ABB BALDOR RELIANCE

# Customer information packet

## CESSWDM3710T

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, 3740M, TEFC
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 213TC |
| **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** | 7.500 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| | 230.0 V @ 60 HZ |
| **Agency Approvals** | CSA EEV |
| | NEMA PREMIUM |
| | NEMA_PREMIUM |
| | UR |
| **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 |
| **Current @ Voltage** | 19.000 A @ 230.0 V |
| | 9.500 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 Face Code** | Standard |
| **Front Shaft Indicator** | None |

## Part Detail

| | |
|---|---|
| **Revision** | AD |
| **Type** | AC |
| **Mech. spec.** | 37J639 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 37WGT864 |
| **Layout** | 37LYJ639 |
| **Eff. date** | 12-18-2024 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#14 |
| **Proprietary** | False |
| **Created date** | 07-20-2006 |

| | |
|---|---|
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 9.5 a |
| **Insulation Class** | F |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | J |
| **Lifting Lugs** | Standard Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | 9 @ 14 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3740M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 20.07 IN |
| **Power Factor** | 81 |
| **Product Family** | Wash Down All Stainless Steel |
| **Pulley End Bearing Type** | Sealed Bearing |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 1.375 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1770 rpm |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | None |
| **Vibration Sensor Indicator** | No Vibration Sensor |

| | |
|---|---|
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

**Nameplate**

| NP1953C01 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | CESSWDM3710T | | | | | | | |
| **SPEC.** | 37J639T864G1 | | | | | | | |
| **HP** | 7.5 | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | |
| **AMP** | 19/9.5 | | | | | | | |
| **RPM** | 1770 | | | | | | | |
| **FRAME** | 213TC | **HZ** | 60 | | | **PH** | 3 | |
| **SER.F.** | 1.15 | **CODE** | J | **DES** | A | **CLASS** | F | |
| **NEMA-NOM-EFF** | 91.7 | **PF** | 81 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | |
| **CC** | 010A | **USABLE AT 208V** | | | | N/A | | |
| **DE** | 6307 | **ODE** | 6206 | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | |
| | 3:1 CT/10:1 VT | | | | | | | |

**AC Induction Motor Performance Data**
Record # 17300
Typical performance - not guaranteed values

| **Winding:** 37WGT864-R001 | **Type:** 3740M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|
| **Rated Output (HP)** | | 7.5 | **Full Load Torque** | 22.36 LB-FT |
| **Volts** | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | 19.0/9.5 | **Breakdown Torque** | 73.15 LB-FT |
| **R.P.M.** | | 1770 | **Pull-up Torque** | 39.79 LB-FT |
| **Hz** | 60 **Phase** | 3 | **Locked-rotor Torque** | 47.81 LB-FT |
| **NEMA Design Code** | A **KVA Code** | J | **Starting Current** | 74.95 A |
| **Service Factor (S.F.)** | | 1.15 | **No-load Current** | 4.4 A |
| **NEMA Nom. Eff.** | 91.7 **Power Factor** | 81 | **Line-line Res. @ 25ºC** | 1.27 Ω |
| **Rating - Duty** | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 69°C |
| **S.F. Amps** | | | **Temp. Rise @ S.F. Load** | 85°C |
| | | | **Locked-rotor Power Factor** | 36.4 |
| | | | **Rotor inertia** | 0.984 LB-FT2 |

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

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 42 | 64 | 75 | 81 | 83 | 85 | 82 |
| **Efficiency** | 86.6 | 90.9 | 92 | 91.9 | 90.8 | 89.7 | 91.4 |
| **Speed** | 1793 | 1786 | 1779 | 1771 | 1761 | 1751 | 1764 |
| **Line amperes** | 4.88 | 6.02 | 7.67 | 9.52 | 11.62 | 13.91 | 10.7 |

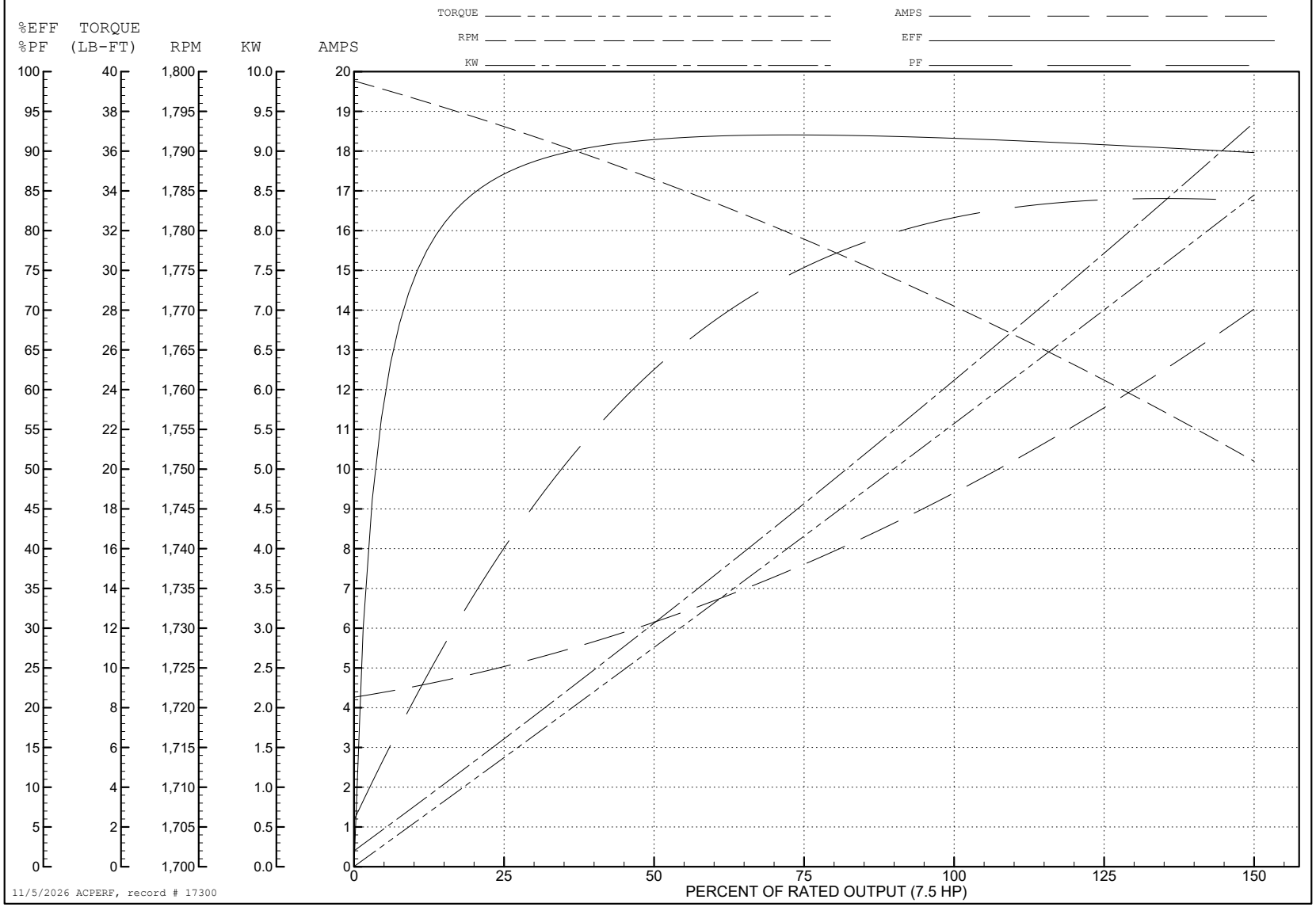
ABB Motors and Mechanical Inc.

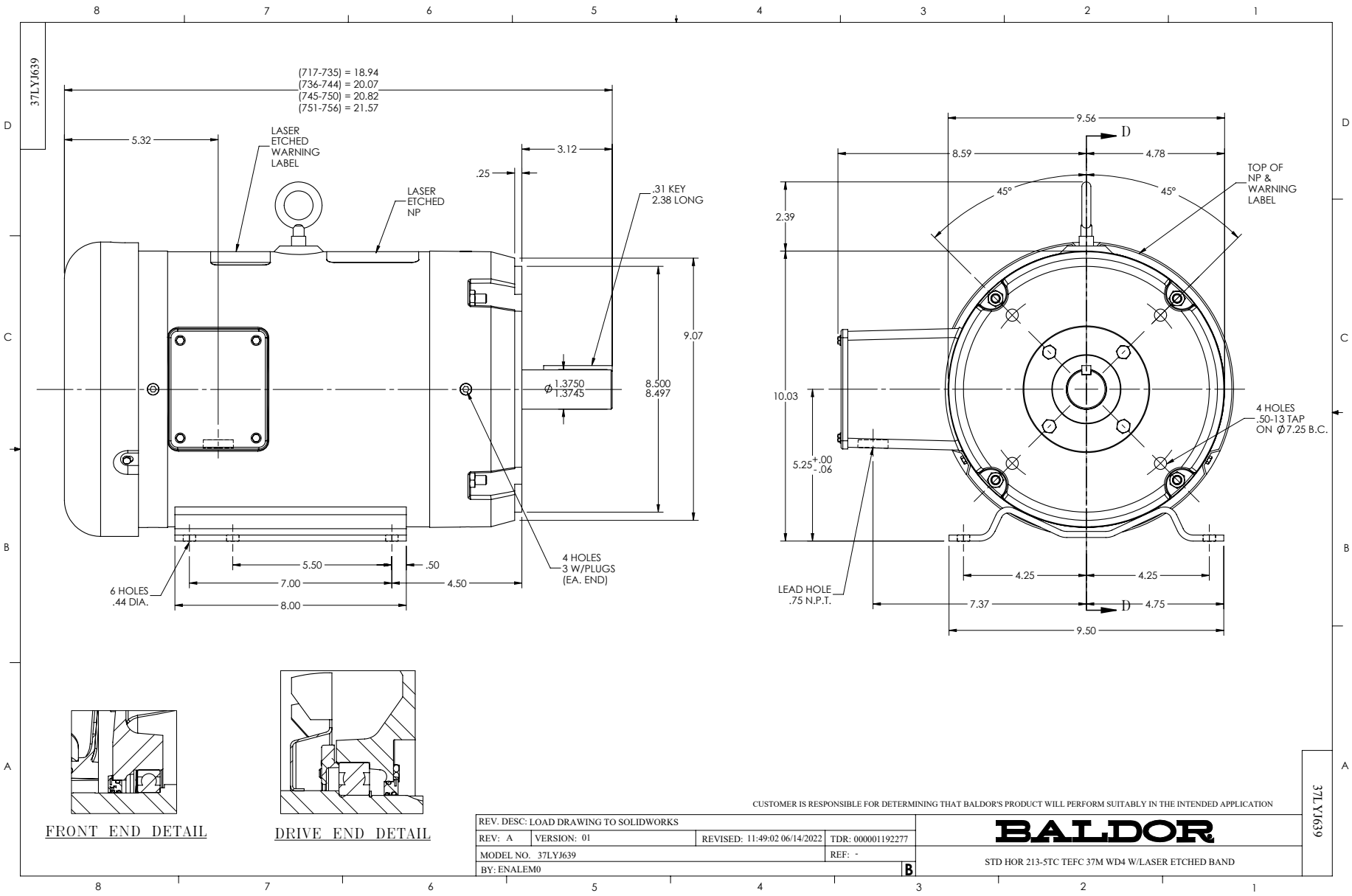
WINDING # 37WGT864

7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3740M

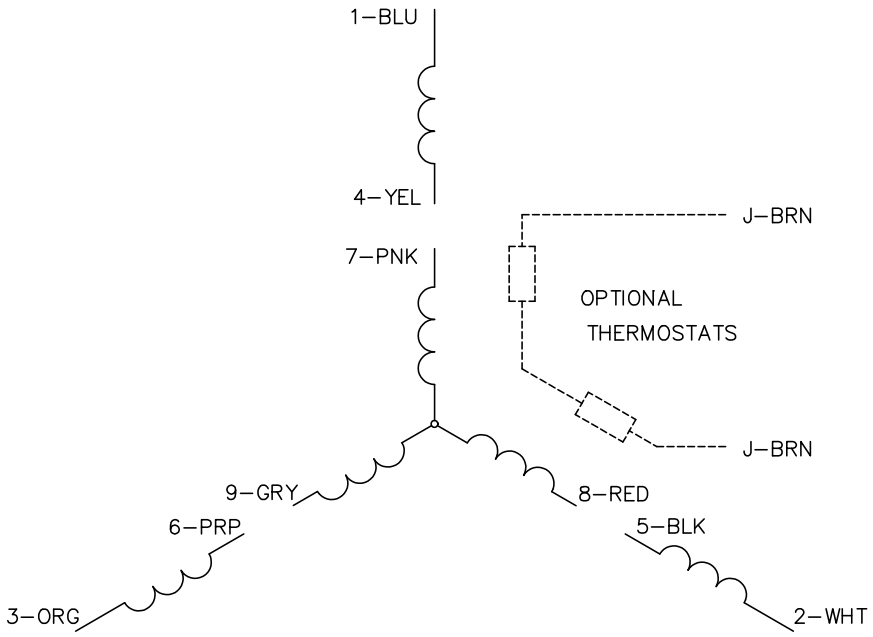
Typical performance - not guaranteed values.

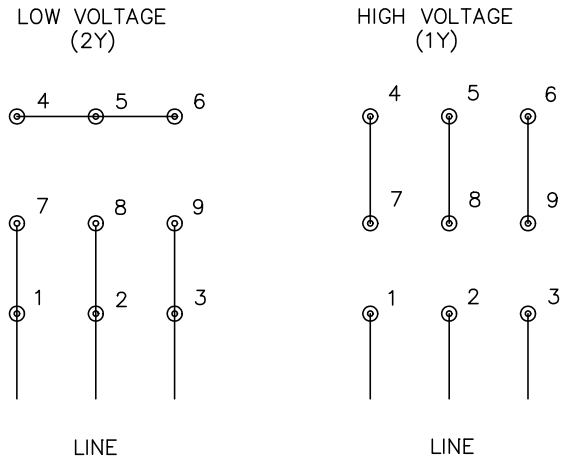
TORQUES(LB-FT): PO=73.15 PU=39.79 LR=47.81 LRA=74.95




37LYJ639
(717-735) = 18.94
(736-744) = 20.07
(745-750) = 20.82
(751-756) = 21.57
5.32
LASER ETCHED WARNING LABEL
LASER ETCHED NP
3.12
.25
.31 KEY 2.38 LONG
9.07
8.500
8.497
Ø1.3750
1.3745
4 HOLES 3 W/PLUGS (EA. END)
6 HOLES .44 DIA.
5.50
.50
7.00
4.50
8.00
9.56
8.59
4.78
45°
45°
TOP OF NP & WARNING LABEL
2.39
10.03
4 HOLES .50-13 TAP ON Ø7.25 B.C.
5.25 +.00 -.06
LEAD HOLE .75 N.P.T.
4.25
4.25
7.37
4.75
9.50
FRONT END DETAIL
DRIVE END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING TO SOLIDWORKS
REV: A VERSION: 01 REVISED: 11:49:02 06/14/2022 TDR: 000001192277
MODEL NO. 37LYJ639 REF: -
BY: ENALEM0 B
BALDOR
STD HOR 213-5TC TEFC 37M WD4 W/LASER ETCHED BAND
37LYJ639

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.

CD0005

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| CD0005 | | FILE: AAA00005140 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS |