

# ABB BALDOR RELIANCE III

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## Customer information packet

### VFSWDM3711T-E

10HP, 3500RPM, 3PH, 60HZ, 215TC, 3744M, TEFC, F

Class - None

Division - Not Applicable

**Specifications**

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| Enclosure                      | TEFC                                                           |
| Frame                          | 215TC                                                          |
| Frame Material                 | Stainless Steel                                                |
| Frequency                      | 60.00 Hz                                                       |
| Haz Area Class and Group       | None                                                           |
| Haz Area Division              | Not Applicable                                                 |
| Motor Letter Type              | Three Phase                                                    |
| Output @ Frequency             | 10.000 HP @ 60 HZ                                              |
| Phase                          | 3                                                              |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                               |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                             |
| Agency Approvals               | CSA<br>CSA EEV<br>NEMA PREMIUM<br>UR                           |
| Ambient Temperature            | 40 °C                                                          |
| Auxiliary Box                  | NO AUXILLARY BOX                                               |
| Auxiliary Box Lead Termination | None                                                           |
| Base Indicator                 | No Mounting                                                    |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                        |
| Blower                         | None                                                           |
| Current @ Voltage              | 23.000 A @ 208.0 V<br>21.200 A @ 230.0 V<br>10.600 A @ 460.0 V |
| Design Code                    | A                                                              |
| Drip Cover                     | No Drip Cover                                                  |
| Duty Rating                    | CONT                                                           |
| Efficiency @ 100% Load         | 91.7 %                                                         |
| Electrically Isolated Bearing  | Not Electrically Isolated                                      |
| Feedback Device                | NO FEEDBACK                                                    |
| Front Shaft Indicator          | None                                                           |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | Q          |
| Type         | AC         |
| Mech. spec.  | 37Q227     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 37WGS137   |
| Layout       | 37LYQ227   |
| Eff. date    | 07-06-2026 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#14       |
| Proprietary  | False      |
| Created date | 07-11-2017 |

|                                      |                        |
|--------------------------------------|------------------------|
| <b>Heater Indicator</b>              | No Heater              |
| <b>High Voltage Full Load Amps</b>   | 10.6 a                 |
| <b>Insulation Class</b>              | H                      |
| <b>Inverter Code</b>                 | Inverter Ready         |
| <b>KVA Code</b>                      | L                      |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs  |
| <b>Locked Bearing Indicator</b>      | Locked Bearing         |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 14 AWG             |
| <b>Motor Lead Termination</b>        | Flying Leads           |
| <b>Motor Standards</b>               | NEMA                   |
| <b>Motor Type</b>                    | 3744M                  |
| <b>Mounting Arrangement</b>          | F1                     |
| <b>Number of Poles</b>               | 2                      |
| <b>Overall Length</b>                | 20.68 IN               |
| <b>Power Factor</b>                  | 94                     |
| <b>Product Family</b>                | WD All SS Encapsulated |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing         |
| <b>Pulley Face Code</b>              | C-Face                 |
| <b>Pulley Shaft Indicator</b>        | Standard               |
| <b>Rodent Screen</b>                 | None                   |
| <b>RoHS Status</b>                   | ROHS COMPLIANT         |
| <b>Service Factor</b>                | 1.15                   |
| <b>Shaft Diameter</b>                | 1.375 IN               |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding     |
| <b>Shaft Rotation</b>                | Reversible             |
| <b>Shaft Slinger Indicator</b>       | No Slinger             |
| <b>Speed</b>                         | 3500 rpm               |
| <b>Speed Code</b>                    | Single Speed           |
| <b>Starting Method</b>               | Direct on line         |
| <b>Thermal Device - Bearing</b>      | None                   |
| <b>Thermal Device - Winding</b>      | None                   |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor    |
| <b>Winding Thermal 1</b>             | None                   |
| <b>Winding Thermal 2</b>             | None                   |

**Nameplate**

| NP4427AAA01 |               |        |       |    |      |         |       |       |    |               |     |       |  |  |  |
|-------------|---------------|--------|-------|----|------|---------|-------|-------|----|---------------|-----|-------|--|--|--|
| CAT #       | VFSWDM3711T-E |        |       |    |      | WT      | 149   | LBS   |    |               |     |       |  |  |  |
| SPEC        | 37Q227S137G1  |        |       |    |      | ENCL    | TEFC  |       |    |               |     |       |  |  |  |
| SER #       |               |        |       |    |      | CC      | 010A  | IP    | 69 |               |     |       |  |  |  |
| HP          | 10            |        |       |    |      | MAG CUR | 7/3.5 |       |    |               |     |       |  |  |  |
| VOLTS       | 230/460       |        |       |    |      |         |       |       |    | NEMA NOM. EFF | 91  |       |  |  |  |
| AMPS        | 21.2/10.6     |        |       |    |      |         |       | PF    | 94 |               |     |       |  |  |  |
| RATING      | 40C AMB-CONT  |        |       |    |      |         |       |       |    |               |     |       |  |  |  |
| RPM         | 3500          |        |       |    |      | MAX RPM |       |       |    | 5400          |     |       |  |  |  |
| FRAME       | 215TC         | HZ     | 60    |    |      | CODE    | L     | CLASS |    | H             |     |       |  |  |  |
| SER.F.      | 1.15          | SF AMP | 26/13 |    |      |         |       |       | PH | 3             | DES | A     |  |  |  |
| DE          | 6307          |        | ODE   |    | 6307 |         |       |       |    |               |     |       |  |  |  |
| LUBRICATION | POLYREX EM    |        |       |    |      |         |       |       |    |               |     |       |  |  |  |
| ID LOGO     | INVERTER TYPE |        |       |    | VPWM |         | CHP   | 60    | TO |               | 90  | 1.5:1 |  |  |  |
| ID LOGO     | WK2           | 0.4    | CT    | 15 | TO   |         | 60    | 4:1   |    |               |     |       |  |  |  |
| ID LOGO     | SL HZ         | 1.7    | VT    | 6  | TO   |         | 60    | 10:1  |    |               |     |       |  |  |  |
|             |               |        |       |    |      |         |       |       |    |               |     |       |  |  |  |
|             |               |        |       |    |      |         |       |       |    |               |     |       |  |  |  |
|             |               |        |       |    |      |         |       |       |    |               |     |       |  |  |  |
|             |               |        |       |    |      |         |       |       |    |               |     |       |  |  |  |
|             |               |        |       |    |      |         |       | QR    |    |               |     |       |  |  |  |
| YR          |               |        |       |    |      |         |       |       |    |               |     |       |  |  |  |

**AC Induction Motor Performance Data**

Record # 57389

Typical performance - not guaranteed values

| Winding: 37WGS137-R011 |    |           | Type: 3744M                              |                     | Enclosure: TEFC         |            |         |
|------------------------|----|-----------|------------------------------------------|---------------------|-------------------------|------------|---------|
| Nameplate Data         |    |           | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |            |         |
| Rated Output (HP)      |    | 10        | Full Load Torque                         |                     | 15 LB-FT                |            |         |
| Volts                  |    | 230/460   | Start Configuration                      |                     | direct on line          |            |         |
| Full Load Amps         |    | 21.2/10.6 | Breakdown Torque                         |                     | 89.4 LB-FT              |            |         |
| R.P.M.                 |    | 3500      | Pull-up Torque                           |                     | 39 LB-FT                |            |         |
| Hz                     | 60 | Phase     | 3                                        | Locked-rotor Torque |                         | 46.5 LB-FT |         |
| NEMA Design Code       |    | A         | KVA Code                                 | L                   | Starting Current        |            | 124 A   |
| Service Factor (S.F.)  |    | 1.15      | No-load Current                          |                     | 4.28 A                  |            |         |
| NEMA Nom. Eff.         |    | 91        | Power Factor                             | 94                  | Line-line Res. @ 25°C   |            | 0.659 Ω |
| Rating - Duty          |    | 40C       | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |            | 67°C    |
| S.F. Amps              |    | 26/13     | Temp. Rise @ S.F. Load                   |                     | 82°C                    |            |         |
|                        |    |           | Locked-rotor Power Factor                |                     | 31.5                    |            |         |
|                        |    |           | Rotor inertia                            |                     | 0.402 lb-ft²            |            |         |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 56   | 77   | 86   | 91   | 91   | 92   | 91   |
| Efficiency      | 81.8 | 88.7 | 90.2 | 91   | 90.1 | 89.7 | 90.5 |
| Speed           | 3579 | 3557 | 3535 | 3510 | 3486 | 3459 | 3496 |
| Line amperes    | 4.99 | 6.82 | 8.93 | 11.3 | 14.2 | 17   | 13   |

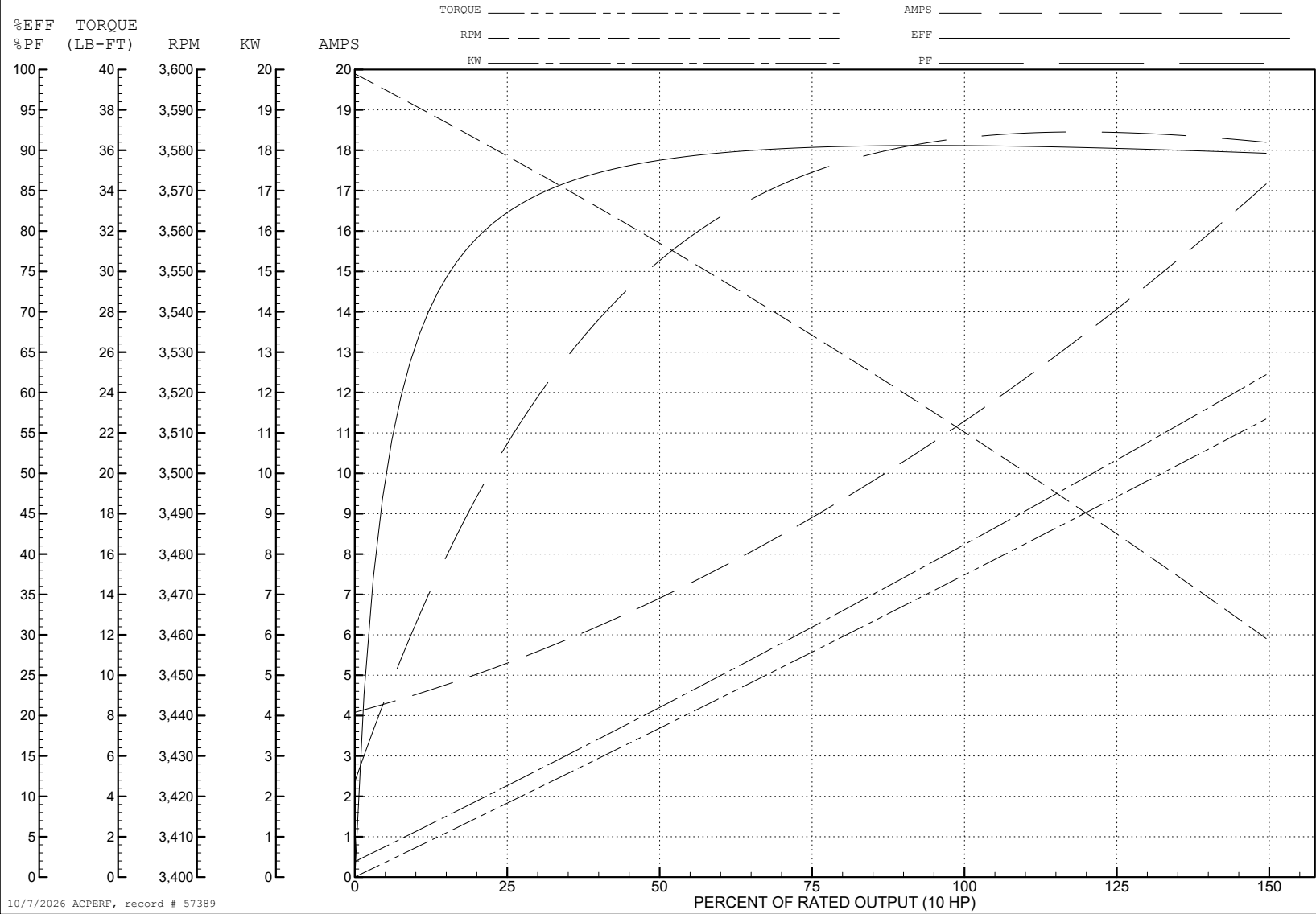
ABB Motors and Mechanical Inc.

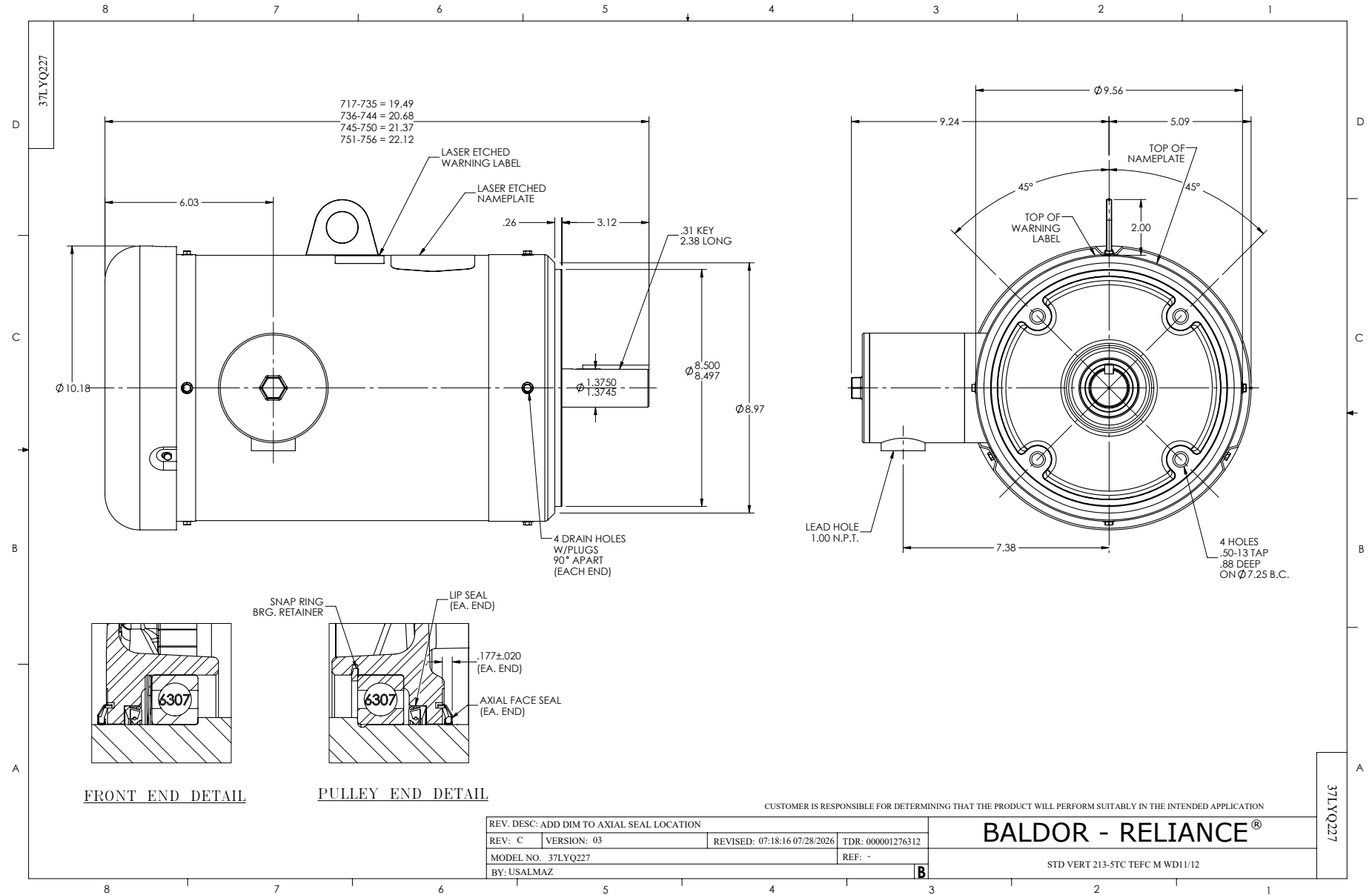
WINDING # 37WGS137

Typical performance - not guaranteed values.

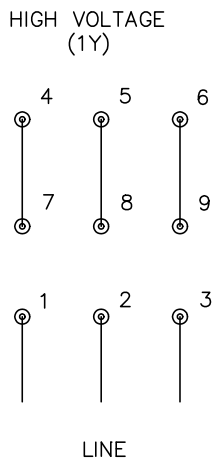
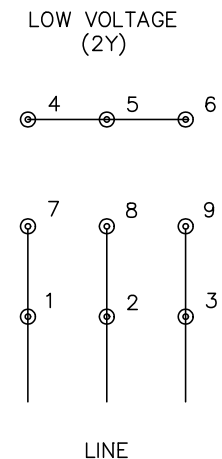
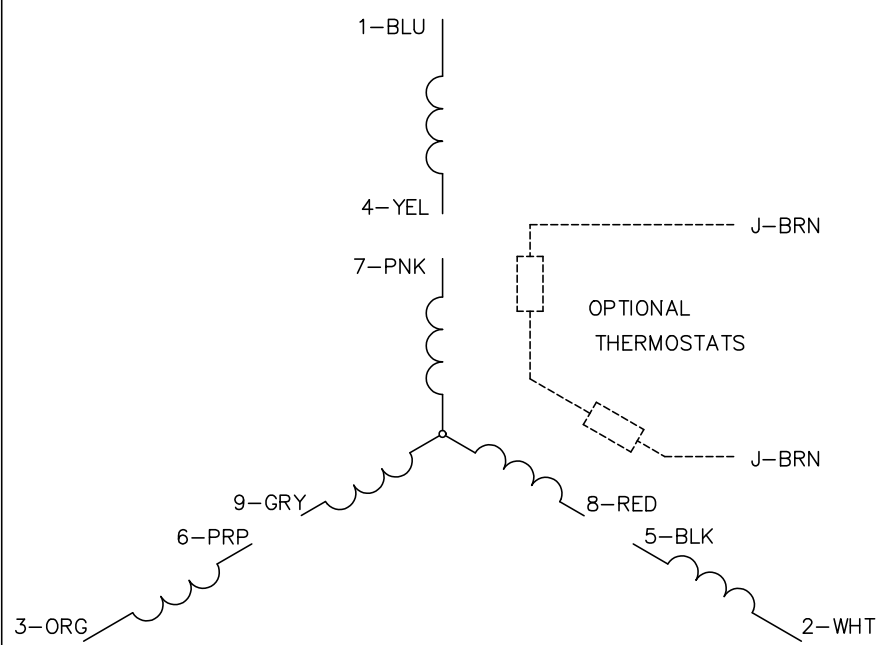
10 HP 3 PH 60 HZ 3500 RPM 460 V 3744M

TORQUES (LB-FT): PO=89.4 PU=39 LR=46.5 LRA=124





CD0005



- 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