# Customer information packet

## VFSWDM3545-E

1HP, 3450RPM, 3PH, 60HZ, 56C, 3520M, TENV, F1, N
Class - None
Division - Not Applicable

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11/5/2026 11:30:25 AM

## Specifications

| | |
|---|---|
| **Enclosure** | TENV |
| **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** | 3600 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 460.0 V @ 60 HZ |
| **Agency Approvals** | UR |
| | CSA |
| **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** | 1.400 A @ 460.0 V |
| | 2.800 A @ 230.0 V |
| | 2.900 A @ 208.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 82.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Face Code** | Standard |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |

## Part Detail

| | |
|---|---|
| **Revision** | P |
| **Type** | AC |
| **Mech. spec.** | 35E4656 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGL314 |
| **Layout** | 35LYE4656 |
| **Eff. date** | 08-14-2023 |
| **CD Diagram** | CD0005 |
| **Poles** | 02 |
| **Leads** | 9#18,0#,0#,0# Y |
| **Proprietary** | False |
| **Created date** | 06-20-2017 |

| | |
|---|---|
| **High Voltage Full Load Amps** | 1.4 a |
| **Insulation Class** | H |
| **Inverter Code** | Not Inverter |
| **KVA Code** | N |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Finish** | UNPAINTED |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | @ 0 AWG<br>9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3520M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 2 |
| **Overall Length** | 11.78 IN |
| **Power Factor** | 82 |
| **Product Family** | WD All SS Encapsulated |
| **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** | 0.625 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 3450 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**

| NP4427AAA01 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT #** | VFSWDM3545-E | | | **WT** | 37 | **LBS** | | | | | | |
| **SPEC** | 35E4656L314G1 | | | **ENCL** | TENV | | | | | | | |
| **SER #** | | | | **CC** | 010A | **IP** | 69 | | | | | |
| **HP** | 1 | | | **MAG CUR** | 1.44/.72 | | | | | | | |
| **VOLTS** | 230/460 | | | | | **NEMA NOM. EFF** | 82.5 | | | | | |
| **AMPS** | 2.8/1.4 | | | | | **PF** | 82 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | | |
| **RPM** | 3450 | | | | **MAX RPM** | 5400 | | | | | | |
| **FRAME** | 56C | **HZ** | 60 | **CODE** | N | **CLASS** | H | | | | | |
| **SER.F.** | 1.15 | **SF AMP** | | | | **PH** | 3 | **DES** | B | | | |
| **DE** | 6205 | | | **ODE** | 6205 | | | | | | | |
| **LUBRICATION** | POLYREX EM | | | | | | | | | | | |
| **ID LOGO** | **INVERTER TYPE** | | | **VPWM** | | **CHP** | 60 | **TO** | 90 | 1.5:1 | | |
| **ID LOGO** | **WK2** | 0.06 | **CT** | 15 | **TO** | 60 | 4:1 | | | | | |
| **ID LOGO** | **SL HZ** | 2.5 | **VT** | 3 | **TO** | 60 | 20:1 | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | **QR** | | | | | | |
| **YR** | | | | | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 63641
Typical performance - not guaranteed values

| **Winding:** 35WGL314-R002 | **Type:** 3520M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 1 | **Full Load Torque** | 1.52 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 2.8/1.4 | **Breakdown Torque** | 8.51 LB-FT |
| **R.P.M.** | | | 3450 | **Pull-up Torque** | 6.16 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 8.01 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | N | **Starting Current** | 15.1 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 0.722 A |
| **NEMA Nom. Eff.** | 82.5 | **Power Factor** | 82 | **Line-line Res. @ 25ºC** | 10.85 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 91°C |
| **S.F. Amps** | | | 3.2/1.6 | **Temp. Rise @ S.F. Load** | 105°C |

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

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 44 | 64 | 76 | 82 | 86 | 88 | 84 |
| **Efficiency** | 67.8 | 79 | 82.4 | 83.4 | 83.4 | 82.5 | 83.4 |
| **Speed** | 3566.5 | 3536.9 | 3507.4 | 3477.1 | 3442.7 | 3405 | 3456 |
| **Line amperes** | 0.791 | 0.953 | 1.15 | 1.38 | 1.63 | 1.93 | 1.53 |

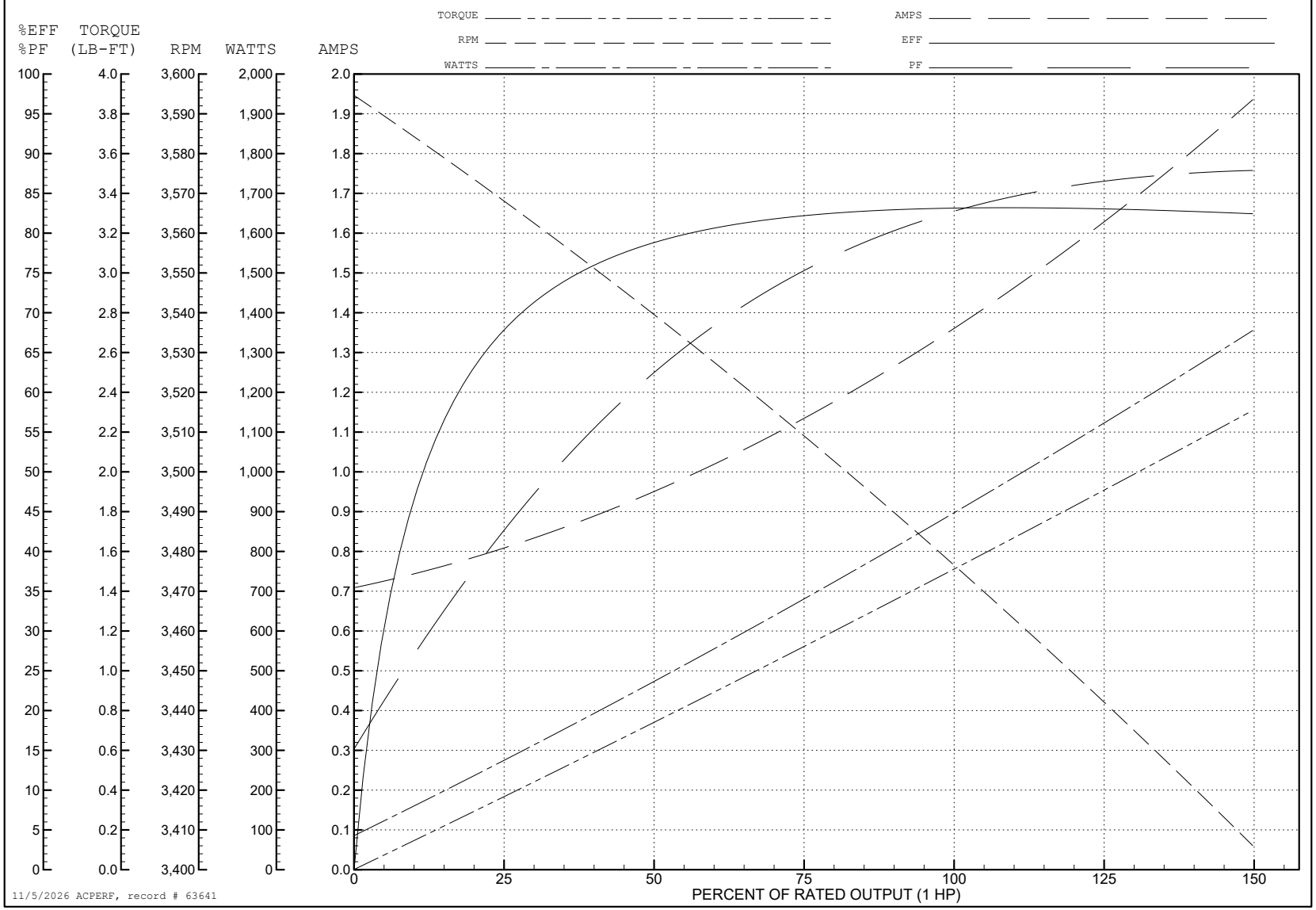
ABB Motors and Mechanical Inc.

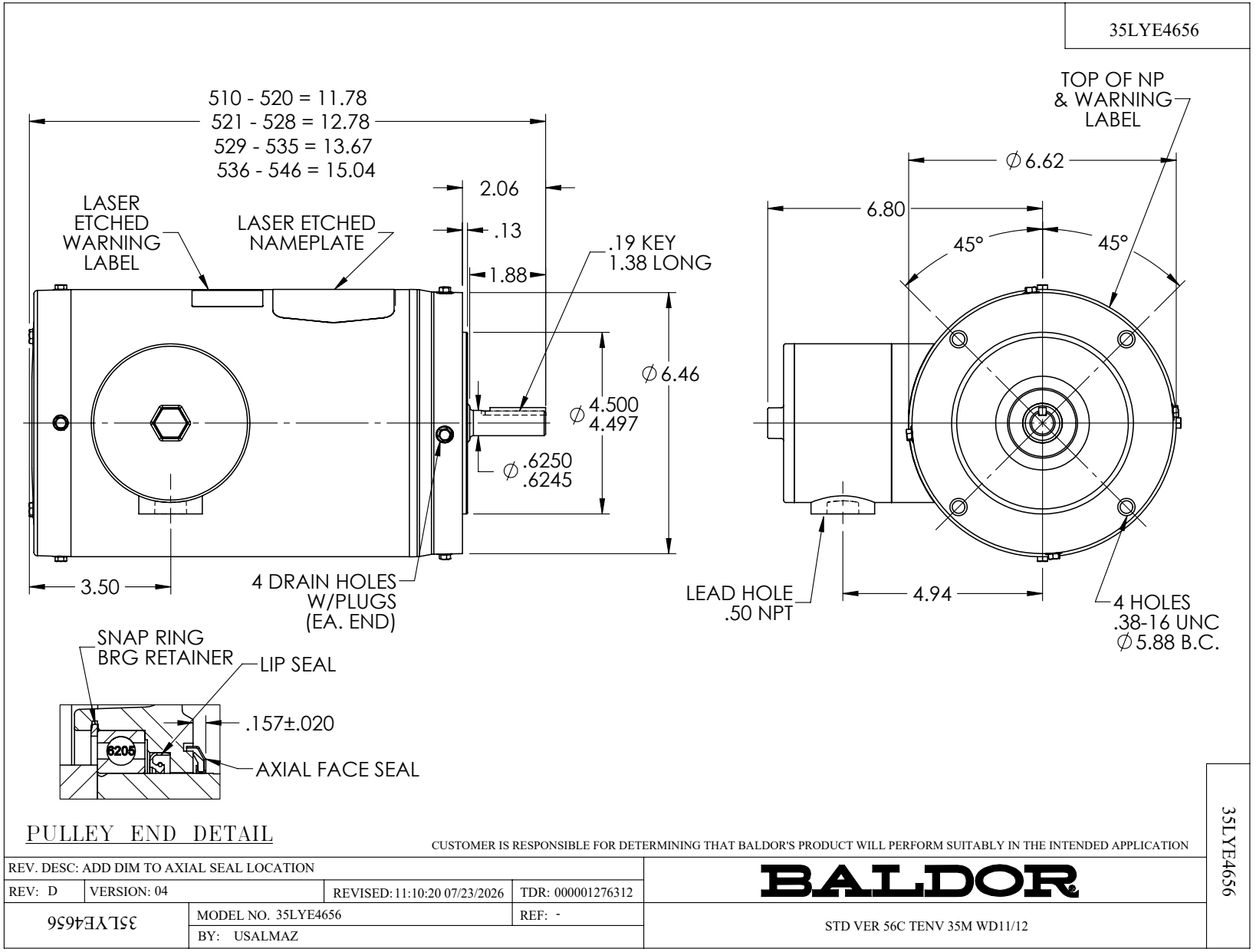
WINDING # 35WGL314

1 HP 3 PH 60 HZ 3450 RPM 460 V 3520M

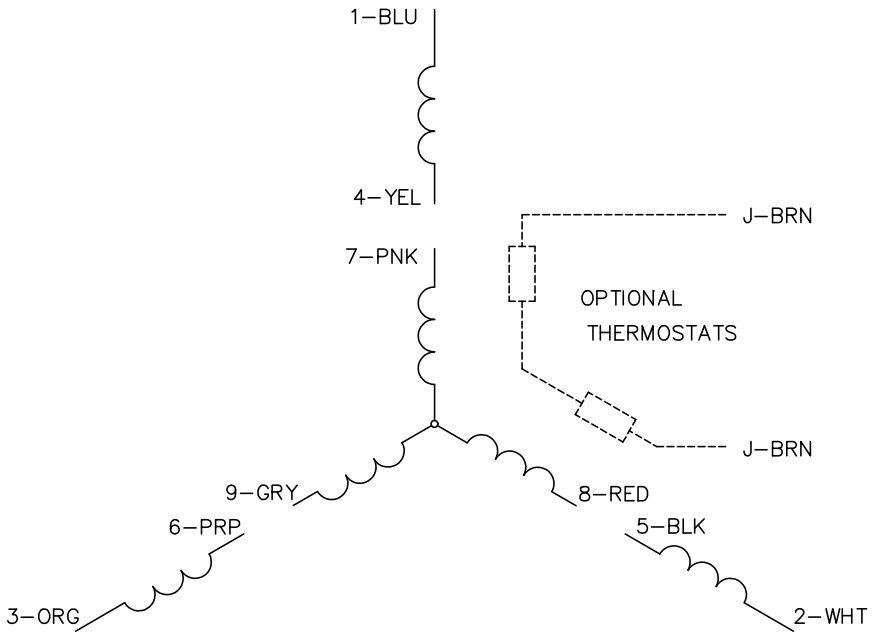
Typical performance - not guaranteed values.

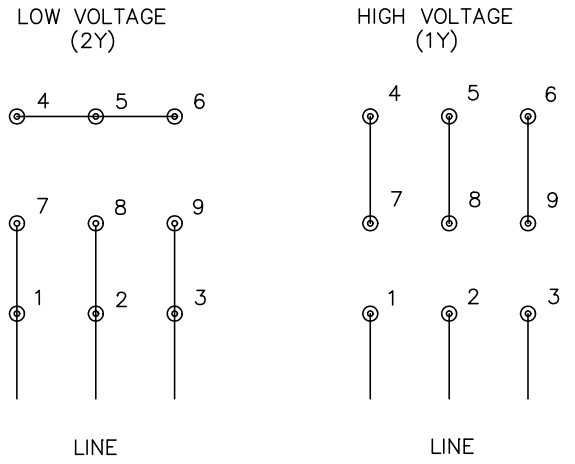
TORQUES(LB-FT): PO=8.51 PU=6.16 LR=8.01 LRA=15.1




35LYE4656
510 - 520 = 11.78
521 - 528 = 12.78
529 - 535 = 13.67
536 - 546 = 15.04
2.06
.13
1.88
LASER ETCHED WARNING LABEL
LASER ETCHED NAMEPLATE
.19 KEY 1.38 LONG
∅6.46
∅4.500 4.497
∅.6250 .6245
3.50
4 DRAIN HOLES W/PLUGS (EA. END)
TOP OF NP & WARNING LABEL
∅6.62
6.80
45°
45°
LEAD HOLE .50 NPT
4.94
4 HOLES .38-16 UNC ∅5.88 B.C.
SNAP RING BRG RETAINER
LIP SEAL
.157±.020
6206
AXIAL FACE SEAL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD DIM TO AXIAL SEAL LOCATION
REV: D
VERSION: 04
REVISED: 11:10:20 07/23/2026
TDR: 000001276312
BALDOR
35LYE4656
MODEL NO. 35LYE4656
REF: -
BY: USALMAZ
STD VER 56C TENV 35M WD11/12
35LYE4656

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 |