

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **CTM2334T**

**20HP,1760RPM,3PH,60HZ,256T,0760M,TEAO,F1**

| Part Detail |      |                |       |             |          |               |            |
|-------------|------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | B    | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | 0760M | Elec. Spec: | 07WGX826 | CD Diagram:   | CD0005     |
| Enclosure:  | TEAO | Mfg Plant:     |       | Mech. Spec: | 07N395   | Layout:       | 07LYN395   |
| Frame:      | 256T | Mounting:      | F1    | Poles:      | 04       | Created Date: | 08-14-2015 |
| Base:       | RG   | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 01-12-2016 |
| Leads:      | 9#10 |                |       |             |          | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |       |             |          |               |            |



| Parts List   |   |          |
|--------------|---|----------|
| Part Number  | Description                               | Quantity |
| SA305967     | SA 07N395X826H1                           | 1.000 EA |
| RA293200     | RA 07N395X826H1                           | 1.000 EA |
| HW3201A01    | 1/2-13 EYEBOLT                            | 1.000 EA |
| HA7205       | "L" SHAPE LIFTING LUG FOR 37,39 & 40 FRA  | 2.000 EA |
| 09CB1002A26G | KOBX W/1.00 NPT LD HL .25-20 TAP FOR LID  | 1.000 EA |
| RM1017       | LEAD SEPERATOR GASKET MODEL 307 1/8" THK  | 1.000 EA |
| 51XW2520A12  | .25-20 X .75, TAPTITE II, HEX WSHR SLTD   | 2.000 EA |
| HA4044A00    | PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD     | 2.000 EA |
| 10XN2520S06  | 1/4 20X3/8 HX HD CAP S.S.                 | 2.000 EA |
| WD1000B16    | T&B CX70TN TERMINAL                       | 2.000 EA |
| 11XW1032G06  | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U  | 1.000 EA |
| HW3001B01    | BRASS CUP WASHER, FOR #8 SCREW            | 1.000 EA |
| 37EP1100C42G | 35 EP FR TENV 206 BRG NO GR SR .125 NPT(E | 1.000 EA |
| HA4054       | SHORT T-DRAIN FITTING, .125" N.P.T.       | 1.000 EA |
| HA4044A00    | PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD     | 2.000 EA |
| HW5100A06    | W2420-025 WVY WSHR (WB)                   | 1.000 EA |
| 07EP1116A59G | PUEP, 309 LOCK BRG, (3).125 NPT(GRAY)     | 1.000 EA |
| HW4600A27    | SEAL 1.750 X 2.441 X 0.313 SINGLE LIP     | 1.000 EA |
| HA4054       | SHORT T-DRAIN FITTING, .125" N.P.T.       | 1.000 EA |
| HA4044A00    | PLUG,PIPE 1/8 NPT PLASTIC SQUARE HEAD     | 2.000 EA |
| 10XN2520A32  | 1/4 X 2 HEX HEAD CAP SCR, GRADE 2         | 4.000 EA |
| XY3118A12    | 5/16-18 HEX NUT DIRECTIONAL SERRATION     | 4.000 EA |
| 12CB1503A01G | CONDUIT BOX LID, MACH, WITH LIP, GREY     | 1.000 EA |
| 12GS1002     | GASKET, CONDUIT BOX LID, NEOP             | 1.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| 10XN2520A12                   | O1/4-20X 3/4 HEX HEAD CAP                | 2.000 EA        |
| HW1001A25                     | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA        |
| HW2501G25                     | KEY, 3/8 SQ X 2.875                      | 1.000 EA        |
| HA7000A03                     | KEY RETAINER RING 1.62 & 1.88 DIA. SH    | 1.000 EA        |
| HW4600B67                     | V-RING SLINGER 1.770 X 2.170 X .28 VITON | 1.000 EA        |
| HW4600G53                     | DOME SLINGER, 5.438 OD X 1.620/1.562 ID  | 1.000 EA        |
| MJ5001A27                     | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL  | 0.001 QT        |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA        |
| LB1115N                       | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA        |
| LB1182                        | WARNING LABEL FOR MOTORS WITH EYENUTS    | 1.000 EA        |
| MJ1000A02                     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB        |
| MG1025G29                     | WILKOFASST, 789.229, DARK CHARCOAL GRAY  | 0.036 GA        |
| HA3104A42                     | THRUBOLT, .31-18 X 16.375                | 4.000 EA        |
| LC0005E01                     | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA        |
| NP1258E                       | SS CP UL CSA CC                          | 1.000 EA        |
| 07PA1011                      | PKG GRP, 07 CAST IRON PK1181             | 1.000 EA        |
| 10XL3808A28                   | 3/8 X 1 3/4" LAG SCREW                   | 2.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA        |
| LB1417                        | LABEL CARTON 6X4 PERFORATED BLANK ROLLS  | 1.000 EA        |

| <b>Accessories</b> |                    |                   |
|--------------------|--------------------|-------------------|
| <b>Part Number</b> | <b>Description</b> | <b>Multiplier</b> |
| 37-1302            | C FACE KIT         | A8                |

**AC Induction Motor Performance Data**

Record # 21241 - Typical performance - not guaranteed values

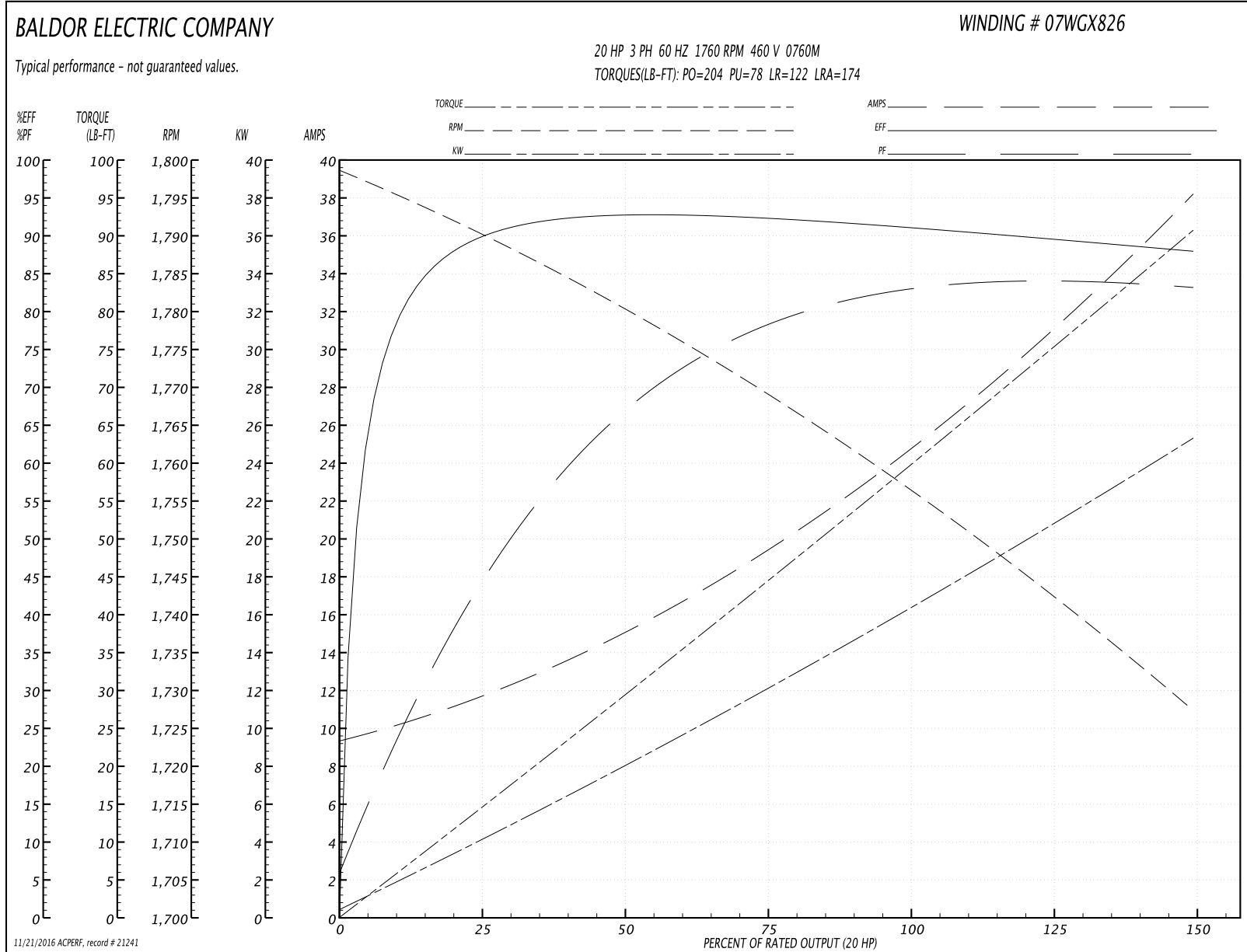
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 07WGX826-R001 | <b>Type:</b> 0760M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                         |
|-----------------------|--------------|--------------|----|--|-------------------------|
| Rated Output (HP)     | 20           |              |    | Full Load Torque                         | 59.7 LB-FT              |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line          |
| Full Load Amps        | 50/25        |              |    | Breakdown Torque                         | 204 LB-FT               |
| R.P.M.                | 1760         |              |    | Pull-up Torque                           | 78 LB-FT                |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 122 LB-FT               |
| NEMA Design Code      | A            | KVA Code     | J  | Starting Current                         | 174 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 9.68 A                  |
| NEMA Nom. Eff.        | 91           | Power Factor | 83 | Line-line Res. @ 25°C                    | 0.523 Ω                 |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 84°C                    |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 110°C                   |
|                       |              |              |    | Locked-rotor Power Factor                | 35                      |
|                       |              |              |    | Rotor inertia                            | 1.48 LB-FT <sup>2</sup> |

Load Characteristics 460 V, 60 Hz, 20 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 46   | 68   | 77   | 82   | 83   | 84   | 83   |
| Efficiency      | 89   | 92.1 | 92   | 91.1 | 89.7 | 87.8 | 90.3 |
| Speed           | 1790 | 1780 | 1769 | 1757 | 1743 | 1727 | 1749 |
| Line amperes    | 11.2 | 14.9 | 19.5 | 25   | 31.1 | 38   | 28.7 |

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 59958 - Typical performance - not guaranteed values

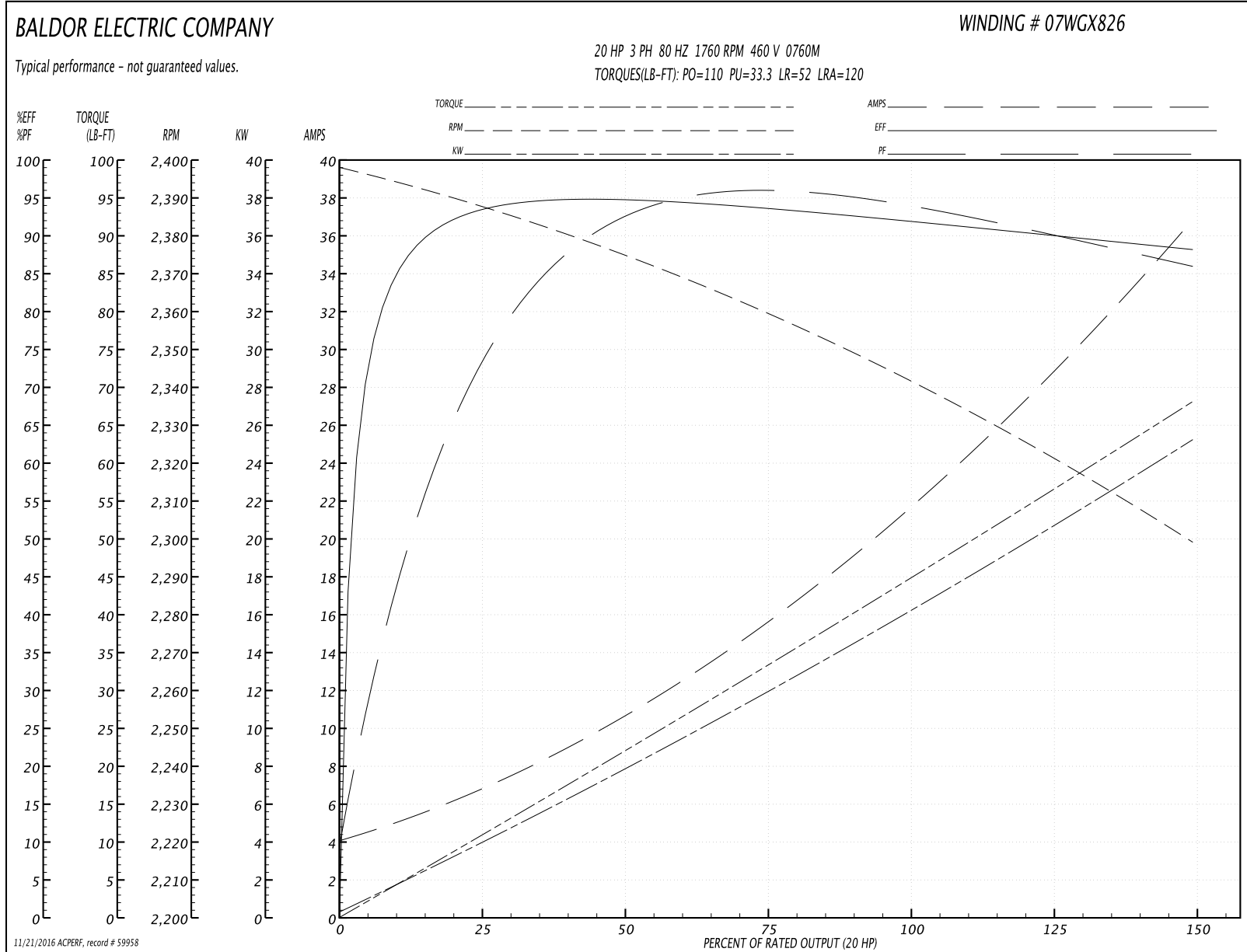
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 07WGX826-R001 | <b>Type:</b> 0760M | <b>Enclosure:</b> TEFC |
|-------------------------------|--------------------|------------------------|

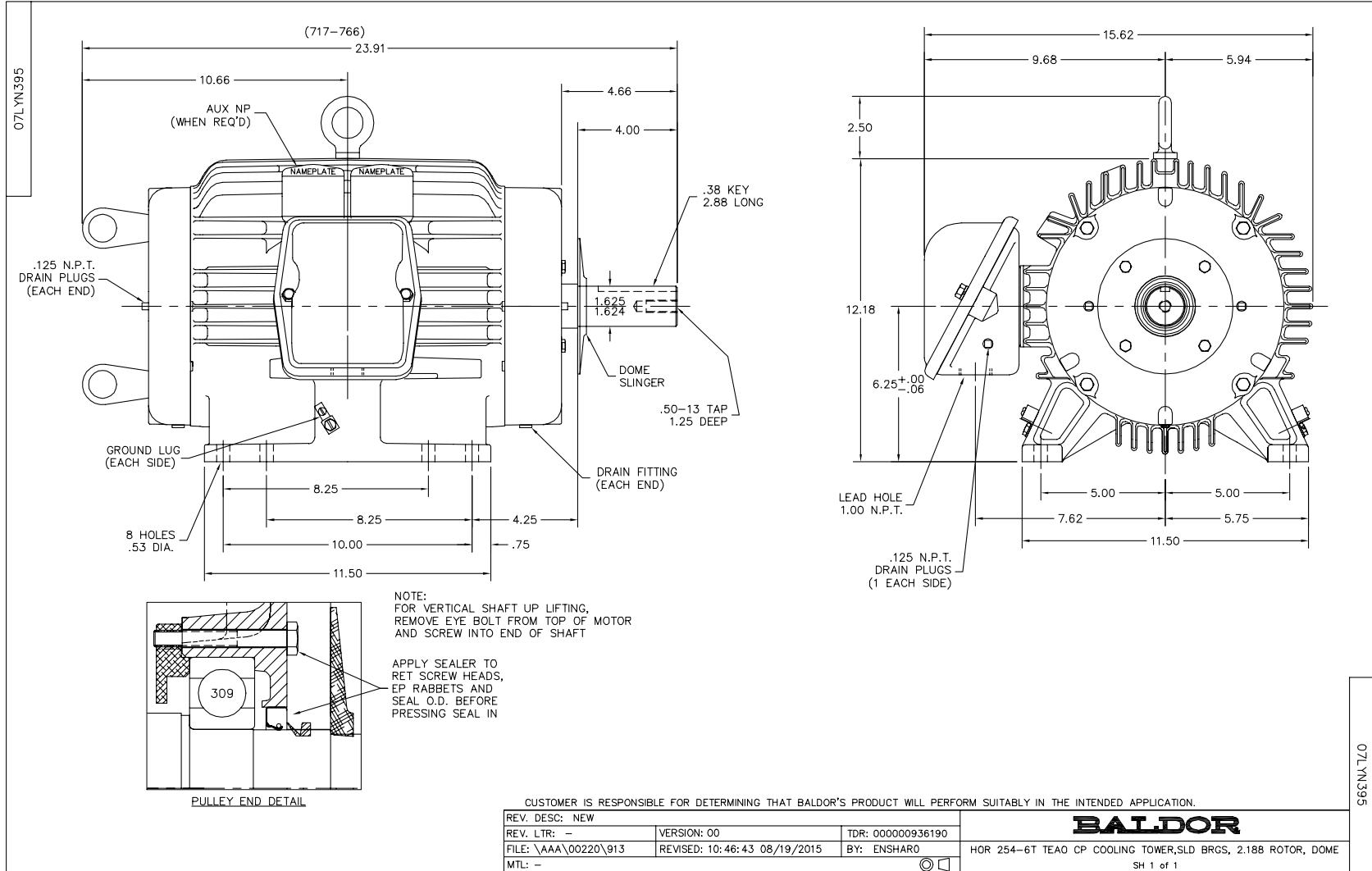
| Nameplate Data        |              |              |    | 460 V, 80 Hz:<br>High Voltage Connection |                         |
|-----------------------|--------------|--------------|----|--|-------------------------|
| Rated Output (HP)     | 20           |              |    | Full Load Torque                         | 44.8 LB-FT              |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line          |
| Full Load Amps        | 50/25        |              |    | Breakdown Torque                         | 110 LB-FT               |
| R.P.M.                | 1760         |              |    | Pull-up Torque                           | 33.3 LB-FT              |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 52 LB-FT                |
| NEMA Design Code      | A            | KVA Code     | J  | Starting Current                         | 120 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 4.42 A                  |
| NEMA Nom. Eff.        | 91           | Power Factor | 83 | Line-line Res. @ 25°C                    | 0.5 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 63°C                    |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 80°C                    |
|                       |              |              |    | Locked-rotor Power Factor                | 27.4                    |
|                       |              |              |    | Rotor inertia                            | 1.48 LB-FT <sup>2</sup> |

Load Characteristics 460 V, 80 Hz, 20 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 79   | 95   | 95   | 93   | 90   | 87   | 91   |
| Efficiency      | 92.3 | 93.9 | 93.7 | 92.3 | 90.5 | 88   | 91.2 |
| Speed           | 2387 | 2374 | 2359 | 2343 | 2323 | 2298 | 2331 |
| Line amperes    | 6.27 | 10.5 | 15.8 | 21.9 | 28.7 | 36.7 | 26   |

Performance Graph at 460V, 80Hz, 20.0HP Typical performance - Not guaranteed values

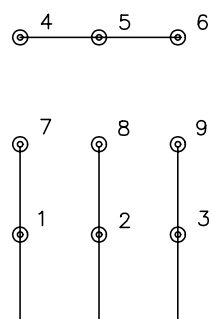




CD0005

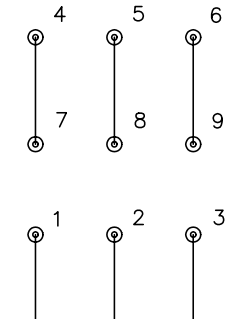


LOW VOLTAGE (2Y)



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 |
| 9000D                                     |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005