ABB BALDOR RELIANCE

# Customer information packet

## VSWDM3542

.75HP, 1765RPM, 3PH, 60HZ, 56C, 3514M, TENV, F1
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.
10/8/2026 8:20:47 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** | .750 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 |
| | 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** | 1.140 A @ 460.0 V |
| | 2.280 A @ 230.0 V |
| | 2.400 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 Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 1.1 a |

## Part Detail

| | |
|---|---|
| **Revision** | F |
| **Type** | AC |
| **Mech. spec.** | 35S617 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGG069 |
| **Layout** | 35LYS617 |
| **Eff. date** | 06-05-2025 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 01-10-2022 |

| | |
|---|---|
| **Insulation Class** | F |
| **Inverter Code** | Not Inverter |
| **KVA Code** | K |
| **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** | 3514M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 11.06 IN |
| **Power Factor** | 74 |
| **Product Family** | Wash Down Paint Free |
| **Pulley End Bearing Type** | Sealed Bearing |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.25 |
| **Shaft Diameter** | 0.625 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1765 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**

| NP1496L | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | VSWDM3542 | | | | | | | | | | |
| **SPEC.** | 35S617G069G1 | | | | | | | | | | |
| **HP** | .75 | | | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | | | |
| **AMP** | 2.4/1.2 | | | | | | | | | | |
| **RPM** | 1765 | | | | | | | | | | |
| **FRAME** | 56C | | **HZ** | 60 | | | **PH** | 3 | | | |
| **SER.F.** | 1.25 | **CODE** | K | **DES** | B | **CLASS** | F | | | | |
| **NEMA-NOM-EFF** | 82.5 | **PF** | 74 | | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | |
| **CC** | | | | | | | | | | | |
| **DE** | 6205 | | **ODE** | 6203 | | | | | | | |
| **ENCL** | TENV | **SN** | | | | | | | | | |
| | SFA 2.68/1.34 | | | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 87322
Typical performance - not guaranteed values

**Winding:** 35WGG069-R009 **Type:** 3514M **Enclosure:** TENV

| Nameplate Data | | | |
|---|---|---|---|
| **Rated Output (HP)** | | | .75 |
| **Volts** | | | 230/460 |
| **Full Load Amps** | | | 2.42/2.42 |
| **R.P.M.** | | | 1765 |
| **Hz** | 60 | **Phase** | 3 |
| **NEMA Design Code** | B | **KVA Code** | K |
| **Service Factor (S.F.)** | | | 1.25 |
| **NEMA Nom. Eff.** | 82.5 | **Power Factor** | 74 |
| **Rating - Duty** | | | 40C AMB-CONT |
| **S.F. Amps** | | | 2.8/1.4 |

| 460 V, 60 Hz: High Voltage Connection | |
|---|---|
| **Full Load Torque** | 2.24 LB-FT |
| **Start Configuration** | direct on line |
| **Breakdown Torque** | 8 LB-FT |
| **Pull-up Torque** | 4.4 LB-FT |
| **Locked-rotor Torque** | 5.1 LB-FT |
| **Starting Current** | 8.4 A |
| **No-load Current** | 0.85 A |
| **Line-line Res. @ 25ºC** | 30.3 Ω |
| **Temp. Rise @ Rated Load** | 75°C |
| **Temp. Rise @ S.F. Load** | 94°C |
| **Locked-rotor Power Factor** | 66.8 |
| **Rotor inertia** | 0.101 lb-ft² |

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

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 30 | 48 | 61 | 70 | 77 | 81 | 80 |
| **Efficiency** | 68.4 | 79 | 82.2 | 82.9 | 82.4 | 81.2 | 82.8 |
| **Speed** | 1791 | 1783 | 1775 | 1766 | 1757 | 1746 | 1752 |
| **Line amperes** | 0.87 | 0.95 | 1.06 | 1.21 | 1.4 | 1.61 | 1.34 |

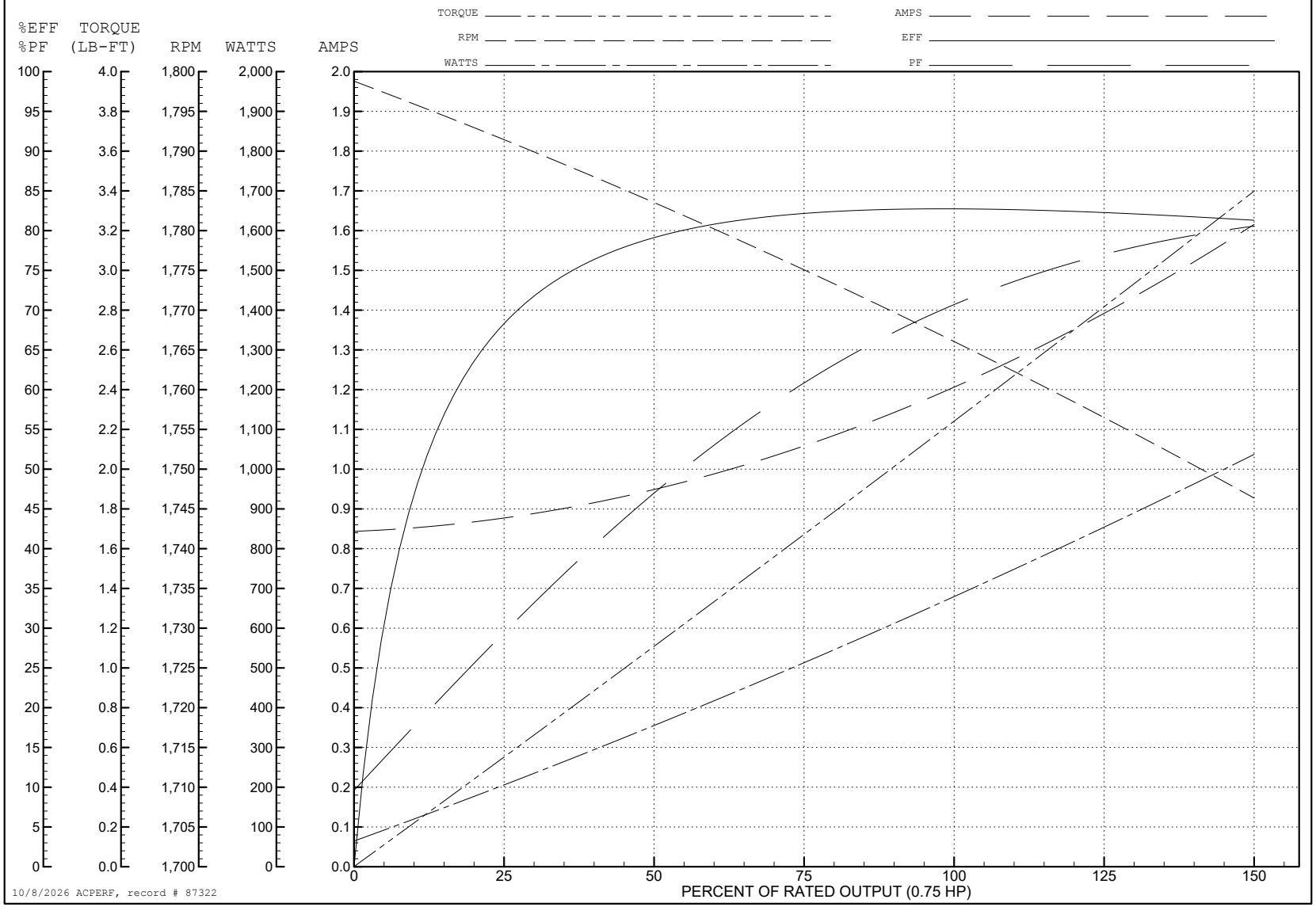
ABB Motors and Mechanical Inc.

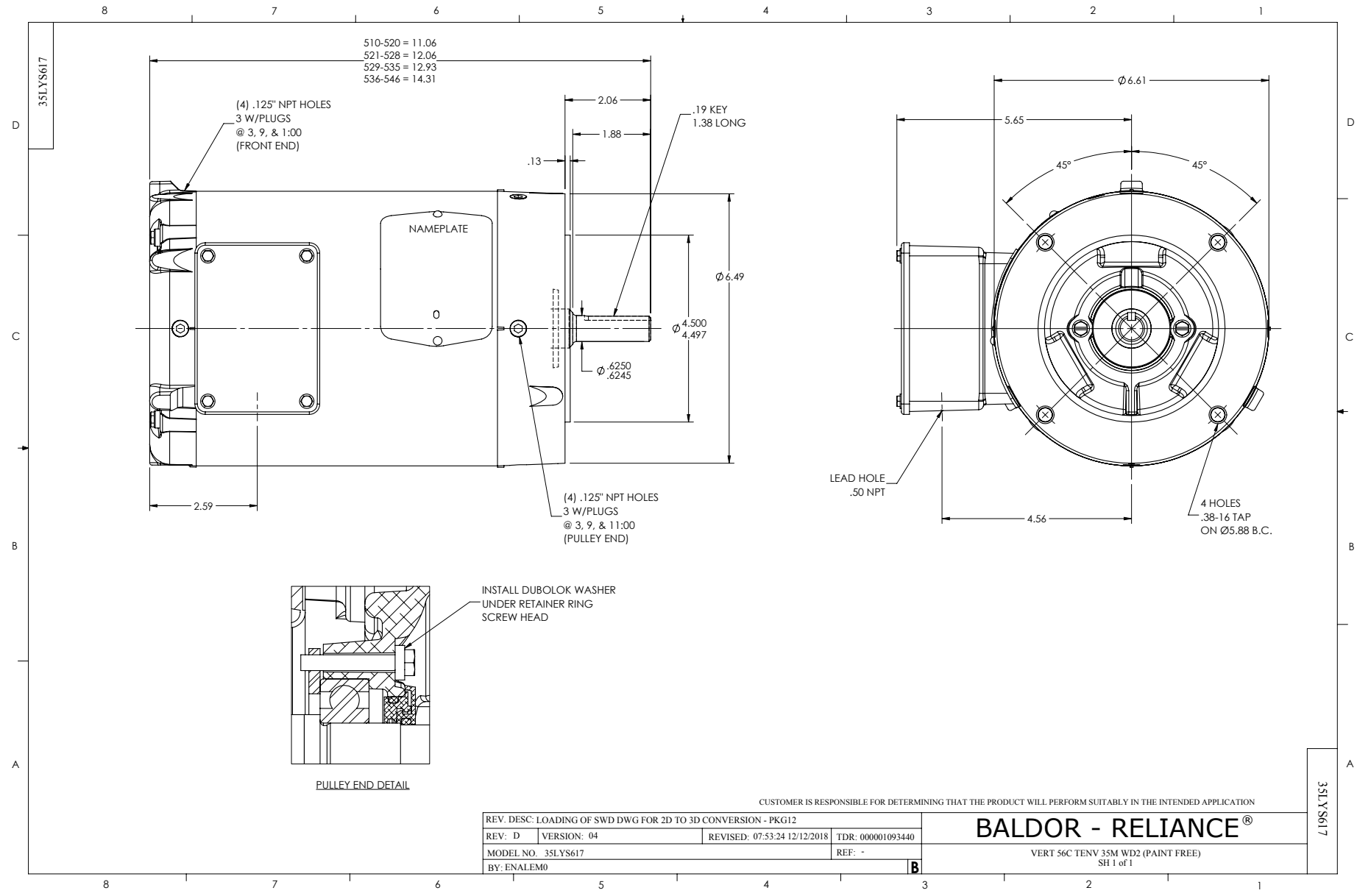
WINDING # 35WGG069

0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M

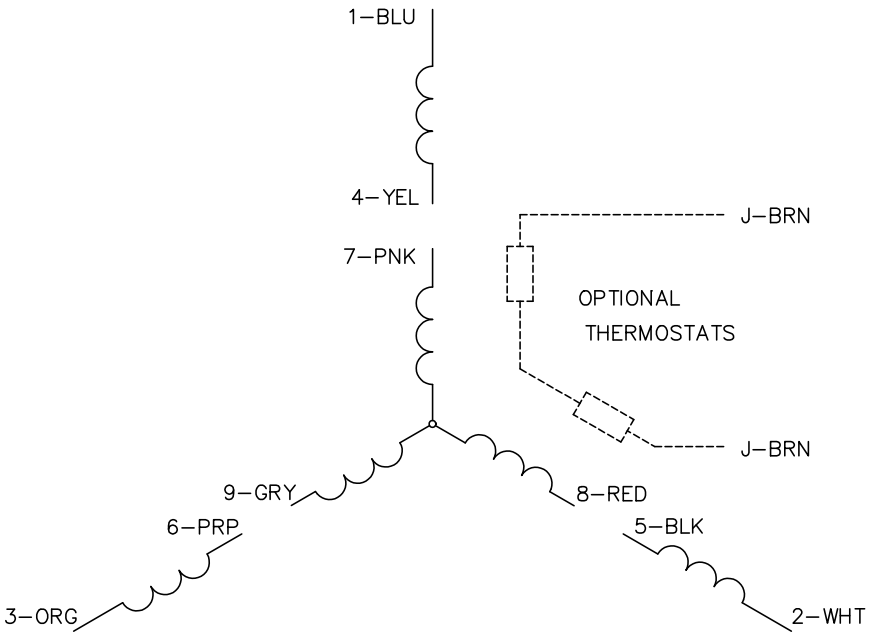
Typical performance - not guaranteed values.

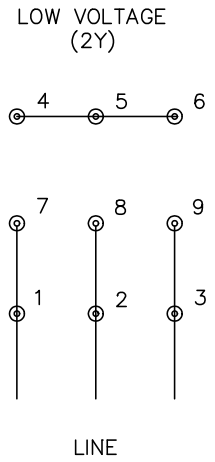
TORQUES(LB-FT): PO=8 PU=4.4 LR=5.1 LRA=8.4

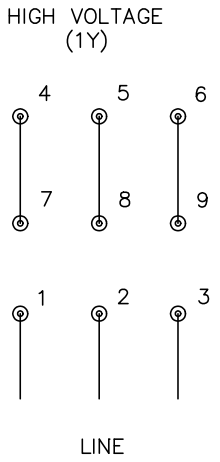



35LYS617
510-520 = 11.06
521-528 = 12.06
529-535 = 12.93
536-546 = 14.31
(4) .125" NPT HOLES
3 W/PLUGS
@ 3, 9, & 1:00
(FRONT END)
2.06
1.88
.13
.19 KEY
1.38 LONG
NAMEPLATE
Ø6.49
Ø 4.500
4.497
Ø .6250
.6245
2.59
(4) .125" NPT HOLES
3 W/PLUGS
@ 3, 9, & 11:00
(PULLEY END)
Ø6.61
5.65
45°
45°
LEAD HOLE
.50 NPT
4.56
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
INSTALL DUBOLOK WASHER
UNDER RETAINER RING
SCREW HEAD
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOADING OF SWD DWG FOR 2D TO 3D CONVERSION - PKG12
REV: D
VERSION: 04
REVISED: 07:53:24 12/2/2018
TDR: 000001093440
MODEL NO. 35LYS617
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VERT 56C TENV 35M WD2 (PAINT FREE)
SH 1 of 1
35LYS617

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 |