

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **CEM3771T**

**10HP,3490RPM,3PH,60HZ,215TC,0729M,TEFC,F**

| Part Detail |       |                |       |             |          |               |            |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | J     | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | 0730M | Elec. Spec: | 07WGY855 | CD Diagram:   | CD0005     |
| Enclosure:  | TEFC  | Mfg Plant:     |       | Mech. Spec: | 07H058   | Layout:       | 07LYH058   |
| Frame:      | 215TC | Mounting:      | F1    | Poles:      | 02       | Created Date: | 01-27-2012 |
| Base:       | RG    | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 04-18-2016 |
| Leads:      | 9#14  |                |       |             |          | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |       |             |          |               |            |

## Nameplate NP3441LUA

|              |              |  |      |                |     |     |      |   |    |    |   |   |
|--------------|--------------|--|------|----------------|-----|-----|------|---|----|----|---|---|
| CAT.NO.      | CEM3771T     |  |      |                |     |     |      |   |    |    |   |   |
| SPEC.        | 07H058Y855G1 |  |      |                |     |     |      |   |    |    |   |   |
| HP           | 10           |  |      |                |     |     |      |   |    |    |   |   |
| VOLTS        | 230/460      |  |      |                |     |     |      |   |    |    |   |   |
| AMP          | 23.6/11.8    |  |      |                |     |     |      |   |    |    |   |   |
| RPM          | 3490         |  |      |                |     |     |      |   |    |    |   |   |
| FRAME        | 215TC        |  |      |                | HZ  |     | 60   |   |    | PH |   | 3 |
| SER.F.       | 1.15         |  | CODE |                | G   | DES |      | B | CL |    | F |   |
| NEMA-NOM-EFF | 90.2         |  |      | PF             |     | 87  |      |   |    |    |   |   |
| RATING       | 40C AMB-CONT |  |      |                |     |     |      |   |    |    |   |   |
| CC           | 010A         |  |      | USABLE AT 208V |     |     |      |   |    |    |   |   |
| DE           | 6307         |  |      |                | ODE |     | 6206 |   |    |    |   |   |
| ENCL         | TEFC         |  | SN   |                |     |     |      |   |    |    |   |   |

 VPWM INVERTER READY  
 CT6-60H(10:1)VT3-60H(20:1)

50Hz 10HP 190/380V 27.8/13.9A

SF1.0

| Parts List  |                                          |          |
|-------------|------------------------------------------|----------|
| Part Number | Description                              | Quantity |
| SA238142    | SA 07H058Y855G1                          | 1.000 EA |
| RA225069    | RA 07H058Y855G1                          | 1.000 EA |
| 36FN3000C02 | EXFN, PLASTIC, 5.25 OD, 1.175 ID         | 1.000 EA |
| HW3201A05   | 3/8-16 EYEBOLT                           | 1.000 EA |
| 09CB3002    | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 EA |
| 09GS1000    | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE    | 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 |
| HW3001B02   | BRASS CUP WASHER W/GROUND SYMBOL TAB,    | 1.000 EA |
| 37FE1100A41 | FR ENDPLATE ASSEMBLY FOR ROUTING         | 1.000 EA |
| HW4500A17   | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A06   | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 37PE1300A10 | PUEP ASSEMBLY FOR ROUTING                | 1.000 EA |
| HW4500A17   | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 10XN2520A30 | HEX HD CAP SCREW-STD THD-.25 X 20 THD PE | 4.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| XY3118A12   | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| 07FH4007    | PRIMED                                   | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 09CB3501    | CONDUIT BOX LID FOR 09CB3001 & 09CB3002  | 1.000 EA |
| 09GS1013    | 09 GS FOR 09CB3501 LID - LEXIDE          | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| 51XW2520A12            | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 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 |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| HA3104A32              | THRUBOLT- 5/16-18 X12.750                | 4.000 EA |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.036 GA |
| LC0005E01              | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3441LUA              | ALUM SUPER-E VPWM INV READY UL           | 1.000 EA |
| 07PA1011               | PKG GRP, 07 CAST IRON PK1181             | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |

## AC Induction Motor Performance Data

Record # 36753 - Typical performance - not guaranteed values

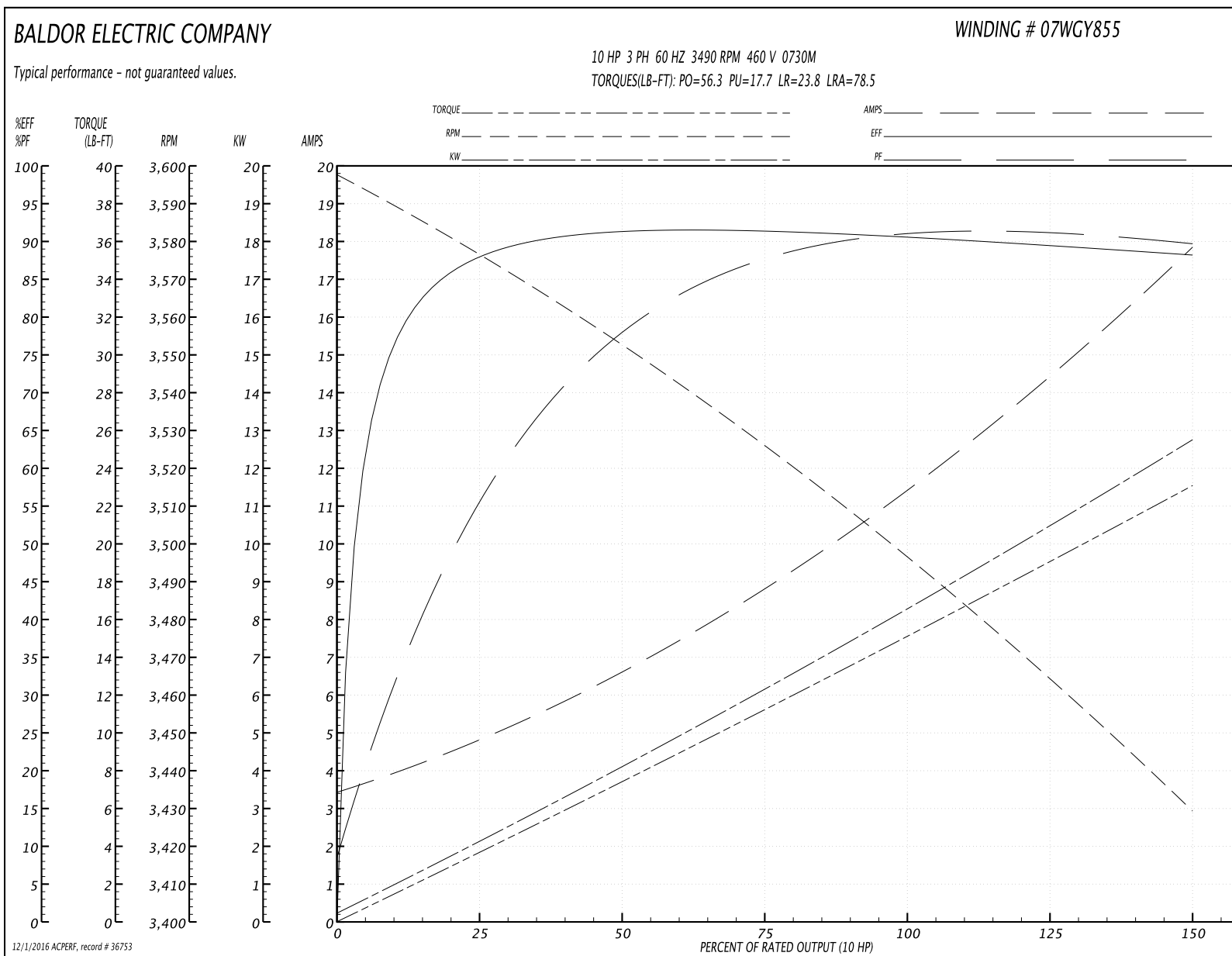
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 07WGY855-R001 | <b>Type:</b> 0730M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

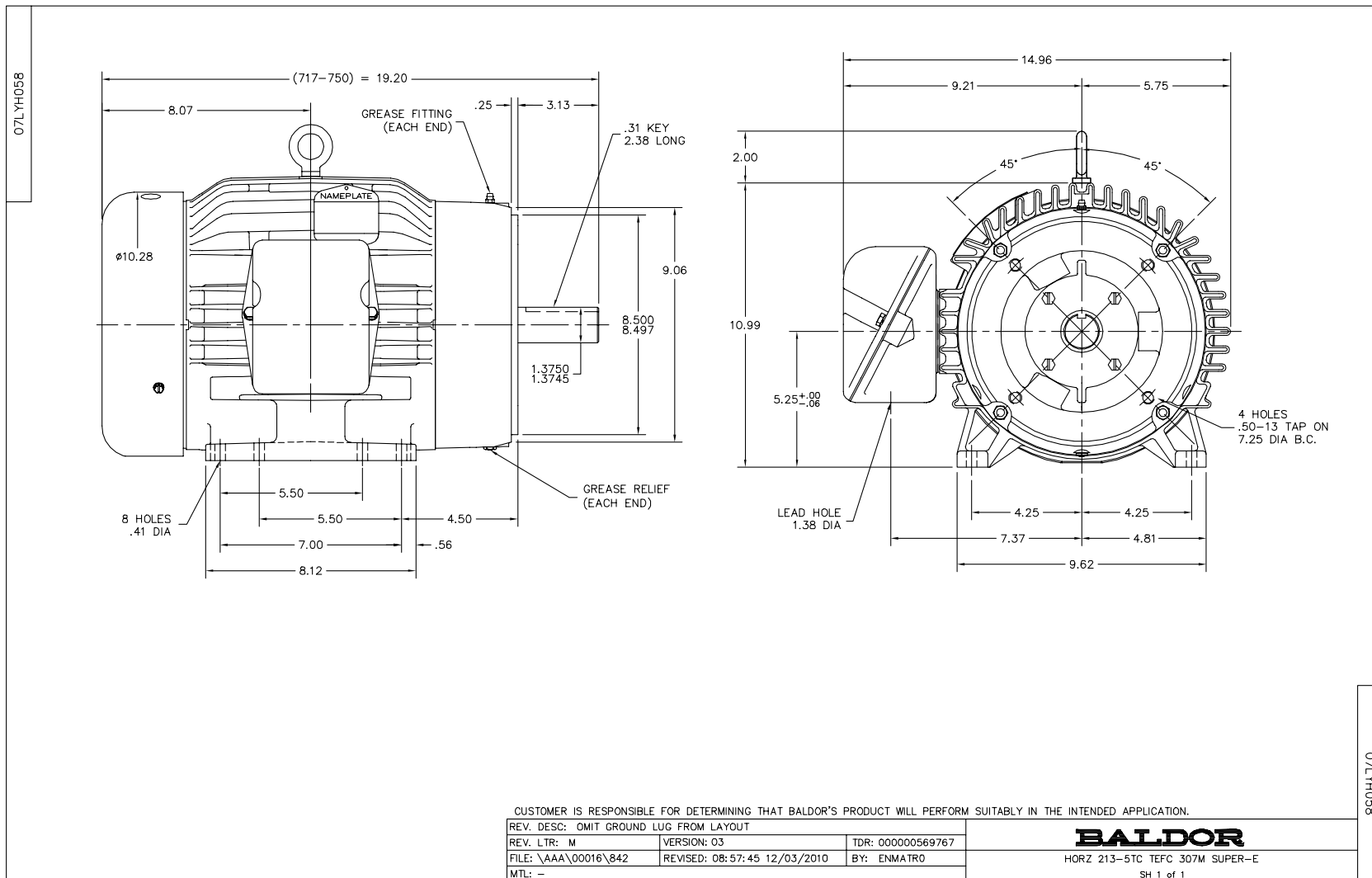
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|------------------------------------------|--------------------------|
| Rated Output (HP)     | 10           |              |    | Full Load Torque                         | 15.1 LB-FT               |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 23.6/11.8    |              |    | Breakdown Torque                         | 56.3 LB-FT               |
| R.P.M.                | 3490         |              |    | Pull-up Torque                           | 17.7 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 23.8 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | G  | Starting Current                         | 78.5 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 3.65 A                   |
| NEMA Nom. Eff.        | 90.2         | Power Factor | 87 | Line-line Res. @ 25°C                    | 1.05 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 63°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 79°C                     |
|                       |              |              |    | Locked-rotor Power Factor                | 33.7                     |
|                       |              |              |    | Rotor inertia                            | 0.273 LB-FT <sup>2</sup> |

## Load Characteristics 460 V, 60 Hz, 10 HP

|                 |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
| Power Factor    | 60   | 80   | 87   | 90   | 90   | 90   | 90   |
| Efficiency      | 88.1 | 91.5 | 91.3 | 90.5 | 89.6 | 88.2 | 90   |
| Speed           | 3576 | 3551 | 3525 | 3497 | 3465 | 3429 | 3477 |
| Line amperes    | 4.55 | 6.56 | 8.97 | 11.6 | 14.5 | 17.7 | 13.4 |

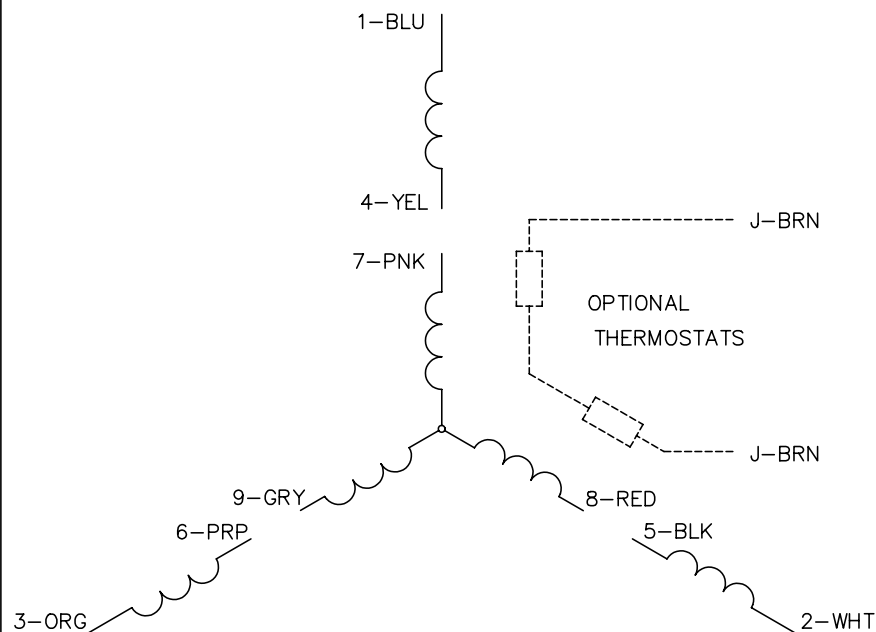
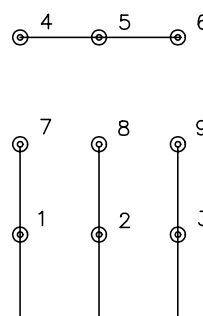
## Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values



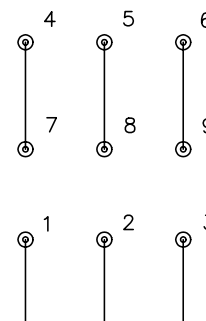




CD0005

LOW VOLTAGE  
(2Y)

LINE

HIGH VOLTAGE  
(1Y)

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: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005