

# ABB BALDOR RELIANCE III

---

## Customer information packet

### VXM21722T

7.5//5HP, 3520//2920RPM, 3PH, 60//50HZ, 213T

Class - CLI GP D; CLII GP F,G

Division - Division I

**Specifications**

|                                |                                                                                    |
|--------------------------------|------------------------------------------------------------------------------------|
| Enclosure                      | XPFC                                                                               |
| Frame                          | 213TC                                                                              |
| Frame Material                 | Steel                                                                              |
| Frequency                      | 50.00 Hz<br>60.00 Hz                                                               |
| Haz Area Class and Group       | CLI GP D; CLII GP F,G                                                              |
| Haz Area Division              | Division I                                                                         |
| Motor Letter Type              | Three Phase                                                                        |
| Output @ Frequency             | 7.500 HP @ 60 HZ<br>5.000 HP @ 50 HZ                                               |
| Phase                          | 3                                                                                  |
| Synchronous Speed @ Frequency  | 3600 RPM @ 60 HZ                                                                   |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>190.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>380.0 V @ 50 HZ           |
| Agency Approvals               | UL<br>CSA EEV                                                                      |
| 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                                                                               |
| Constant Torque Speed Range    | 6                                                                                  |
| Current @ Voltage              | 15.400 A @ 190.0 V<br>18.000 A @ 230.0 V<br>7.700 A @ 380.0 V<br>9.000 A @ 460.0 V |
| Design Code                    | A                                                                                  |
| Drip Cover                     | No Drip Cover                                                                      |
| Duty Rating                    | CONT                                                                               |

**Part Detail**

|              |              |
|--------------|--------------|
| Revision     | B            |
| Type         | AC           |
| Mech. spec.  |              |
| Base         |              |
| Status       | PRD/A        |
| Elec. spec.  | 37WGR224     |
| Layout       | 37LY-000-164 |
| Eff. date    | 04-16-2026   |
| CD Diagram   | CD0005       |
| Poles        | 02           |
| Leads        | 9#14         |
| Proprietary  | False        |
| Created date | 03-05-2021   |

|                               |                            |
|-------------------------------|----------------------------|
| Efficiency @ 100% Load        | 89.5 %                     |
| Electrically Isolated Bearing | Not Electrically Isolated  |
| Feedback Device               | NO FEEDBACK                |
| Haz Area Temp Code            | T3C                        |
| Heater Indicator              | No Heater                  |
| High Voltage Full Load Amps   | 7.7 a                      |
| Insulation Class              | F                          |
| Inverter Code                 | Inverter Duty              |
| IP Rating                     | NONE                       |
| KVA Code                      | J                          |
| Lifting Lugs                  | Standard Lifting Lugs      |
| Locked Bearing Indicator      | Locked Bearing             |
| Max Speed                     | 5400 rpm                   |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 3728M                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 2                          |
| Overall Length                | 19.19 IN                   |
| Power Factor                  | 84                         |
| Product Family                | General Purpose            |
| Pulley Face Code              | C-Face                     |
| Rodent Screen                 | None                       |
| Service Factor                | 1.00                       |
| Shaft Diameter                | 1.375 IN                   |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Speed                         | 3520 rpm                   |
| Speed Code                    | Single Speed               |
| Starting Method               | Direct on line             |
| Thermal Device - Bearing      | None                       |
| Thermal Device - Winding      | Normally Closed Thermostat |
| Vibration Sensor Indicator    | No Vibration Sensor        |
| Winding Thermal 1             | None                       |

**Winding Thermal 2**

**None**

---

**Nameplate**

| NP0887XPSLEV |                        |        |   |              |   |          |            |       |         |          |  |    |  |
|--------------|------------------------|--------|---|--------------|---|----------|------------|-------|---------|----------|--|----|--|
| NO.          |                        |        |   |              |   |          | CC         | 010A  |         |          |  |    |  |
| S/N          |                        |        |   |              |   |          | TEMP CODE  |       | T3C     |          |  |    |  |
| SPEC.        | 37-0000-0328           |        |   |              |   |          | INV.TYPE   |       | PWM     |          |  |    |  |
| CAT.NO.      | VXM21722T              |        |   |              |   |          | C HP FR    |       | 60      | C HP TO  |  | 90 |  |
| HP           | 7.5//5                 |        |   |              |   |          | CT HZ FROM |       | 6       | CT HZ TO |  | 60 |  |
| VOLTS        | 230/460//190/380       |        |   |              |   |          | VT HZ FROM |       | 6       | VT HZ TO |  | 60 |  |
| AMPS         | 18/9//15.4/7.7         |        |   |              |   |          | MAG CUR    |       | 7.4/3.7 |          |  |    |  |
| RPM          | 3520//2920             |        |   |              |   |          | MX RPM     |       | 5400    |          |  |    |  |
| HZ           | 60//50                 | PH     | 3 | CL           | F | NOM.EFF. |            | 89.5  |         |          |  |    |  |
| SER.F.       | 1.00                   | DES    | A | SL HZ        |   | 1.7      | WK2        | 0.255 |         |          |  |    |  |
| FRAME        | 213TC                  | RATING |   | 40C AMB-CONT |   |          |            |       |         |          |  |    |  |
|              | NEMA MG-1 PART 5, IP54 |        |   |              |   |          |            |       |         |          |  |    |  |
|              | 1.15 SF ON SINE WAVE   |        |   |              |   |          |            |       |         |          |  |    |  |

**AC Induction Motor Performance Data**

Record # 73679

Typical performance - not guaranteed values

| Winding: 37WGR224-R054 |  |                  | Type: 3728M  |                     | Enclosure: XPFC                          |                           |            |              |
|------------------------|--|------------------|--------------|---------------------|------------------------------------------|---------------------------|------------|--------------|
| Nameplate Data         |  |                  |              |                     | 460 V, 60 Hz:<br>High Voltage Connection |                           |            |              |
| Rated Output (HP)      |  | 7.5//5           |              | Full Load Torque    |                                          | 10.9 LB-FT                |            |              |
| Volts                  |  | 230/460//190/380 |              | Start Configuration |                                          | direct on line            |            |              |
| Full Load Amps         |  | 18/9//15.4/7.7   |              | Breakdown Torque    |                                          | 39.7 LB-FT                |            |              |
| R.P.M.                 |  | 3520//2920       |              | Pull-up Torque      |                                          | 20.6 LB-FT                |            |              |
| Hz                     |  | 60//50           | Phase        | 3                   | Locked-rotor Torque                      |                           | 21.8 LB-FT |              |
| NEMA Design Code       |  | A                |              | KVA Code            | J                                        | Starting Current          |            | 68.4 A       |
| Service Factor (S.F.)  |  | 1                |              | No-load Current     |                                          | 3.83 A                    |            |              |
| NEMA Nom. Eff.         |  | 89.5             | Power Factor |                     | 84                                       | Line-line Res. @ 25°C     |            | 1.1 Ω        |
| Rating - Duty          |  | 40C              |              | AMB-CONT            |                                          | Temp. Rise @ Rated Load   |            | 49°C         |
|                        |  |                  |              |                     |                                          | Locked-rotor Power Factor |            | 33           |
|                        |  |                  |              |                     |                                          | Rotor inertia             |            | 0.255 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125   | 150  |
|-----------------|------|------|------|------|-------|------|
| Power Factor    | 51   | 73   | 81   | 85   | 87    | 89   |
| Efficiency      | 66.3 | 78.7 | 82.9 | 84.7 | 85.2  | 85.3 |
| Speed           | 3576 | 3558 | 3537 | 3515 | 3491  | 3465 |
| Line amperes    | 4.49 | 5.75 | 7.49 | 9.45 | 11.56 | 13.7 |

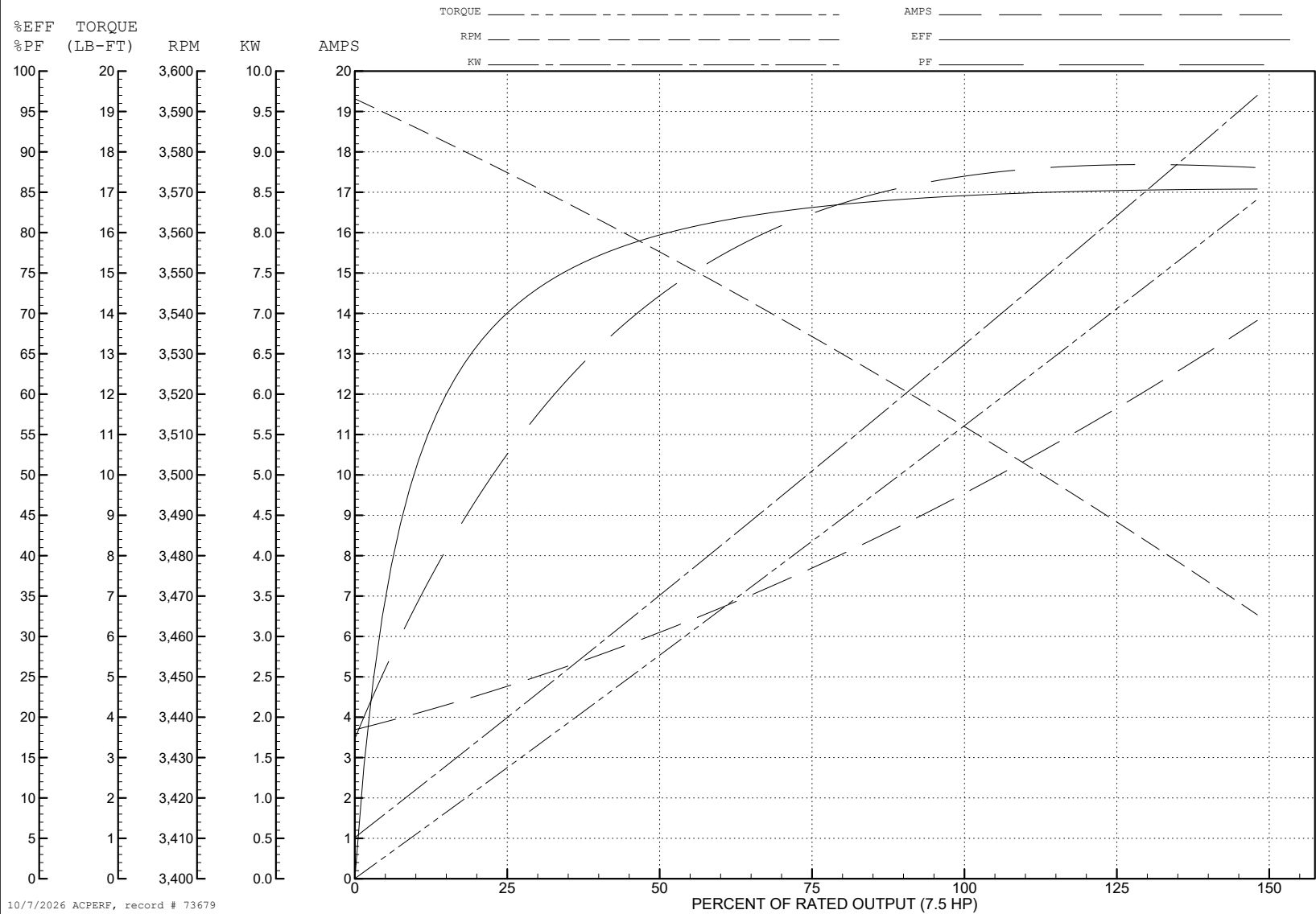
ABB Motors and Mechanical Inc.

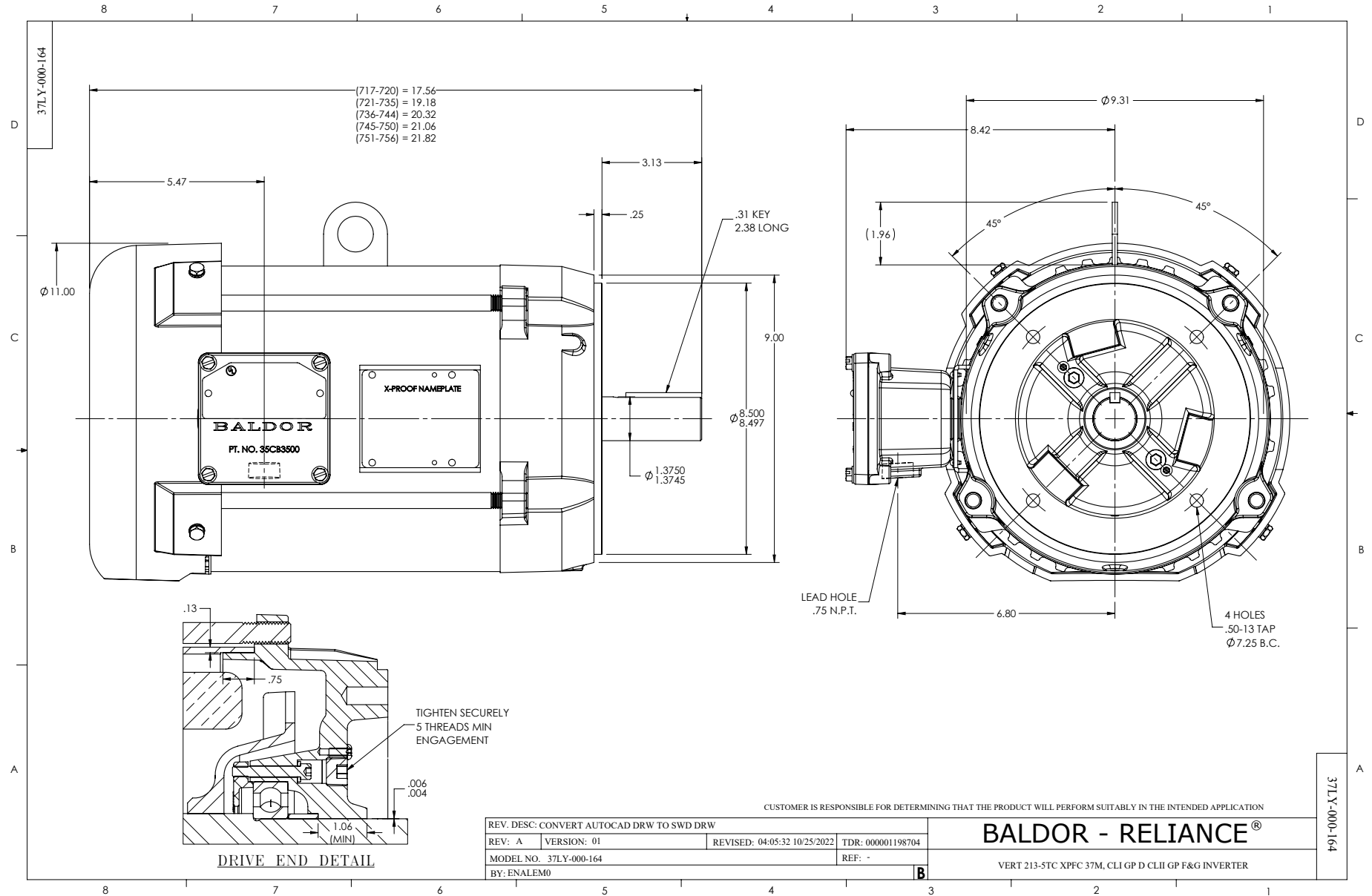
WINDING # 37WGR224

Typical performance - not guaranteed values.

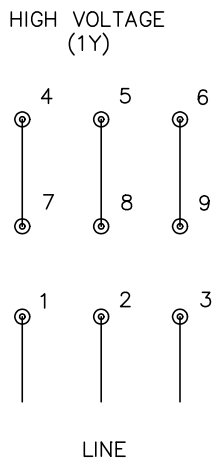
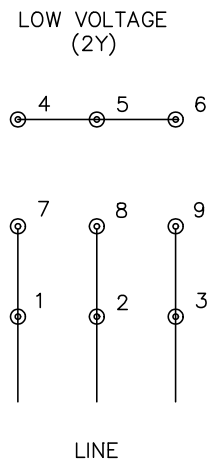
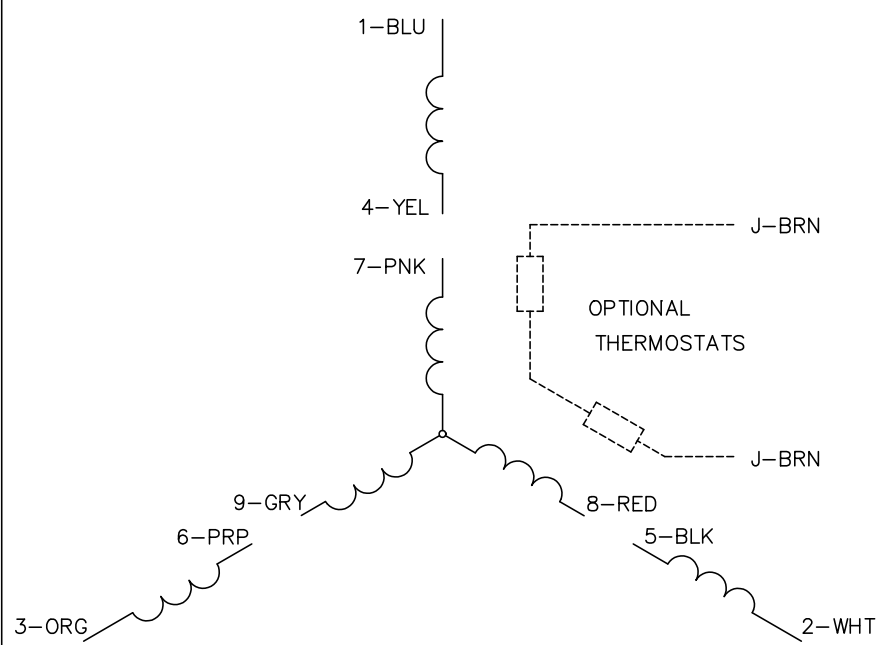
7.5 HP 3 PH 60 HZ 3515 RPM 460 V 3728M

TORQUES (LB-FT): PO=39.7 PU=20.6 LR=21.8 LRA=68.4





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