|------------------------|

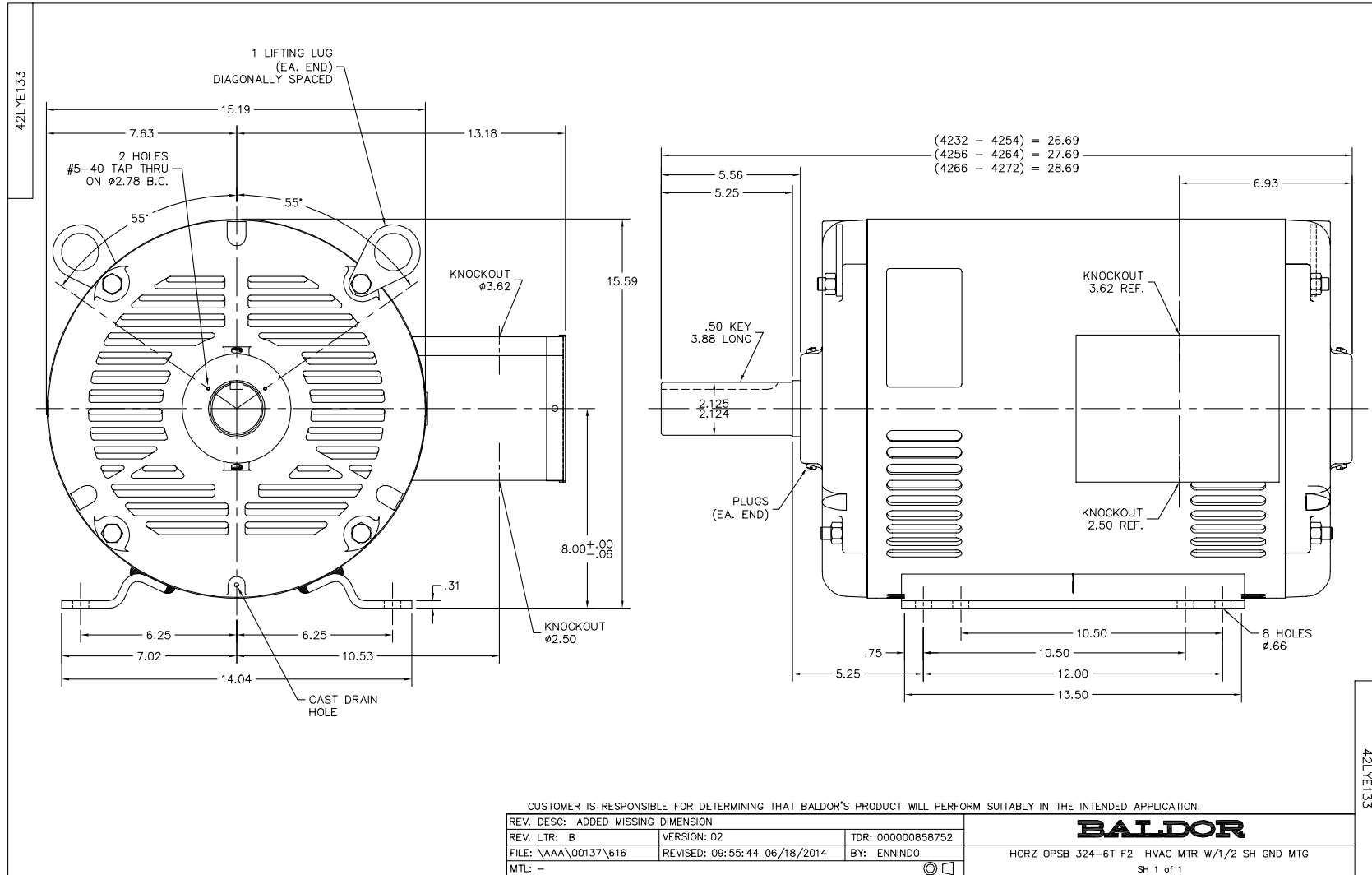
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                |
|-----------------------|--------------|--------------|----|--|----------------|
| Rated Output (HP)     | 50           |              |    | Full Load Torque                         | 149 LB-FT      |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line |
| Full Load Amps        | 114/57       |              |    | Breakdown Torque                         | 420 LB-FT      |
| R.P.M.                | 1775         |              |    | Pull-up Torque                           | 217 LB-FT      |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 311 LB-FT      |
| NEMA Design Code      | B            | KVA Code     | G  | Starting Current                         | 373 A          |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 20.2 A         |
| NEMA Nom. Eff.        | 94.5         | Power Factor | 87 | Line-line Res. @ 25°C                    | 0.12266 Ω      |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 39°C           |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 47°C           |

Load Characteristics 460 V, 60 Hz, 50 HP

| % of Rated Load | 25   | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|------|--------|--------|--------|--------|--------|------|
| Power Factor    | 54   | 75     | 83     | 87     | 88     | 88     | 88   |
| Efficiency      | 92   | 94.5   | 94.9   | 94.7   | 94.2   | 93.4   | 94.4 |
| Speed           | 1791 | 1786.1 | 1781.1 | 1775.2 | 1769.2 | 1762.1 | 1772 |
| Line amperes    | 24.4 | 33.4   | 44.7   | 57.4   | 71     | 85.6   | 65.6 |

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values





CD0180

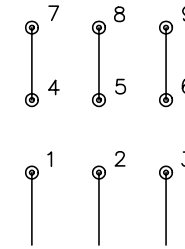


LOW VOLTAGE  
(2D)



LINE

HIGH VOLTAGE  
(1D)



LINE

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