

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM3710T-5**

**7.5HP,1770RPM,3PH,60HZ,213T,3736M,TEFC,F**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | D    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 3736M | Elec. Spec: | 37WGT929 | CD Diagram:   | CD0006     |
| Enclosure:  | TEFC | Mfg Plant:     |       | Mech. Spec: | 37H244   | Layout:       | 37LYH244   |
| Frame:      | 213T | Mounting:      | F1    | Poles:      | 04       | Created Date: | 03-19-2009 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 02-05-2013 |
| Leads:      | 3#14 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |

|                   |              |                |  |  |      |     |  |   |      |
|-------------------|--------------|----------------|--|--|------|-----|--|---|------|
| Nameplate NP1259L |              |                |  |  |      |     |  |   |      |
| CAT.NO.           | EM3710T-5    |                |  |  |      |     |  |   |      |
| SPEC.             | 37H244T929   |                |  |  |      |     |  |   |      |
| HP                | 7.5          |                |  |  |      |     |  |   |      |
| VOLTS             | 575          |                |  |  |      |     |  |   |      |
| AMP               | 7.6          |                |  |  |      |     |  |   |      |
| RPM               | 1770         |                |  |  |      |     |  |   |      |
| FRAME             | 213T         | HZ             |  |  | 60   | PH  |  | 3 |      |
| SER.F.            | 1.15         | CODE           |  |  | J    | DES |  | A | CL F |
| NEMA-NOM-EFF      | 91.7         | PF             |  |  | 81   |     |  |   |      |
| RATING            | 40C AMB-CONT |                |  |  |      |     |  |   |      |
| CC                | 010A         | USABLE AT 208V |  |  |      |     |  |   |      |
| DE                | 6307         | ODE            |  |  | 6206 |     |  |   |      |
| ENCL              | TEFC         | SN             |  |  |      |     |  |   |      |
|                   |              |                |  |  |      |     |  |   |      |

| Parts List     |                                          |          |
|----------------|------------------------------------------|----------|
| Part Number    | Description                              | Quantity |
| SA180629       | SA 37H244T929                            | 1.000 EA |
| RA168585       | RA 37H244T929                            | 1.000 EA |
| 37FN3002C01    | EXFN, PLASTIC, 6.00 OD, 1.155 ID         | 1.000 EA |
| S/P107-000-001 | SUPER E PROC'S-FS, WS & CK PLTS          | 1.000 EA |
| HW3200A01      | 3/8-16X3/4 I-BLT WELDED F/S              | 1.000 EA |
| 37CB3006       | 37 CB CASTING W/1.38 LEAD HOLE @ 6:00    | 1.000 EA |
| 37GS1000SP     | GASKET, CONDUIT BOX STD., .06 THICK LEXI | 1.000 EA |
| 51XW2520A12    | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| 11XW1032G06    | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 37EP3101A01SP  | FR ENDPLATE,TEFC, 37 L&M, W/GREASER      | 1.000 EA |
| HW4500A01      | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A06      | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 37EP3100A01SP  | STD PU ENDPLATE, ENCL,37 "T"-307 BRG, W/ | 1.000 EA |
| HW4500A01      | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| XY3118A12      | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 07FH4007SP     | IEC FH W/GRSR, NOTCH @ 6:00 & 3 FAN CVR  | 1.000 EA |
| 51XW1032A06    | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 37CB4516       | LIPPED LID FOR 37 FRAME NEC KOBX         | 1.000 EA |
| 37GS1008SP     | 37 GS FOR CB LID - LEXIDE                | 1.000 EA |
| 51XW0832A07    | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501F21      | KEY, 5/16 SQ X 2.375                     | 1.000 EA |
| HA7000A02      | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 EA |
| 85XU0407S04    | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| LB1115N        | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| MJ1000A75              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| 51XB1214A20            | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.028 GA |
| HA3104A17              | 5/16-18X13.250 T-BLT/OHIO                | 4.000 EA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| LB1125C02              | SUPER-E (STOCK CTN LABEL SUPER-E WITH FL | 1.000 EA |
| LC0006                 | CONNECTION LABEL                         | 1.000 EA |
| NP1259L                | ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM  | 1.000 EA |
| 36PA1001               | PACKAGING GROUP                          | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 10/13 | 1.000 EA |

| Accessories |             |            |
|-------------|-------------|------------|
| Part Number | Description | Multiplier |
| 37-3301     | C FACE KIT  | P1         |

**AC Induction Motor Performance Data**

Record # 28591 - Typical performance - not guaranteed values

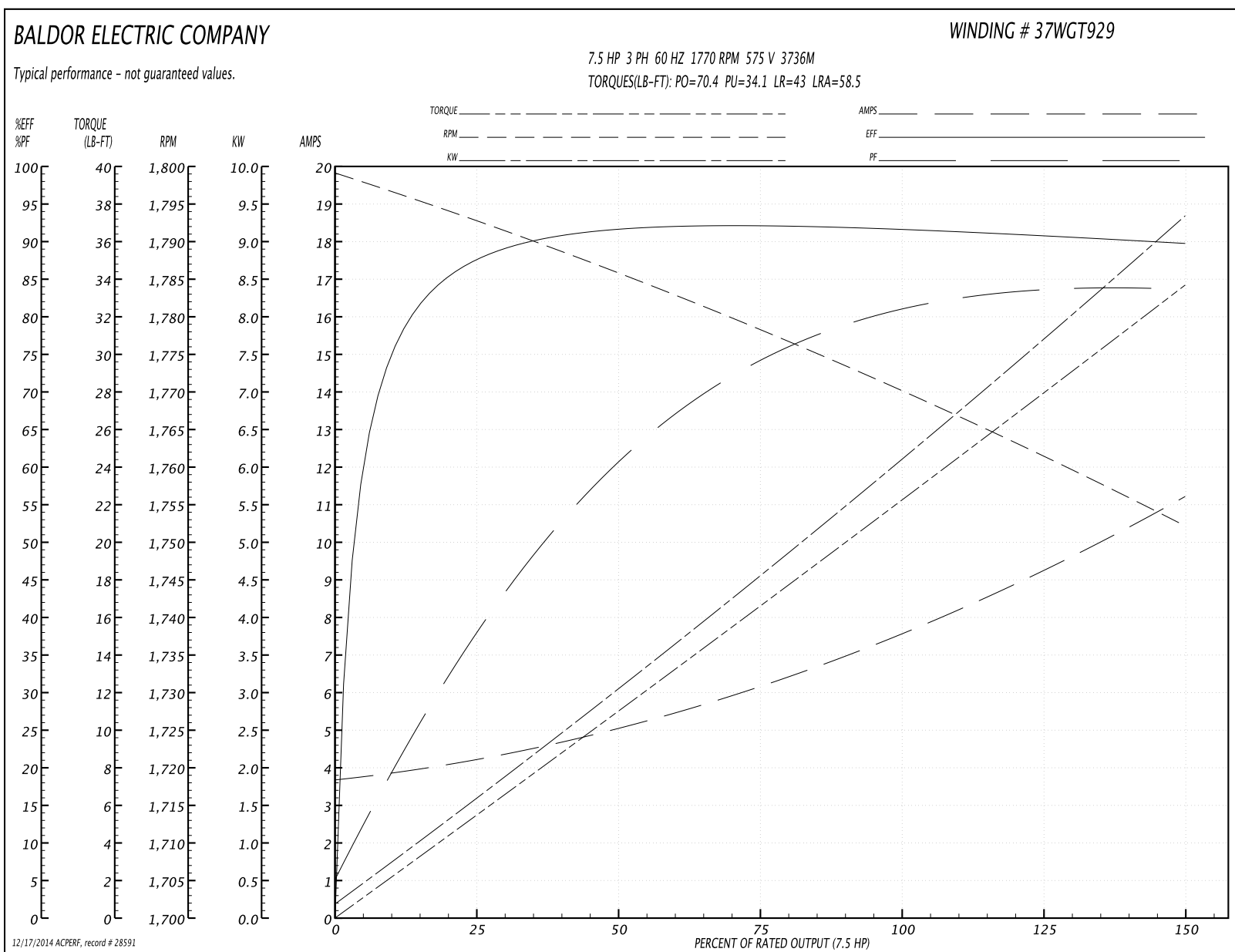
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 37WGT929-R001 | <b>Type:</b> 3736M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

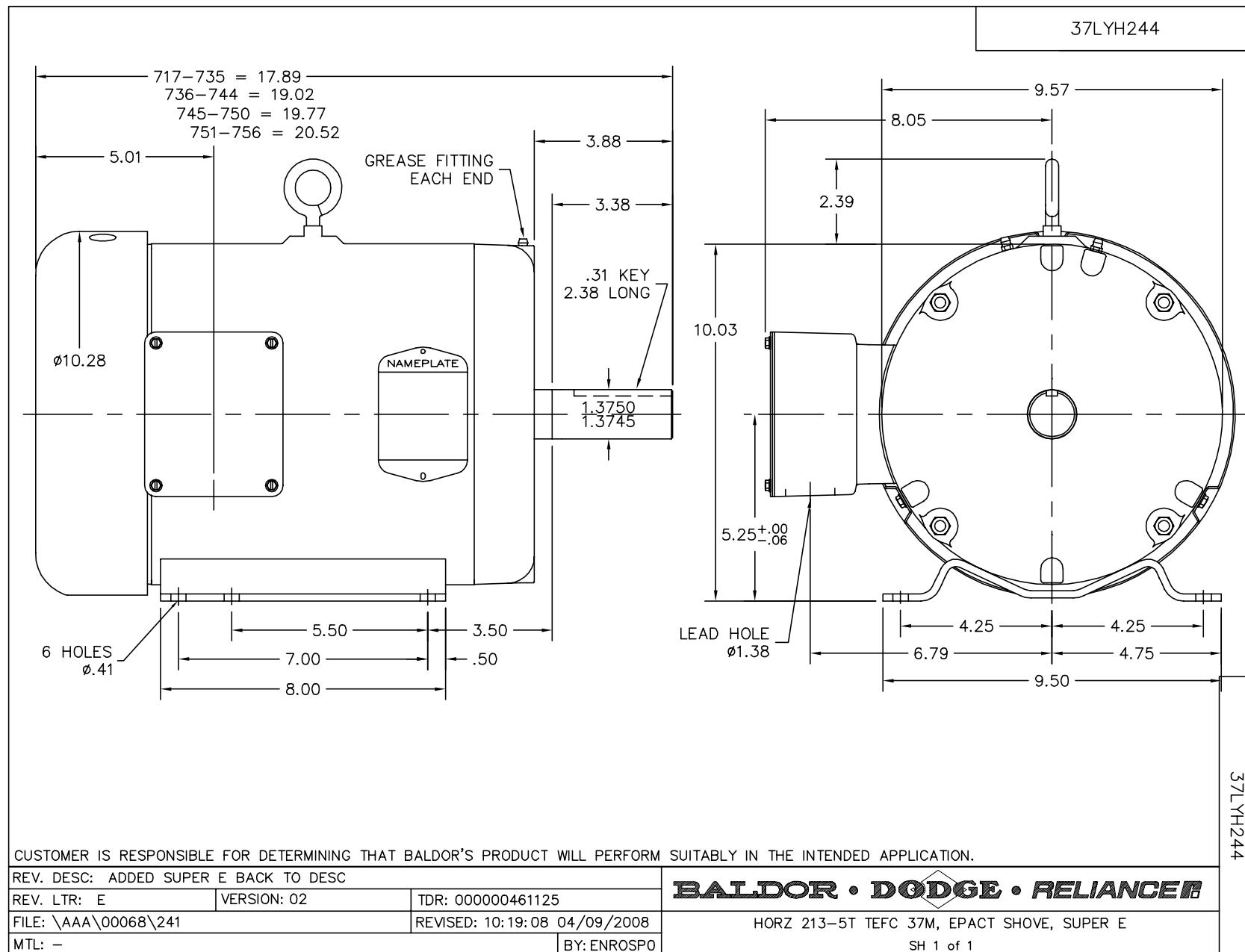
| Nameplate Data        |              |              |    | 575 V, 60 Hz:<br>Single Voltage Motor |                       |
|-----------------------|--------------|--------------|----|---------------------------------------|-----------------------|
| Rated Output (HP)     | 7.5          |              |    | Full Load Torque                      | 22.2 LB-FT            |
| Volts                 | 575          |              |    | Start Configuration                   | direct on line        |
| Full Load Amps        | 7.6          |              |    | Breakdown Torque                      | 70.4 LB-FT            |
| R.P.M.                | 1770         |              |    | Pull-up Torque                        | 34.1 LB-FT            |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                   | 43 LB-FT              |
| NEMA Design Code      | A            | KVA Code     | J  | Starting Current                      | 58.5 A                |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                       | 3.7 A                 |
| NEMA Nom. Eff.        | 91.7         | Power Factor | 81 | Line-line Res. @ 25°C                 | 2.2 Ω                 |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load               | 54°C                  |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                | 66°C                  |
|                       |              |              |    | Rotor inertia                         | 0.885 LF <sup>2</sup> |

**Load Characteristics 575 V, 60 Hz, 7.5 HP**

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 38   | 61   | 74   | 81   | 83   | 84   | 82   |
| Efficiency      | 87.5 | 91.1 | 92.3 | 91.7 | 90.9 | 89.7 | 91.2 |
| Speed           | 1793 | 1786 | 1778 | 1770 | 1762 | 1752 | 1765 |
| Line amperes    | 4.2  | 5.01 | 6.17 | 7.58 | 9.25 | 11.2 | 8.58 |

## Performance Graph at 575V, 60Hz, 7.5HP Typical performance - Not guaranteed values





CD0006



## NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: D

BY: JLP

REVISED: 01/21/99 4:02

TDR: 0171435

9000D

FILE: AAA00005141

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006