

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EJPM71170T-I**

**10//7.5HP,1765//1465RPM,3PH,60//50HZ,215**

| Part Detail |        |                |       |             |          |               |            |
|-------------|--------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | K      | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC     | Prod. Type:    | 0750M | Elec. Spec: | 07WGX598 | CD Diagram:   | CD0005     |
| Enclosure:  | XPFC   | Mfg Plant:     |       | Mech. Spec: | 07K202   | Layout:       | 07LYK202   |
| Frame:      | 215TCZ | Mounting:      | F1    | Poles:      | 04       | Created Date: | 04-02-2012 |
| Base:       | RG     | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 01-19-2017 |
| Leads:      | 9#14   |                |       |             |          | Replaced By:  |            |
| Literature: |        | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP0977XPSLEV |                    |  |        |   |              |      |              |      |     |  |
|------------------------|--------------------|--|--------|---|--------------|------|--------------|------|-----|--|
| NO.                    |                    |  |        |   |              |      | CC           | 010A |     |  |
| SER.                   |                    |  |        |   |              |      | TEMP CODE    |      | T3C |  |
| SPEC.                  | 07K202X598G3       |  |        |   |              |      |              |      |     |  |
| CAT.NO.                | EJPM71170T-I       |  |        |   |              |      |              |      |     |  |
| HP                     | 10//7.5            |  |        |   |              |      |              |      |     |  |
| VOLTS                  | 230/460//190/380   |  |        |   |              |      |              |      |     |  |
| AMPS                   | 24.6/12.3//23/11.5 |  |        |   |              |      |              |      |     |  |
| RPM                    | 1765//1465         |  |        |   |              |      | MOTOR WEIGHT | 252  |     |  |
| HERTZ                  | 60//50             |  | PH     | 3 | CL           | F    | DE BRG       | 6307 |     |  |
| SER.F.                 | 1.15               |  | DES    | A | CODE         | J    | ODE BRG      | 6206 |     |  |
| FRAME                  | 215TCZ             |  | GREASE |   | POLYREX EM   |      |              |      |     |  |
| RATING                 | 40C AMB-CONT       |  |        |   |              |      |              |      |     |  |
| USABLE AT 208V         |                    |  |        |   | NEMA-NOM-EFF | 92.4 |              | PF   | 81  |  |
|                        | 55C AMB AT 1.0SF   |  |        |   |              |      |              |      |     |  |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA242018    | SA 07K202X598G3                          | 1.000 EA |
| RA228931    | RA 07K202X598G3                          | 1.000 EA |
| 37FN3002B01 | EXFN, PLASTIC, 7.50 OD, 1.155 ID         | 1.000 EA |
| HA3210E08   | .250X 7/8 PIN 312-57                     | 1.000 EA |
| HW3201A05   | 3/8-16 EYEBOLT                           | 1.000 EA |
| 07CB1000A01 | CONDUIT BOX MACH                         | 1.000 EA |
| 10XN3118A16 | 5/16-18X1 HEX HD CAP                     | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| WD1000B17   | T&B CX35TN TERMINAL                      | 1.000 EA |
| 07EP1707A17 | FREP XP GR C W/DRAINS, GRSRS             | 1.000 EA |
| HW4500A19   | 1/4-28X1/4 SLOTTED PLUG F/S              | 2.000 EA |
| HW4506A02   | BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI | 1.000 EA |
| HW3022E05   | .125 DIA X .500 ROLLED SPRING PIN        | 1.000 EA |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW5100A06   | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 07EP1708A12 | PUEP 213-5TC 307M "DRILL RIG DUTY" SLING | 1.000 EA |
| HW4500A19   | 1/4-28X1/4 SLOTTED PLUG F/S              | 2.000 EA |
| HW4506A02   | BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI | 1.000 EA |
| HW3022E05   | .125 DIA X .500 ROLLED SPRING PIN        | 1.000 EA |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10XN2520A32 | 1/4 X 2 HEX HEAD CAP SCR, GRADE 2        | 4.000 EA |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| HW1001A25              | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| HA6059A05              | ADAPTER FOR 8.50" RABBET TO 4.50" RABBET | 1.000 EA |
| 84XN5013J16S           | 1/2-13 X 1 LOW HEAD HEX SOC HD, GRADE 8  | 4.000 EA |
| 07FH1003A01            | STANDARD 307 EXPLOSION PROOF FAN HOUSING | 1.000 EA |
| 10XN2520A12            | O1/4-20X 3/4 HEX HEAD CAP                | 4.000 EA |
| 07CB1502A01            | CONDUIT BOX LID MACH (DUCTILE IRON)      | 1.000 EA |
| 84XN2520J16            | 1/4-20 X 1 SOC HD CAP SCREW              | 4.000 EA |
| HW1001A25              | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| HA2065A02              | SLINGER, ALUM MODLE 36 & 37 DRILL RIG MT | 1.000 EA |
| 80XN1032A07            | SET SCREW, HEX XOCK, ZN                  | 1.000 EA |
| HW2501D14              | KEY, 3/16 SQ X 1.500                     | 1.000 EA |
| HA7000A01              | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |
| LB1081F                | ALUM XP CAUTION LABEL (FS PLANT ONLY-    | 1.000 EA |
| LB1115N                | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 6.000 EA |
| MJ1000A02              | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| 51XB1214A20            | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| MG1025G29              | WILKOFASST, 789.229, DARK CHARCOAL GRAY  | 0.036 GA |
| LB1119N                | WARNING LABEL                            | 1.000 EA |
| LC0145B01              | CONNECTION LABEL                         | 1.000 EA |
| NP0977XPSLEV           | SS XP UL CSA-EEV CC CL-I GP-C&D          | 1.000 EA |
| 07PA1011               | PKG GRP, 07 CAST IRON PK1181             | 1.000 EA |
| MN416A01               | TAG-INSTAL-MAINT no wire (1000/bx) 11/14 | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 33780 - Typical performance - not guaranteed values

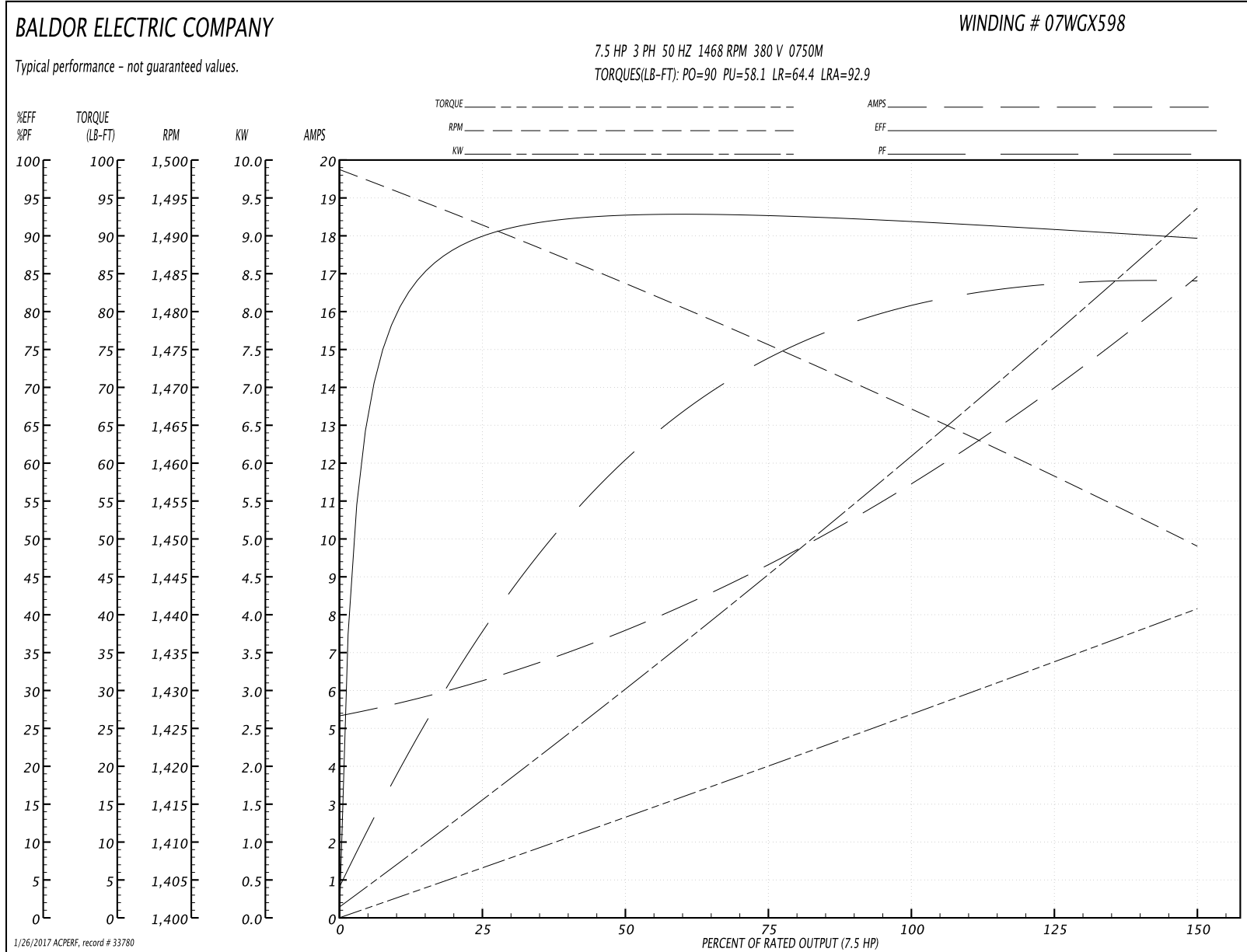
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 07WGX598-R007 | <b>Type:</b> 0750M | <b>Enclosure:</b> XPFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |                      |              |    | 380 V, 50 Hz:<br>High Voltage Connection |                         |
|-----------------------|----------------------|--------------|----|--|-------------------------|
| Rated Output (HP)     | 10//7.5              |              |    | Full Load Torque                         | 26.8 LB-FT              |
| Volts                 | 230/460//190/380     |              |    | Start Configuration                      | direct on line          |
| Full Load Amps        | 24.6/12.3//23.2/11.6 |              |    | Breakdown Torque                         | 90 LB-FT                |
| R.P.M.                | 1765//1465           |              |    | Pull-up Torque                           | 58.1 LB-FT              |
| Hz                    | 60//50               | Phase        | 3  | Locked-rotor Torque                      | 64.4 LB-FT              |
| NEMA Design Code      | A                    | KVA Code     | J  | Starting Current                         | 92.9 A                  |
| Service Factor (S.F.) | 1.15                 |              |    | No-load Current                          | 5.49 A                  |
| NEMA Nom. Eff.        | 92.4                 | Power Factor | 81 | Line-line Res. @ 25°C                    | 0.867 Ω                 |
| Rating - Duty         | 40C AMB-CONT         |              |    | Temp. Rise @ Rated Load                  | 48°C                    |
| S.F. Amps             |                      |              |    | Temp. Rise @ S.F. Load                   | 58°C                    |
|                       |                      |              |    | Locked-rotor Power Factor                | 39                      |
|                       |                      |              |    | Rotor inertia                            | 1.23 LB-FT <sup>2</sup> |

Load Characteristics 380 V, 50 Hz, 7.5 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 39   | 61   | 74   | 80   | 83   | 85   | 82   |
| Efficiency      | 89.3 | 93.4 | 92.3 | 91.9 | 90.9 | 89.7 | 91.3 |
| Speed           | 1491 | 1484 | 1475 | 1468 | 1458 | 1449 | 1462 |
| Line amperes    | 6.07 | 7.46 | 9.35 | 11.6 | 14.1 | 16.8 | 13.1 |

Performance Graph at 380V, 50Hz, 7.5HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 39054 - Typical performance - not guaranteed values

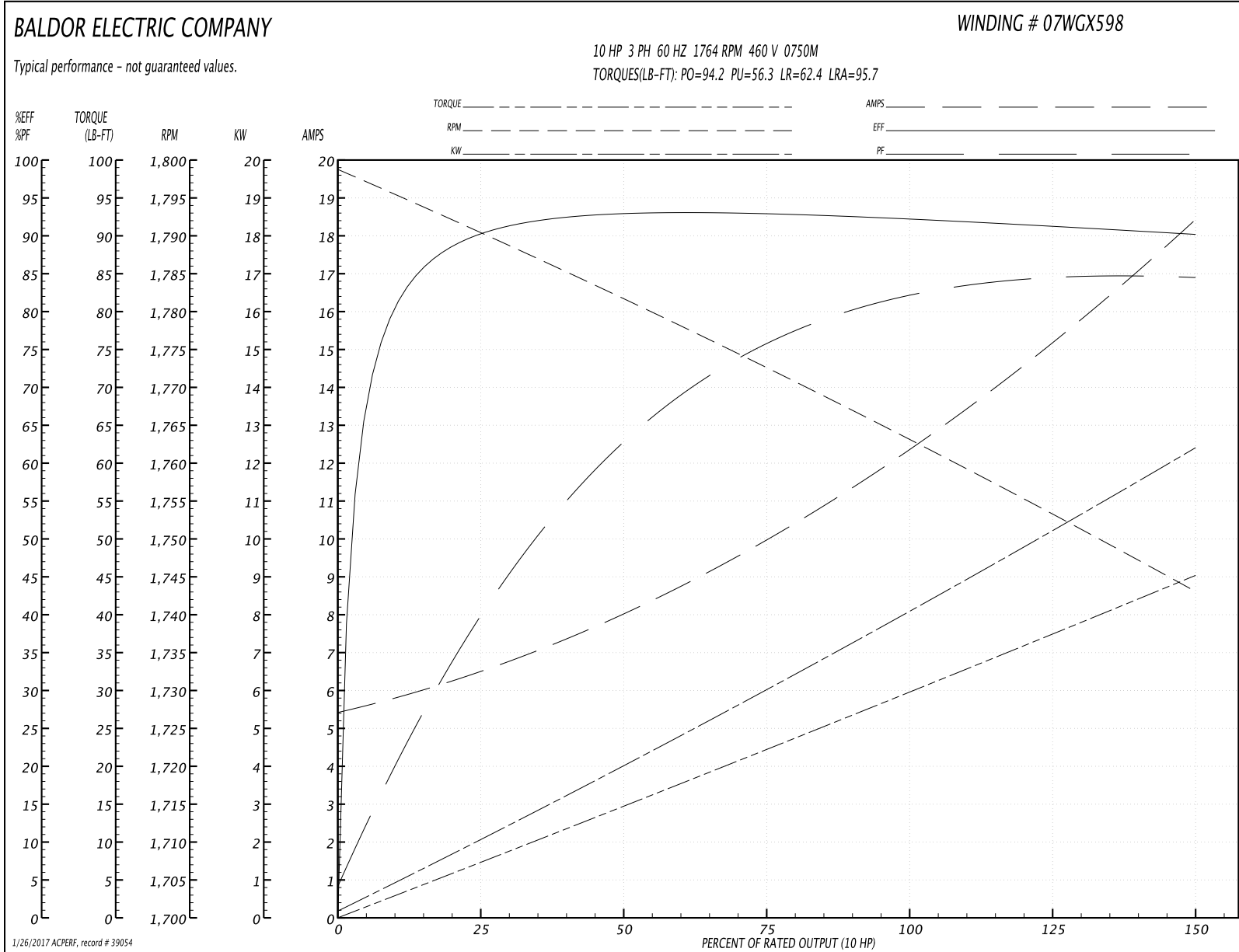
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 07WGX598-R007 | <b>Type:</b> 0750M | <b>Enclosure:</b> XPFC |
|-------------------------------|--------------------|------------------------|

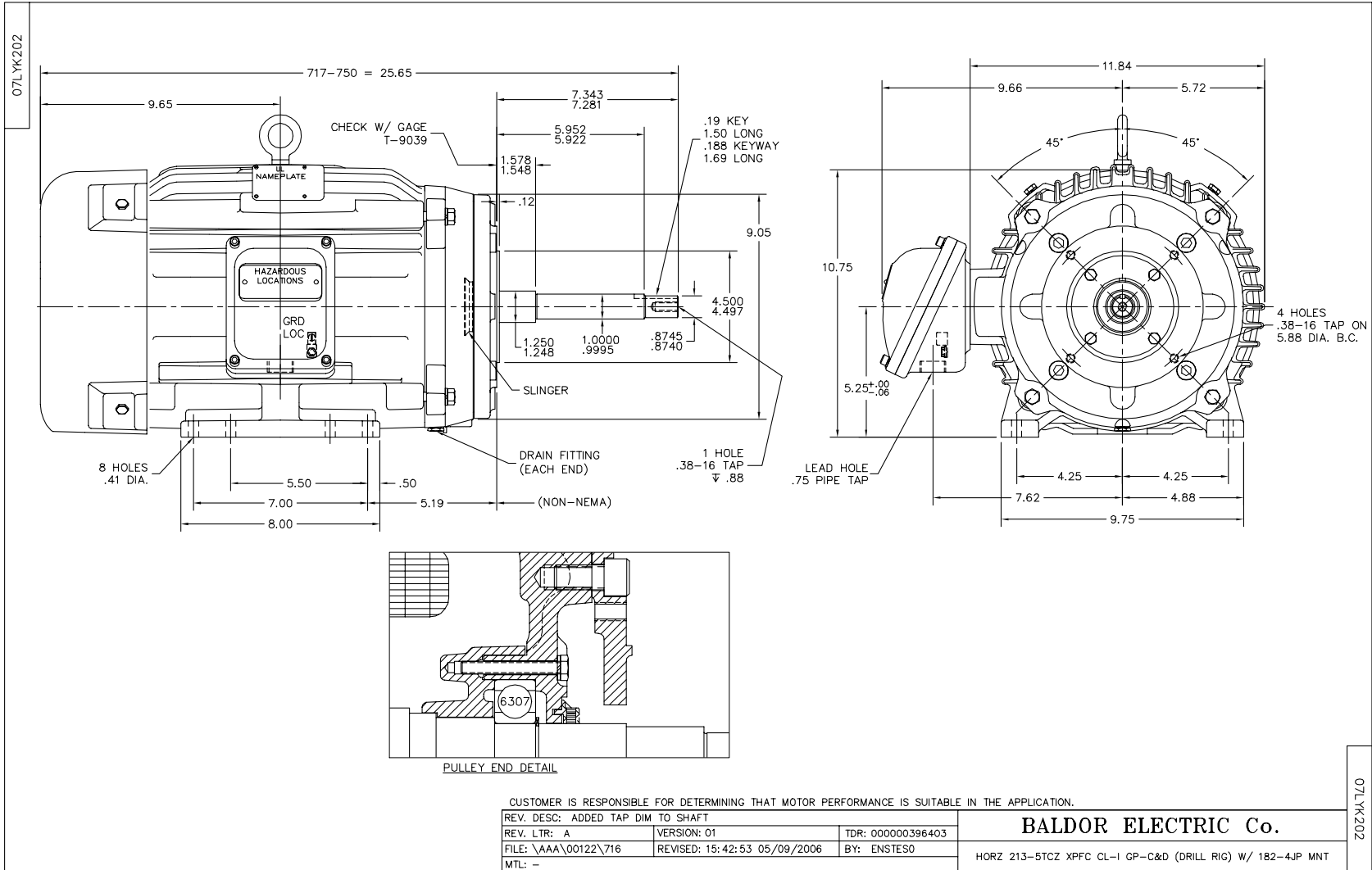
| Nameplate Data        |                    |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                         |
|-----------------------|--------------------|--------------|----|--|-------------------------|
| Rated Output (HP)     | 10//7.5            |              |    | Full Load Torque                         | 29.7 LB-FT              |
| Volts                 | 230/460//190/380   |              |    | Start Configuration                      | direct on line          |
| Full Load Amps        | 24.6/12.3//23/11.5 |              |    | Breakdown Torque                         | 94.2 LB-FT              |
| R.P.M.                | 1765//1465         |              |    | Pull-up Torque                           | 56.3 LB-FT              |
| Hz                    | 60//50             | Phase        | 3  | Locked-rotor Torque                      | 62.4 LB-FT              |
| NEMA Design Code      | A                  | KVA Code     | J  | Starting Current                         | 95.7 A                  |
| Service Factor (S.F.) | 1.15               |              |    | No-load Current                          | 5.6 A                   |
| NEMA Nom. Eff.        | 92.4               | Power Factor | 81 | Line-line Res. @ 25°C                    | 0.867 Ω                 |
| Rating - Duty         | 40C AMB-CONT       |              |    | Temp. Rise @ Rated Load                  | 55°C                    |
| S.F. Amps             |                    |              |    | Temp. Rise @ S.F. Load                   | 70°C                    |
|                       |                    |              |    | Locked-rotor Power Factor                | 35                      |
|                       |                    |              |    | Rotor inertia                            | 1.23 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    | 41   | 64   | 76   | 81   | 84   | 85   | 83   |
| Efficiency      | 89.8 | 93.6 | 92.6 | 92.4 | 91.3 | 90.2 | 91.7 |
| Speed           | 1790 | 1782 | 1772 | 1764 | 1753 | 1743 | 1757 |
| Line amperes    | 6.28 | 7.9  | 10   | 12.5 | 15.3 | 18.3 | 14.2 |

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





CD0005

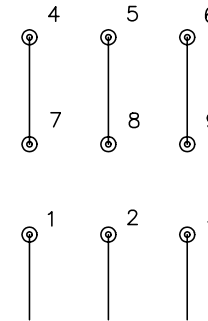


LOW VOLTAGE  
(2Y)



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