ABB BALDOR RELIANCE

# Customer information packet

## VFSWDNM3558-E

2HP, 1760RPM, 3PH, 60HZ, 56C, 3546M, TENV, F1, N
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/5/2026 5:37:26 PM

## 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** | 2.000 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 |
| | CURUSEEV |
| | NEMA PREMIUM |
| | NEMA_PREMIUM |
| | WEEE |
| **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** | 5.600 A @ 208.0 V |
| | 5.300 A @ 230.0 V |
| | 2.650 A @ 460.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 86.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |

## Part Detail

| | |
|---|---|
| **Revision** | E |
| **Type** | AC |
| **Mech. spec.** | 35E4656 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGZ811 |
| **Layout** | 35LYE4656 |
| **Eff. date** | 10-01-2024 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 03-11-2022 |

| | |
|---|---|
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 2.7 a |
| **Insulation Class** | H |
| **Inverter Code** | Inverter Duty |
| **KVA Code** | L |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Max Speed** | 2700 rpm |
| **Motor Finish** | UNPAINTED |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3546M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 15.04 IN |
| **Power Factor** | 80 |
| **Product Family** | WD All SS Encapsulated |
| **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** | 1760 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 #** | VFSWDNM3558-E | | | **WT** | 63 | **LBS** | | | | | | |
| **SPEC** | 35E4656Z811G1 | | | **ENCL** | TENV | | | | | | | |
| **SER #** | | | | **CC** | 010A | **IP** | 69 | | | | | |
| **HP** | 2 | | | **MAG CUR** | 2.7/1.35 | | | | | | | |
| **VOLTS** | 230/460 | | | | | **NEMA NOM. EFF** | 86.5 | | | | | |
| **AMPS** | 5.3/2.65 | | | | | **PF** | 80 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | | |
| **RPM** | 1760 | | | | **MAX RPM** | 2700 | | | | | | |
| **FRAME** | 56C | **HZ** | 60 | **CODE** | L | **CLASS** | H | | | | | |
| **SER.F.** | 1.15 | **SF AMP** | 6/3 | | | **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** | 0.332 | **CT** | 15 | **TO** | 60 | | 4:1 | | | | |
| **ID LOGO** | **SL HZ** | 1.33 | **VT** | 3 | **TO** | 60 | | 20:1 | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | **QR** | | | | | | |
| **YR** | | | | | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 87105
Preliminary Data Sheet

| **Winding:** 35WGZ811-R001 | **Type:** 3546M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 2 | **Full Load Torque** | 6 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 5.3/2.65 | **Breakdown Torque** | 27.78 LB-FT |
| **R.P.M.** | | | 1760 | **Pull-up Torque** | 16.81 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 21.79 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | L | **Starting Current** | 25.07 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 1.36 A |
| **NEMA Nom. Eff.** | 86.5 | **Power Factor** | 80 | **Line-line Res. @ 25ºC** | 7.86 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 100°C |
| **S.F. Amps** | | | 6/3 | **Temp. Rise @ S.F. Load** | 122°C |
| | | | | **Locked-rotor Power Factor** | 51.7 |
| | | | | **Rotor inertia** | 0.332 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 2 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 39 | 61 | 73 | 80 | 85 | 87 | 83 |
| **Efficiency** | 83.3 | 88.6 | 89.2 | 88.7 | 87.5 | 86 | 88 |
| **Speed** | 1790 | 1781 | 1771 | 1760 | 1748 | 1735 | 1753 |
| **Line amperes** | 1.5 | 1.78 | 2.17 | 2.65 | 3.18 | 3.77 | 2.97 |

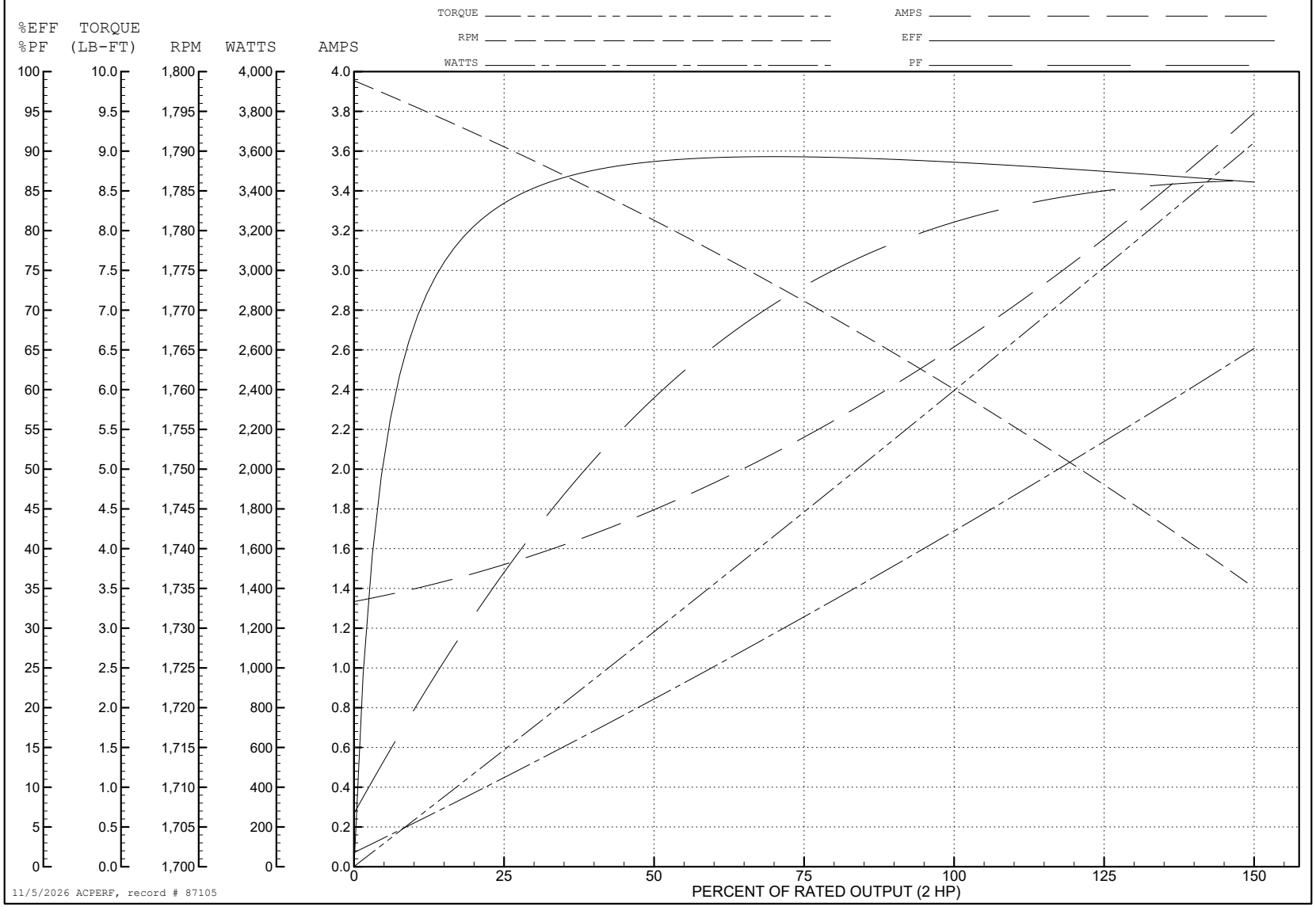
ABB Motors and Mechanical Inc.

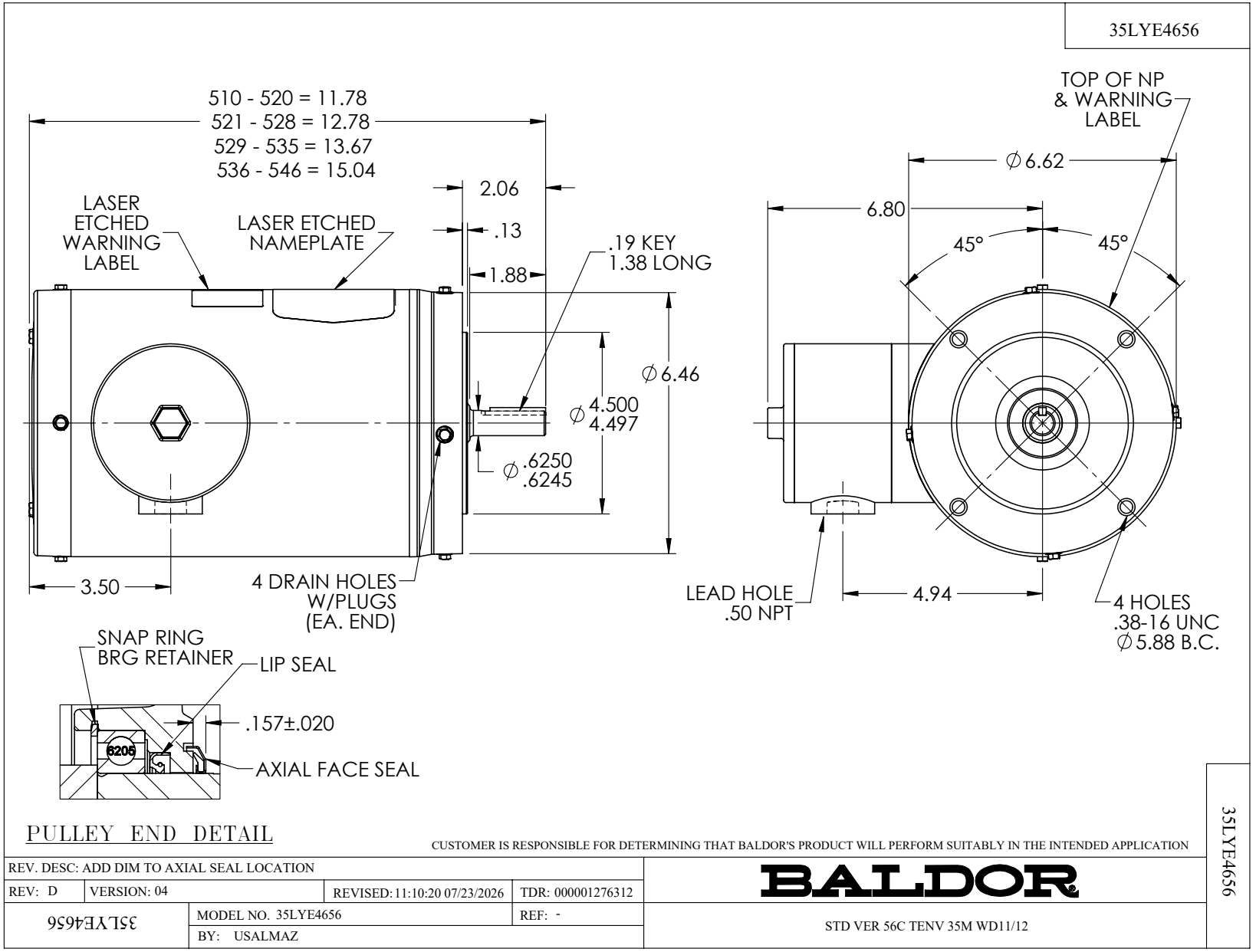
WINDING # 35WGZ811

2 HP 3 PH 60 HZ 1760 RPM 460 V 3546M

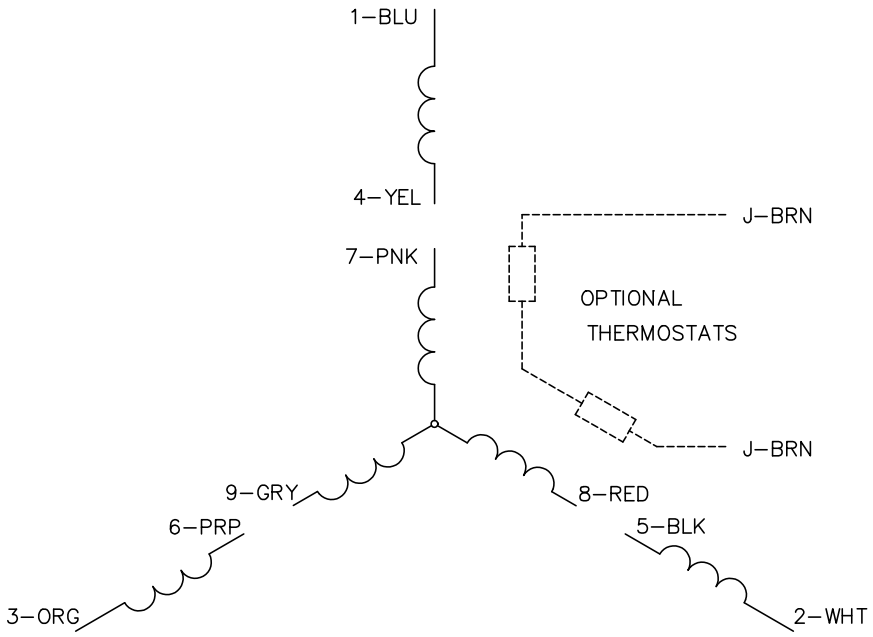
Typical performance - not guaranteed values.

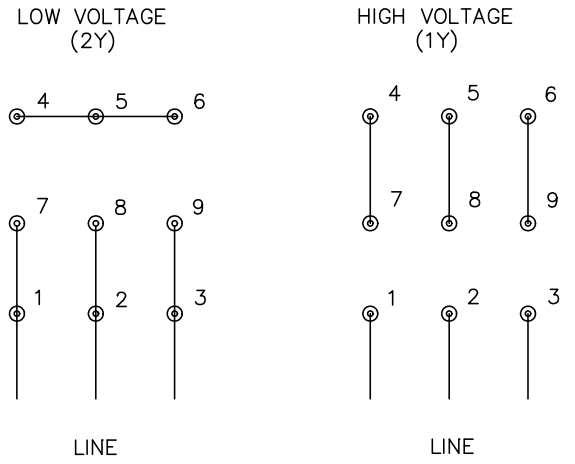
TORQUES(LB-FT): PO=27.78 PU=16.81 LR=21.79 LRA=25.07




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 |