

# ABB BALDOR RELIANCE III

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## Customer information packet

### DRX18544T

5HP, 1750//1450RPM, 3PH, 60HZ, 184T, XPFC, F1

Class - CLI GP C,D

Division - Division I

**Specifications**

|                                |                                                                                    |
|--------------------------------|------------------------------------------------------------------------------------|
| Enclosure                      | XPFC                                                                               |
| Frame                          | 184T                                                                               |
| Frame Material                 | Iron                                                                               |
| Frequency                      | 60.00 Hz                                                                           |
| Haz Area Class and Group       | CLI GP C,D                                                                         |
| Haz Area Division              | Division I                                                                         |
| Motor Letter Type              | Three Phase                                                                        |
| Output @ Frequency             | 5.000 HP @ 60 HZ                                                                   |
| Phase                          | 3                                                                                  |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                                                   |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                                                 |
| Agency Approvals               | CSA EEV<br>UL                                                                      |
| Ambient Temperature            | 40 °C                                                                              |
| Auxiliary Box                  | NO AUXILLARY BOX                                                                   |
| Auxiliary Box Lead Termination | None                                                                               |
| Base Indicator                 | Rigid                                                                              |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                                            |
| Blower                         | None                                                                               |
| Constant Torque Speed Range    | 6                                                                                  |
| Current @ Voltage              | 6.600 A @ 460.0 V<br>5.100 A @ 380.0 V<br>13.200 A @ 230.0 V<br>10.200 A @ 190.0 V |
| Design Code                    | B                                                                                  |
| Drip Cover                     | No Drip Cover                                                                      |
| Duty Rating                    | CONT                                                                               |
| Efficiency @ 100% Load         | 89.5 %                                                                             |
| Electrically Isolated Bearing  | Not Electrically Isolated                                                          |
| Feedback Device                | NO FEEDBACK                                                                        |
| Haz Area Temp Code             | T3C                                                                                |

**Part Detail**

|              |              |
|--------------|--------------|
| Revision     | F            |
| Type         | AC           |
| Mech. spec.  |              |
| Base         |              |
| Status       | PRD/A        |
| Elec. spec.  | 06WGY545     |
| Layout       | 06LY-000-044 |
| Eff. date    | 07-15-2025   |
| CD Diagram   | CD0005       |
| Poles        | 04           |
| Leads        | 9#16         |
| Proprietary  | False        |
| Created date | 03-22-2019   |

|                             |                            |
|-----------------------------|----------------------------|
| Heater Indicator            | No Heater                  |
| High Voltage Full Load Amps | 5.1 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                   | 2700 rpm                   |
| Motor Lead Termination      | Flying Leads               |
| Motor Standards             | NEMA                       |
| Motor Type                  | 0642M                      |
| Mounting Arrangement        | F1                         |
| Number of Poles             | 4                          |
| Overall Length              | 17.56 IN                   |
| Power Factor                | 81                         |
| Product Family              | General Purpose            |
| Pulley Face Code            | Standard                   |
| Rodent Screen               | None                       |
| RoHS Status                 | ROHS NON-COMPLIANT         |
| Service Factor              | 1.00                       |
| Shaft Diameter              | 1.125 IN                   |
| Shaft Ground Indicator      | No Shaft Grounding         |
| Shaft Rotation              | Reversible                 |
| Speed                       | 1750 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**

| NP1401XPSLEV |                    |        |   |              |     |          |                     |      |         |          |  |    |
|--------------|--------------------|--------|---|--------------|-----|----------|---------------------|------|---------|----------|--|----|
| NO.          |                    |        |   |              |     |          | CC                  | 010A |         |          |  |    |
| S/N          |                    |        |   |              |     |          | TEMP CODE           |      | T3C     |          |  |    |
| SPEC.        | 06-0000-0054       |        |   |              |     |          | INV.TYPE            |      | PWM     |          |  |    |
| CAT.NO.      | DRX18544T          |        |   |              |     |          | C HP FR             | 60   | C HP TO | 90       |  |    |
| HP           | 5//3               |        |   |              |     |          | CT HZ FROM          |      | 6       | CT HZ TO |  | 60 |
| VOLTS        | 230/460//190/380   |        |   |              |     |          | VT HZ FROM          |      | 6       | VT HZ TO |  | 60 |
| AMPS         | 13.2/6.6//10.2/5.1 |        |   |              |     |          | MAG CUR             | 6/3  |         |          |  |    |
| RPM          | 1750//1450         |        |   |              |     |          | MX RPM              | 2700 |         |          |  |    |
| HZ           | 60                 | PH     | 3 | CL           | F   | NOM.EFF. |                     | 89.5 |         |          |  |    |
| SER.F.       | 1.00               | DES    | B | SL HZ        | 1.7 | WK2      | 0.39                |      |         |          |  |    |
| FRAME        | 184T               | RATING |   | 40C AMB-CONT |     |          |                     |      |         |          |  |    |
|              | 55C AMB @1.0SF     |        |   |              |     |          |                     |      |         |          |  |    |
|              | 1.15SF SINEWAVE    |        |   |              |     |          | NEMA MG-1 PT 5,IP55 |      |         |          |  |    |

**AC Induction Motor Performance Data**

Record # 72834

Typical performance - not guaranteed values

| Winding: 06WGY545-R005 |  |                    | Type: 0642M  |                           | Enclosure: XPFC                          |                       |            |        |
|------------------------|--|--------------------|--------------|---------------------------|------------------------------------------|-----------------------|------------|--------|
| Nameplate Data         |  |                    |              |                           | 460 V, 60 Hz:<br>High Voltage Connection |                       |            |        |
| Rated Output (HP)      |  | 5//3               |              | Full Load Torque          |                                          | 15 LB-FT              |            |        |
| Volts                  |  | 230/460//190/380   |              | Start Configuration       |                                          | direct on line        |            |        |
| Full Load Amps         |  | 13.2/6.6//10.2/5.1 |              | Breakdown Torque          |                                          | 53.9 LB-FT            |            |        |
| R.P.M.                 |  | 1750//1450         |              | Pull-up Torque            |                                          | 22.4 LB-FT            |            |        |
| Hz                     |  | 60//50             | Phase        | 3                         | Locked-rotor Torque                      |                       | 31.8 LB-FT |        |
| NEMA Design Code       |  | B                  |              | KVA Code                  | J                                        | Starting Current      |            | 46.6 A |
| Service Factor (S.F.)  |  | 1                  |              | No-load Current           |                                          | 3.02 A                |            |        |
| NEMA Nom. Eff.         |  | 89.5               | Power Factor |                           | 79                                       | Line-line Res. @ 25°C |            | 2.63 Ω |
| Rating - Duty          |  | 40C AMB-CONT       |              | Temp. Rise @ Rated Load   |                                          | 53°C                  |            |        |
|                        |  |                    |              | Locked-rotor Power Factor |                                          | 40.5                  |            |        |
|                        |  |                    |              | Rotor inertia             |                                          | 0.391 LB-FT2          |            |        |

**Load Characteristics 460 V, 60 Hz, 5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 41   | 63   | 75   | 81   | 84   | 85   |
| Efficiency      | 85.1 | 89.7 | 90.3 | 89.8 | 88.4 | 86.8 |
| Speed           | 1789 | 1777 | 1765 | 1752 | 1737 | 1721 |
| Line amperes    | 3.35 | 4.14 | 5.21 | 6.45 | 7.91 | 9.47 |

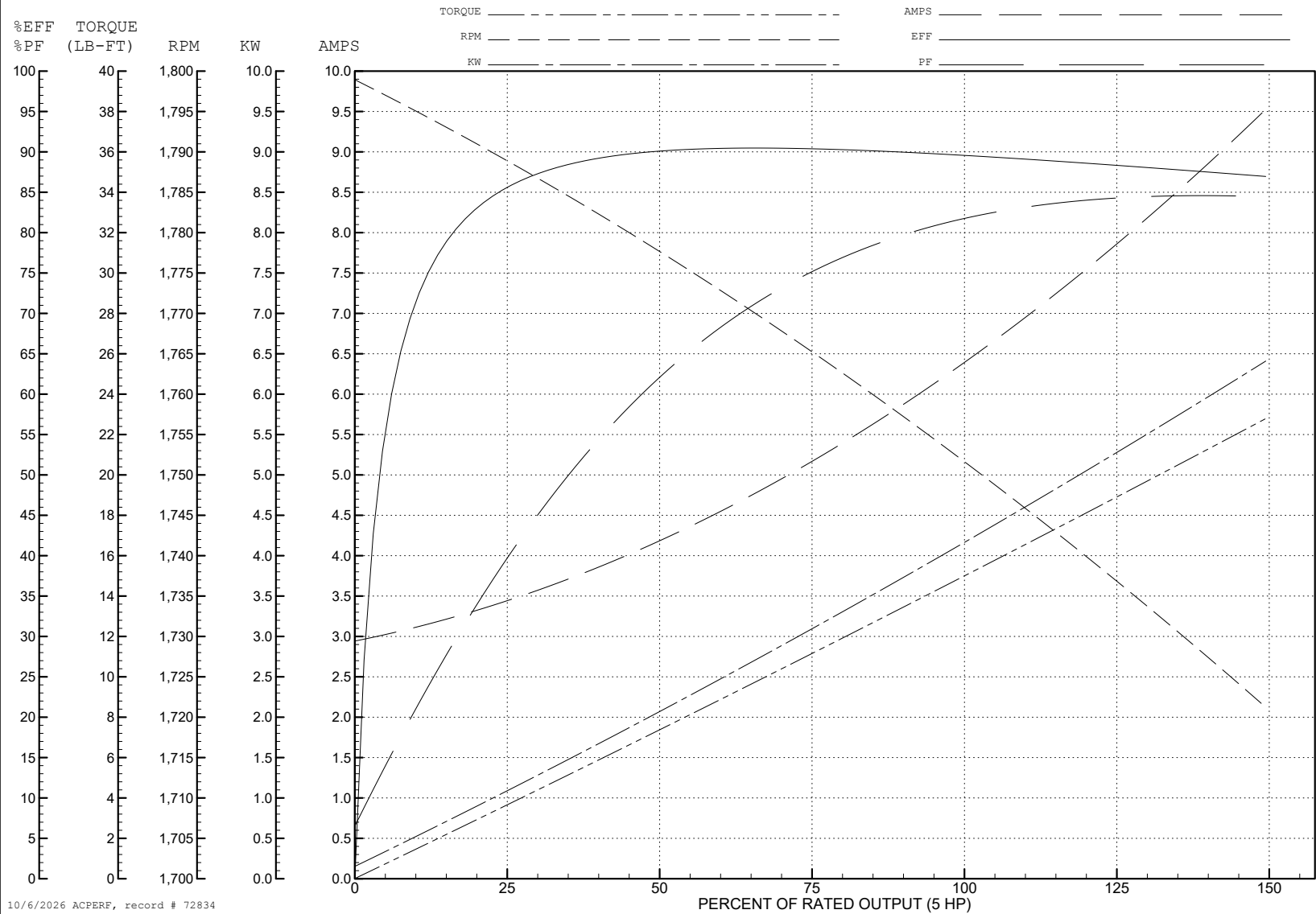
ABB Motors and Mechanical Inc.

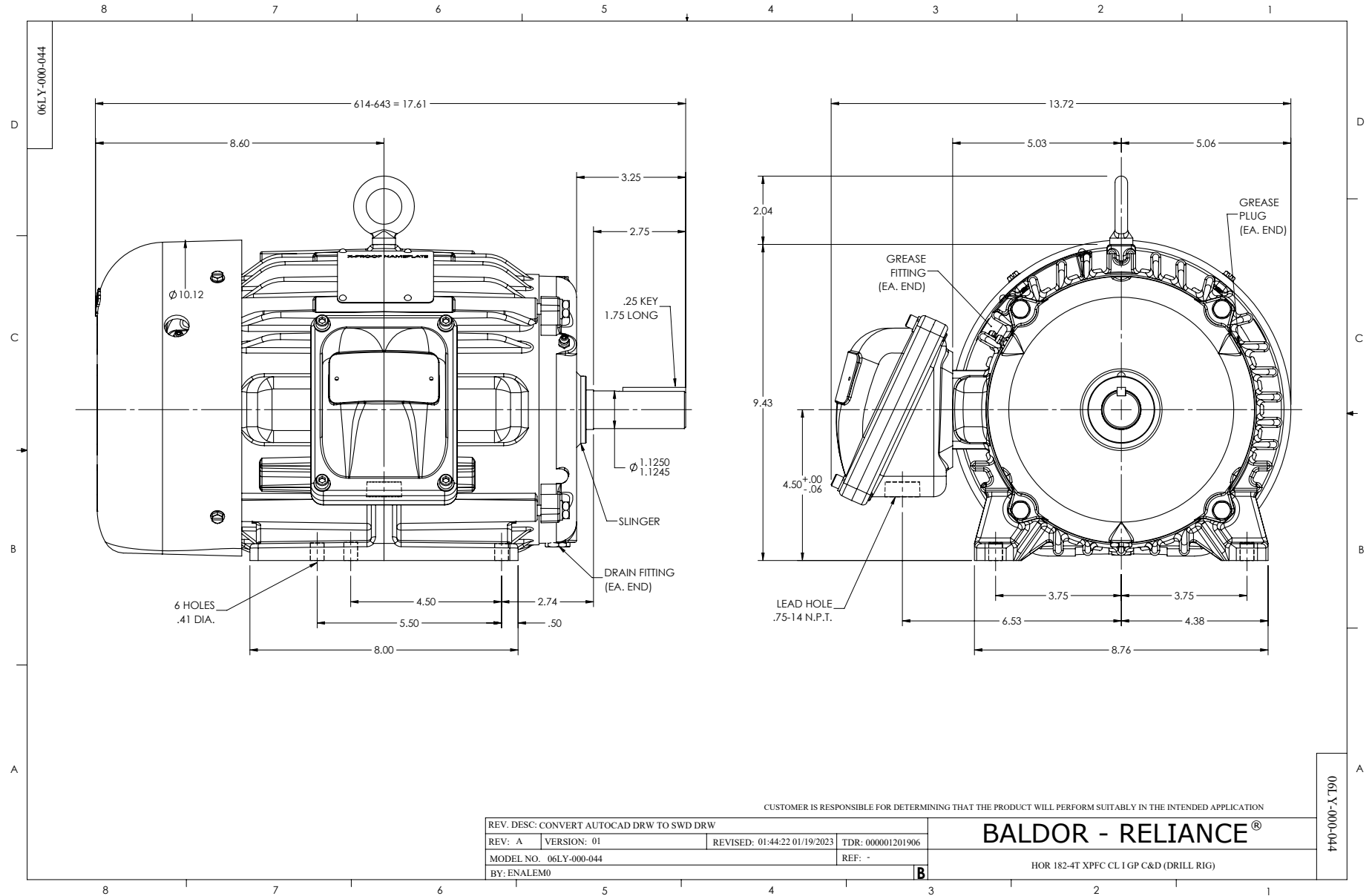
WINDING # 06WGY545

Typical performance - not guaranteed values.

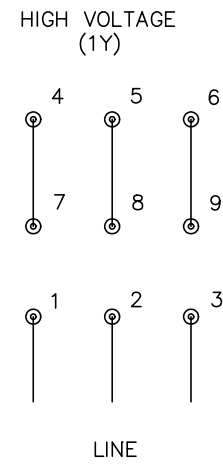
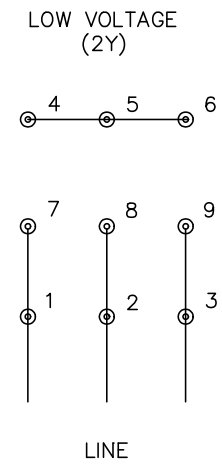
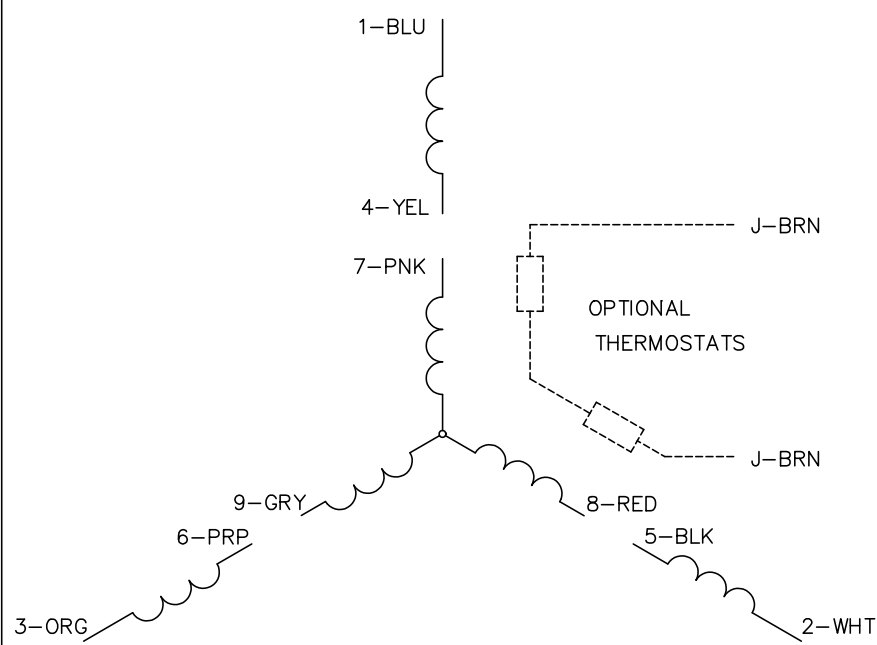
5 HP 3 PH 60 HZ 1752 RPM 460 V 0642M

TORQUES (LB-FT): PO=53.9 PU=22.4 LR=31.8 LRA=46.6





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 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005