ABB BALDOR RELIANCE

# Customer information packet

## VNM3541

.75HP, 3480RPM, 3PH, 60HZ, 56C, 3520M, TENV, F1
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TENV |
| **Frame** | 56C |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | .750 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 3600 RPM @ 60 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| | 230.0 V @ 60 HZ |
| | 208.0 V @ 60 HZ |
| **Agency Approvals** | C UR US |
| | CURUS |
| **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** | 2.200 A @ 208.0 V |
| | 2.000 A @ 230.0 V |
| | 1.000 A @ 460.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 84.0 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Face Code** | Standard |
| **Front Shaft Indicator** | None |

## Part Detail

| | |
|---|---|
| **Revision** | Y |
| **Type** | AC |
| **Mech. spec.** | 35E010 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGR090 |
| **Layout** | 35LYE010 |
| **Eff. date** | 01-05-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 02 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 01-08-2008 |

| | |
|---|---|
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 1.0 a |
| **Insulation Class** | H |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | N |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Ko Box |
| **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** | 2 |
| **Overall Length** | 11.06 IN |
| **Power Factor** | 82 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.25 |
| **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** | 3480 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**

| NP1256L | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | VNM3541 | | | | | | | | | | |
| **SPEC.** | 35E010R090G2 | | | | | | | | | | |
| **HP** | .75 | | | | | | | | | | |
| **VOLTS** | 208-230/460 | | | | | | | | | | |
| **AMP** | 2.2-2/1 | | | | | | | | | | |
| **RPM** | 3480 | | | | | | | | | | |
| **FRAME** | 56C | | **HZ** | 60 | | | **PH** | 3 | | | |
| **SER.F.** | 1.25 | **CODE** | N | **DES** | B | **CLASS** | | H | | | |
| **NEMA-NOM-EFF** | 84 | **PF** | 82 | | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | |
| **CC** | | | | | | | | | | | |
| **DE** | 6205 | | **ODE** | 6203 | | | | | | | |
| **ENCL** | TENV | **SN** | | | | | | | | | |
| | SFA 2.6-2.4/1.2 | | | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 37297
Typical performance - not guaranteed values

| **Winding:** 35WGR090-R016 | **Type:** 3520M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|
| **Rated Output (HP)** | | .75 | **Full Load Torque** | 1.12 LB-FT |
| **Volts** | | 208-230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | 2.2-2/1 | **Breakdown Torque** | 6.1 LB-FT |
| **R.P.M.** | | 3480 | **Pull-up Torque** | 4.3 LB-FT |
| **Hz** | 60 **Phase** | 3 | **Locked-rotor Torque** | 5.1 LB-FT |
| **NEMA Design Code** | B **KVA Code** | N | **Starting Current** | 11.3 A |
| **Service Factor (S.F.)** | | 1.25 | **No-load Current** | 0.545 A |
| **NEMA Nom. Eff.** | 84 **Power Factor** | 82 | **Line-line Res. @ 25ºC** | 15.4 Ω |
| **Rating - Duty** | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 52°C |
| **S.F. Amps** | | 2.6-2.4/1.2 | **Temp. Rise @ S.F. Load** | 63°C |
| | | | **Locked-rotor Power Factor** | 53 |
| | | | **Rotor inertia** | 0.0553 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 45 | 65 | 77 | 82 | 87 | 86 | 87 |
| **Efficiency** | 65 | 77.1 | 81.7 | 83.6 | 84.5 | 83.9 | 84.5 |
| **Speed** | 3573 | 3550 | 3528 | 3503 | 3478 | 3451 | 3478 |
| **Line amperes** | 0.599 | 0.71 | 0.848 | 1.02 | 1.18 | 1.41 | 1.18 |

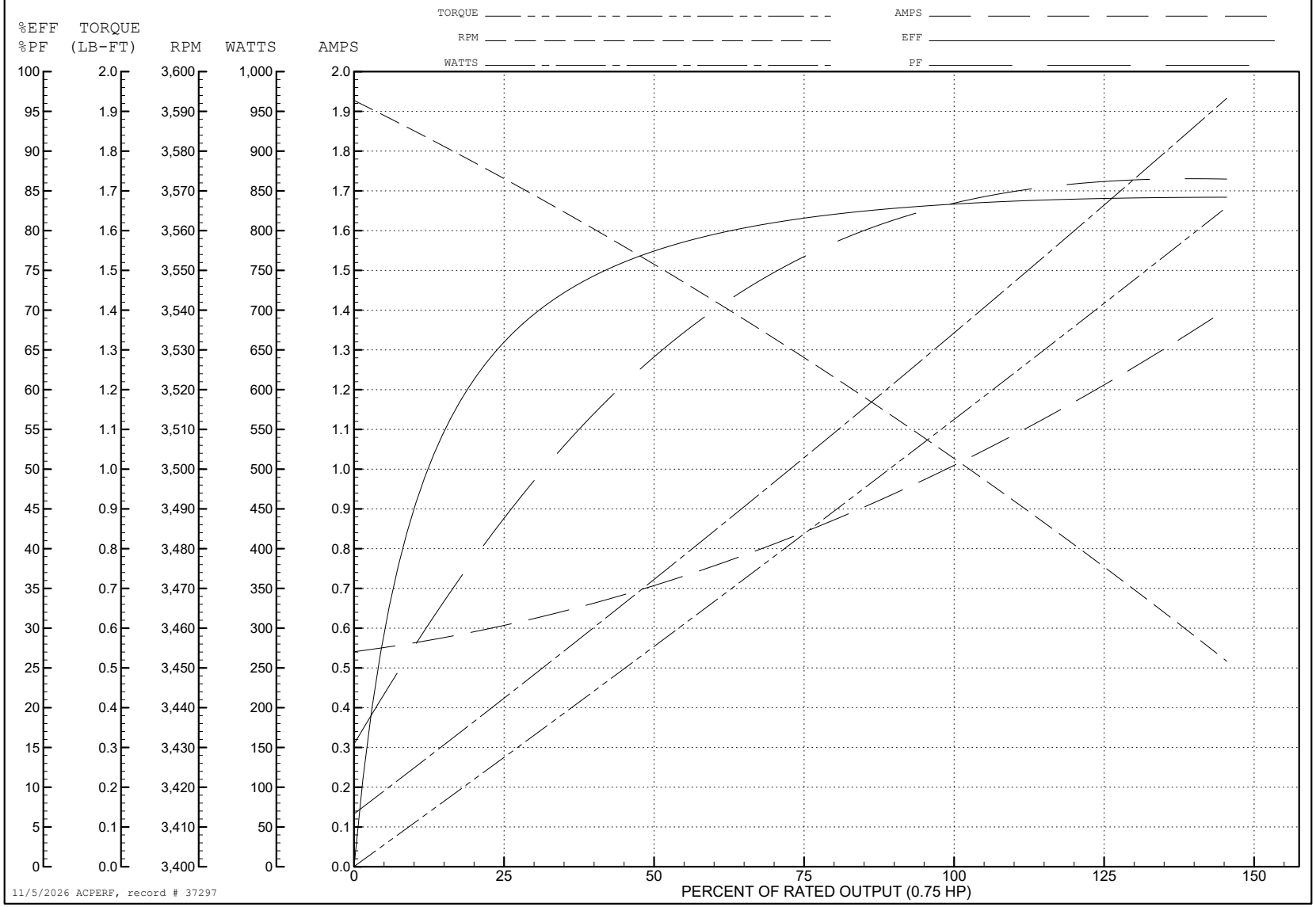
ABB Motors and Mechanical Inc.

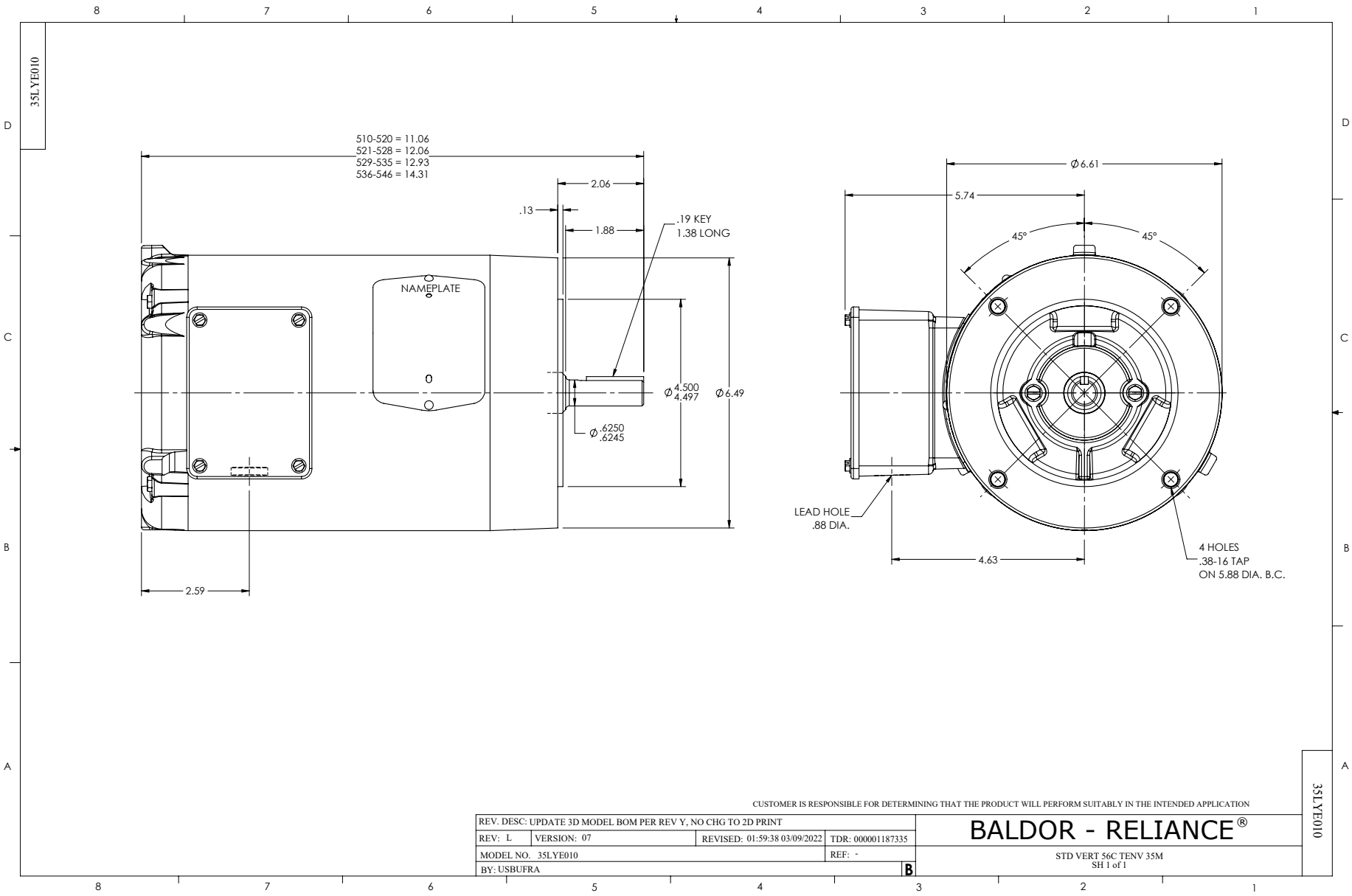
WINDING # 35WGR090

0.75 HP 3 PH 60 HZ 3480 RPM 460 V 3520M

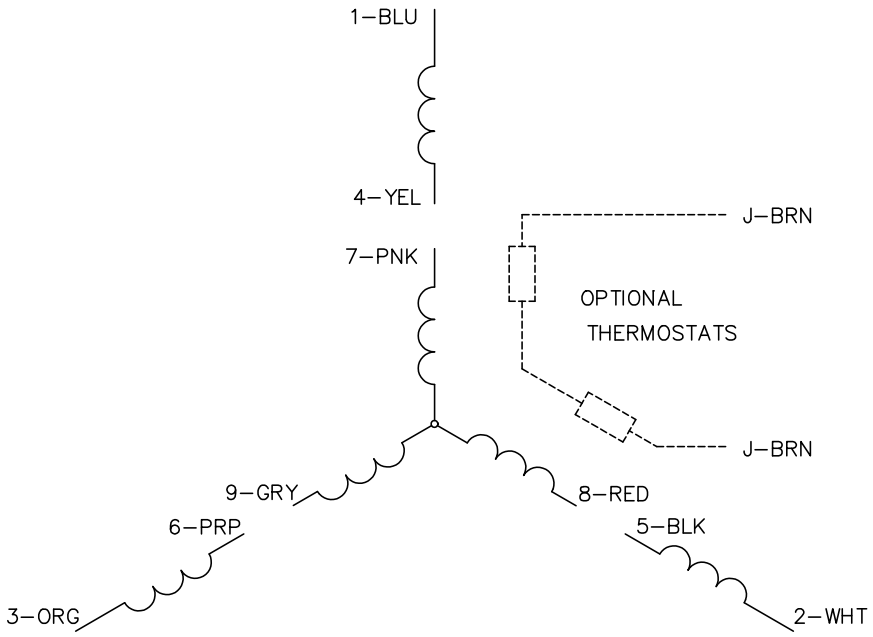
Typical performance - not guaranteed values.

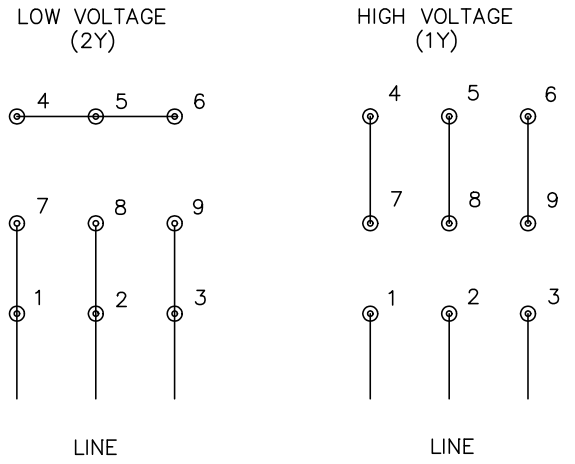
TORQUES(LB-FT): PO=6.1 PU=4.3 LR=5.1 LRA=11.3




35LYE010
510-520 = 11.06
521-528 = 12.06
529-535 = 12.93
536-546 = 14.31
2.06
.13
1.88
.19 KEY
1.38 LONG
NAMEPLATE
Ø 4.500
4.497
Ø 6.49
Ø .6250
.6245
2.59
Ø 6.61
5.74
45°
45°
LEAD HOLE
.88 DIA.
4.63
4 HOLES
.38-16 TAP
ON 5.88 DIA. B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV Y, NO CHG TO 2D PRINT
REV: L
VERSION: 07
REVISED: 01:59:38 03/09/2022
TDR: 000001187335
MODEL NO. 35LYE010
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD VERT 56C TENV 35M
SH 1 of 1
35LYE010

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 |