ABB BALDOR RELIANCE

# Customer information packet

VESSFWDM3546

1HP, 1770RPM, 3PH, 60HZ, 56C, 3520M, TEFC, F1, N
Class - None
Division - Not Applicable

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9/7/2026 9:47:37 AM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 56C |
| **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** | 1.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 460.0 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** | No Mounting |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Blower** | None |
| **Current @ Voltage** | 3.200 A @ 230.0 V |
| | 3.200 A @ 208.0 V |
| | 1.600 A @ 460.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 85.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Shaft Indicator** | None |

## Part Detail

| | |
|---|---|
| **Revision** | G |
| **Type** | AC |
| **Mech. spec.** | 35W179 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGG004 |
| **Layout** | 35LYW179 |
| **Eff. date** | 08-19-2025 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 Y |
| **Proprietary** | False |
| **Created date** | 01-10-2022 |

| | |
|---|---|
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 1.6 a |
| **Insulation Class** | F |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | N |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3520M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 12.34 IN |
| **Power Factor** | 69 |
| **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 |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 0.625 IN |
| **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**

| NP1953A01 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | VESSFWDM3546 | | | | | | | |
| **SPEC.** | 35W179G004G1 | | | | | | | |
| **HP** | 1 | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | |
| **AMP** | 3.2/1.6 | | | | | | | |
| **RPM** | 1770 | | | | | | | |
| **FRAME** | 56C | **HZ** | 60 | | | **PH** | 3 | |
| **SER.F.** | 1.15 | **CODE** | N | **DES** | B | **CLASS** | F | |
| **NEMA-NOM-EFF** | 85.5 | **PF** | 69 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | |
| **CC** | 010A | | | | | | | |
| **DE** | 6205 | **ODE** | 6203 | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | |
| | 10:1CT 20:1VT | | | | | | | |

**AC Induction Motor Performance Data**
Record # 91625
Typical performance - not guaranteed values

| **Winding:** 35WGG004-R001 | **Type:** 3520M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 1 | **Full Load Torque** | 2.982 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 3.2/1.6 | **Breakdown Torque** | 14.6 LB-FT |
| **R.P.M.** | | | 1770 | **Pull-up Torque** | 7.57 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 9.17 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | N | **Starting Current** | 14.6 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 1.2 A |
| **NEMA Nom. Eff.** | 85.5 | **Power Factor** | 69 | **Line-line Res. @ 25ºC** | 16.049 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 36°C |
| **S.F. Amps** | | | 3.4/1.7 | **Temp. Rise @ S.F. Load** | 41°C |
| | | | | **Locked-rotor Power Factor** | 61.549 |
| | | | | **Rotor inertia** | 0.144 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 29 | 45 | 58 | 67 | 73 | 78 | 71 |
| **Efficiency** | 71.1 | 81.2 | 84.7 | 85.8 | 86 | 85.6 | 85.9 |
| **Speed** | 1794 | 1787.3 | 1781.1 | 1774.3 | 1767.4 | 1759.4 | 1770 |
| **Line amperes** | 1.22 | 1.31 | 1.46 | 1.64 | 1.86 | 2.11 | 1.77 |

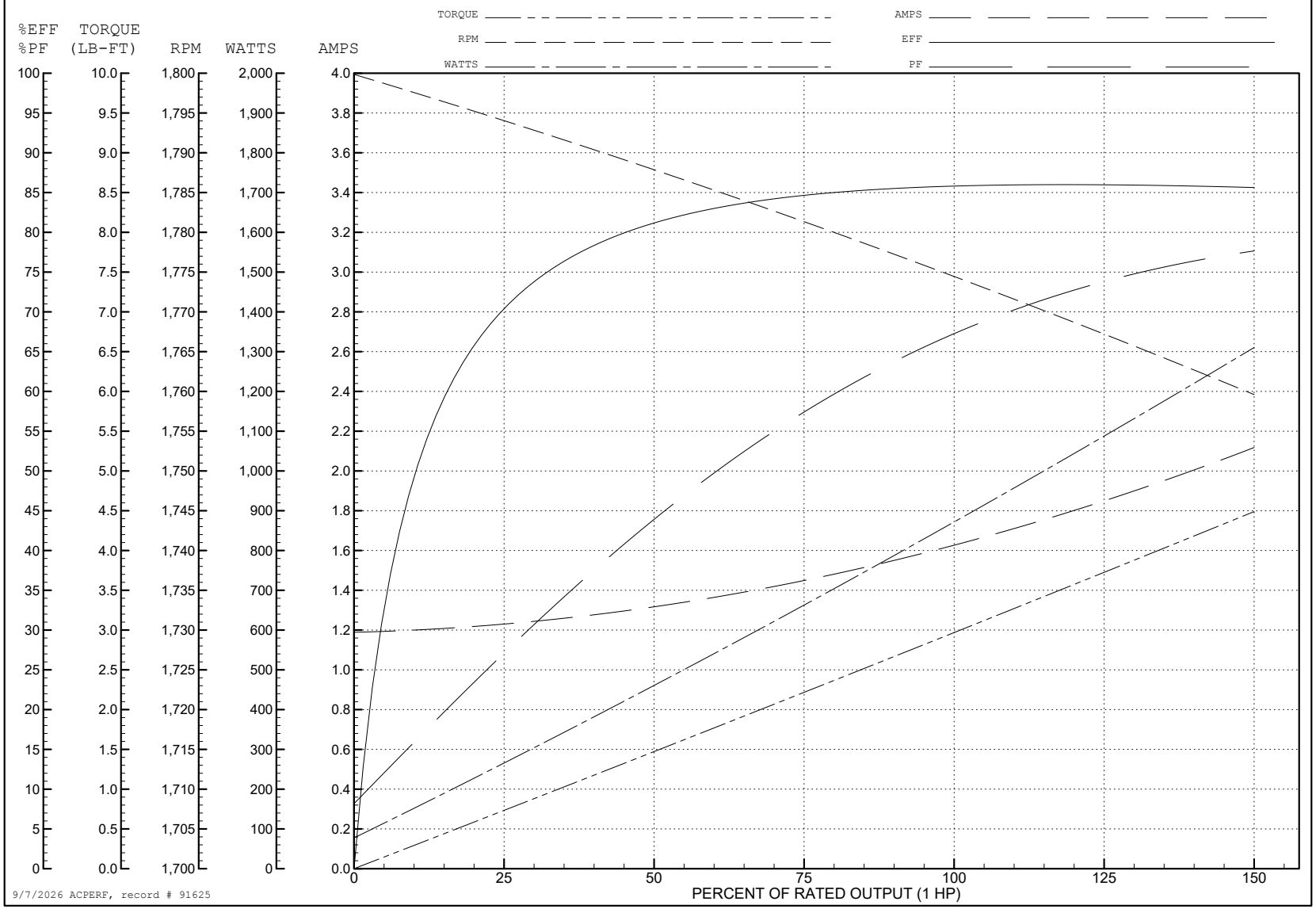
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

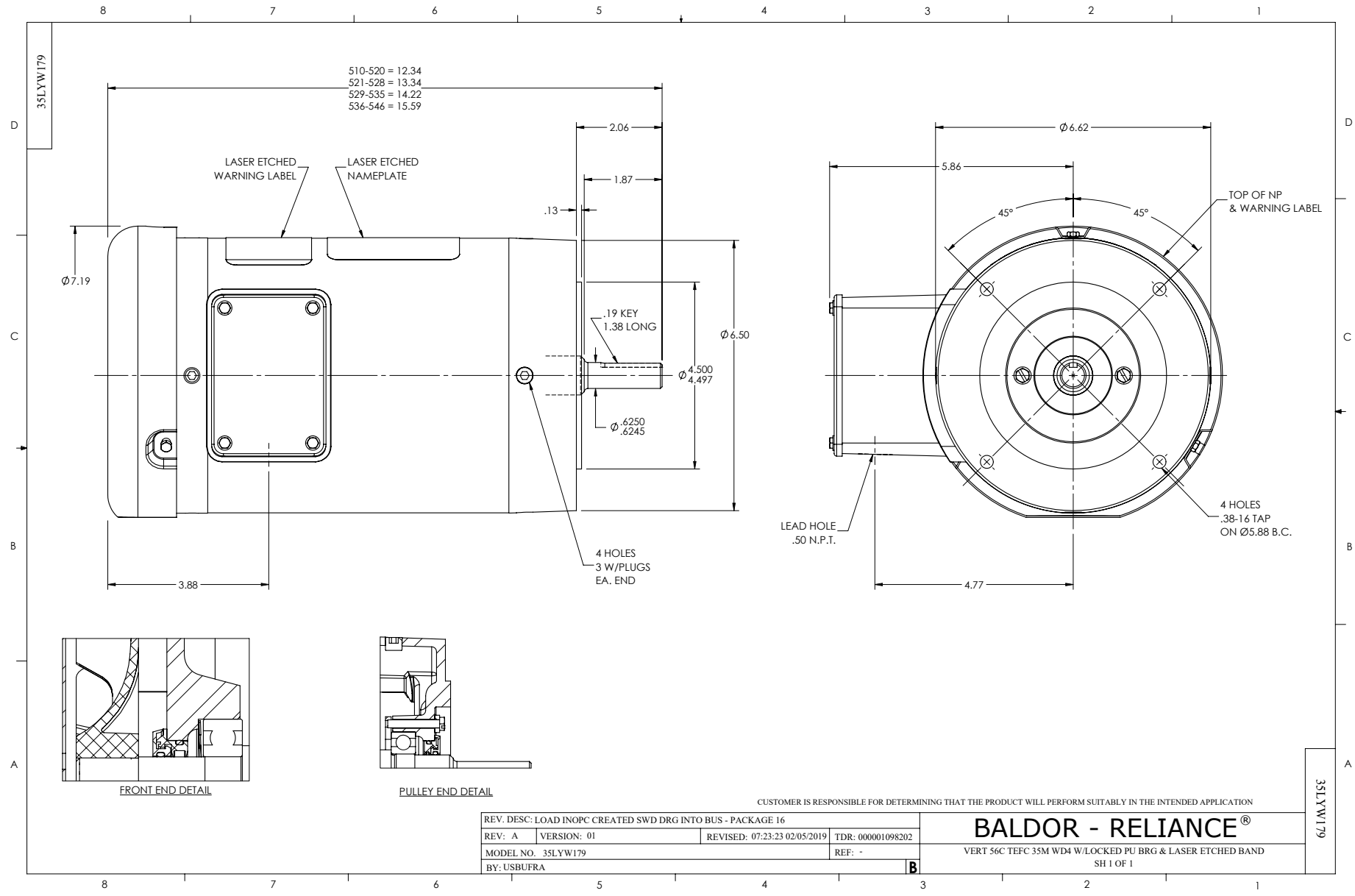
1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

Typical performance - not guaranteed values.

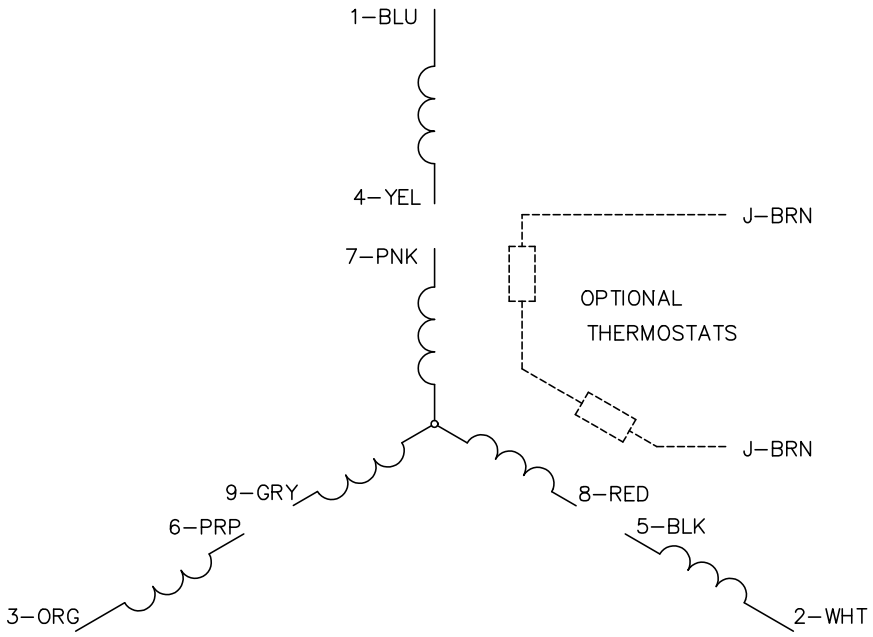
TORQUES(LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6

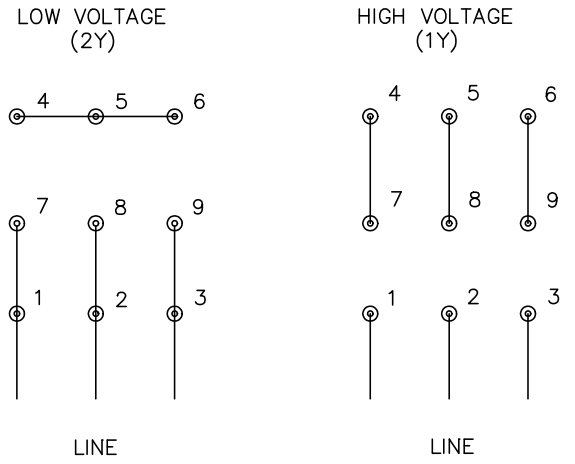



9/7/2026 ACPERF, record # 91625


35LYW179
510-520 = 12.34
521-528 = 13.34
529-535 = 14.22
536-546 = 15.59
2.06
1.87
.13
LASER ETCHED WARNING LABEL
LASER ETCHED NAMEPLATE
Ø7.19
.19 KEY
1.38 LONG
Ø6.50
Ø4.500
4.497
Ø.6250
.6245
4 HOLES
3 W/PLUGS
EA. END
3.88
Ø6.62
5.86
45°
45°
TOP OF NP
& WARNING LABEL
LEAD HOLE
.50 N.P.T.
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
4.77
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 16
REV: A
VERSION: 01
REVISED: 07:23:23 02/05/2019
TDR: 000001098202
MODEL NO. 35LYW179
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
VERT 56C TEFC 35M WD4 W/LOCKED PU BRG & LASER ETCHED BAND
SH 1 OF 1
35LYW179

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 |