ABB BALDOR RELIANCE

# Customer information packet

## VENM3546T

1HP, 1770RPM, 3PH, 60HZ, 143TC, 3522M, TENV, F1
Class - None
Division - Not Applicable

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11/10/2026 3:18:08 AM

## Specifications

| | |
|---|---|
| **Enclosure** | TENV |
| **Frame** | 143TC |
| **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** | 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** | CURUSEEV |
| | NEMA PREMIUM |
| **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** | 1.670 A @ 460.0 V |
| | 3.300 A @ 208.0 V |
| | 3.340 A @ 230.0 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 |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 1.7 a |

## Part Detail

| | |
|---|---|
| **Revision** | E |
| **Type** | AC |
| **Mech. spec.** | 35E016 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGZ818 |
| **Layout** | 35LYE016 |
| **Eff. date** | 01-05-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 01-10-2022 |

| | |
|---|---|
| **Insulation Class** | F |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | M |
| **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** | 3522M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 12.12 IN |
| **Power Factor** | 66 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 0.875 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**

| NP3441LUA | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | VENM3546T | | | | | | | | | |
| **SPEC** | 35E016Z818G1 | | | | | | | | | |
| **HP** | 1 | | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | | |
| **AMPS** | 3.34/1.67 | | | | | | | | | |
| **RPM** | 1770 | | | | | | | | | |
| **FRAME** | 143TC | **HZ** | 60 | | | **PH** | 3 | | | |
| **SF** | 1.15 | **CODE** | M | **DES** | B | **CLASS** | F | | | |
| **NEMA NOM. EFF** | 85.5 | **PF** | 66 | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | |
| **CC** | 010A | | | | | | | | | |
| **ENCL** | TENV | **SER** | | | | | | | | |
| **DE** | 6205 | **ODE** | 6203 | | | | | | | |
| **VPWM INVERTER READY** | SFA 3.5/1.75 | | | | | | | | | |
| **CT6-60H(10:1)VT3-60H(20:1** | | | | | | | | | | |
| | 1HP 50HZ 190/380V 3.7/1.85A | | | | | | | | | SF1.0 |

**AC Induction Motor Performance Data**
Record # 89784
Typical performance - not guaranteed values

| **Winding:** 35WGZ818-R002 | **Type:** 3522M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 1 | **Full Load Torque** | 2.99 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 3.34/1.67 | **Breakdown Torque** | 16.6 LB-FT |
| **R.P.M.** | | | 1770 | **Pull-up Torque** | 7.42 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 10.32 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | M | **Starting Current** | 16.1 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 1.23 A |
| **NEMA Nom. Eff.** | 85.5 | **Power Factor** | 66 | **Line-line Res. @ 25ºC** | 14.4 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 63°C |
| **S.F. Amps** | | | 3.5/1.75 | **Temp. Rise @ S.F. Load** | 71°C |
| | | | | **Locked-rotor Power Factor** | 60.4724 |
| | | | | **Rotor inertia** | 0.159 lb-ft² |

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

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 27 | 43 | 56 | 66 | 73 | 78 | 72 |
| **Efficiency** | 70.8 | 81.2 | 84.5 | 85.9 | 85.8 | 85.2 | 85.5 |
| **Speed** | 1793 | 1786 | 1781 | 1773 | 1766 | 1758 | 1768 |
| **Line amperes** | 1.25 | 1.34 | 1.49 | 1.67 | 1.87 | 2.12 | 1.75 |

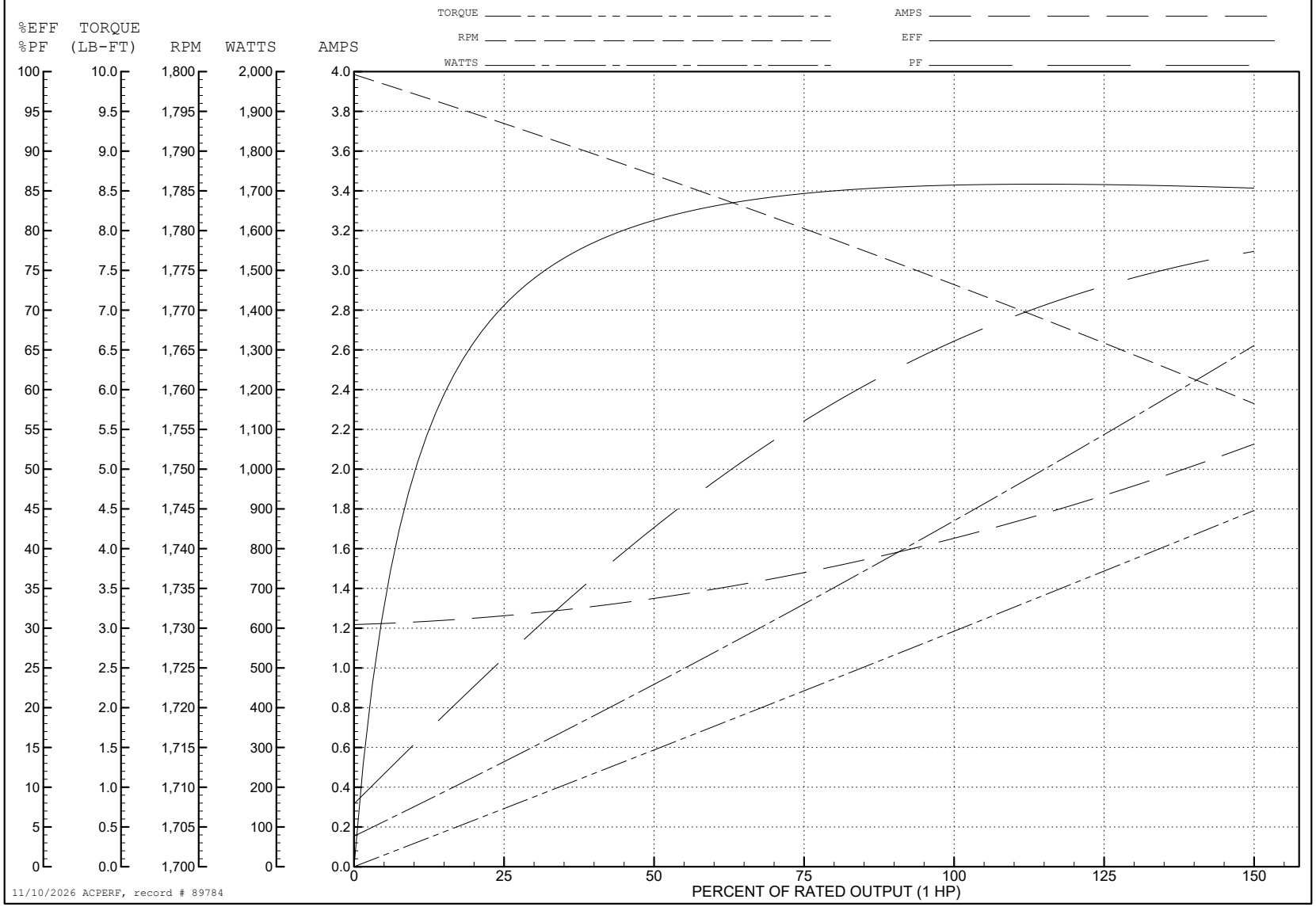
ABB Motors and Mechanical Inc.

WINDING # 35WGZ818

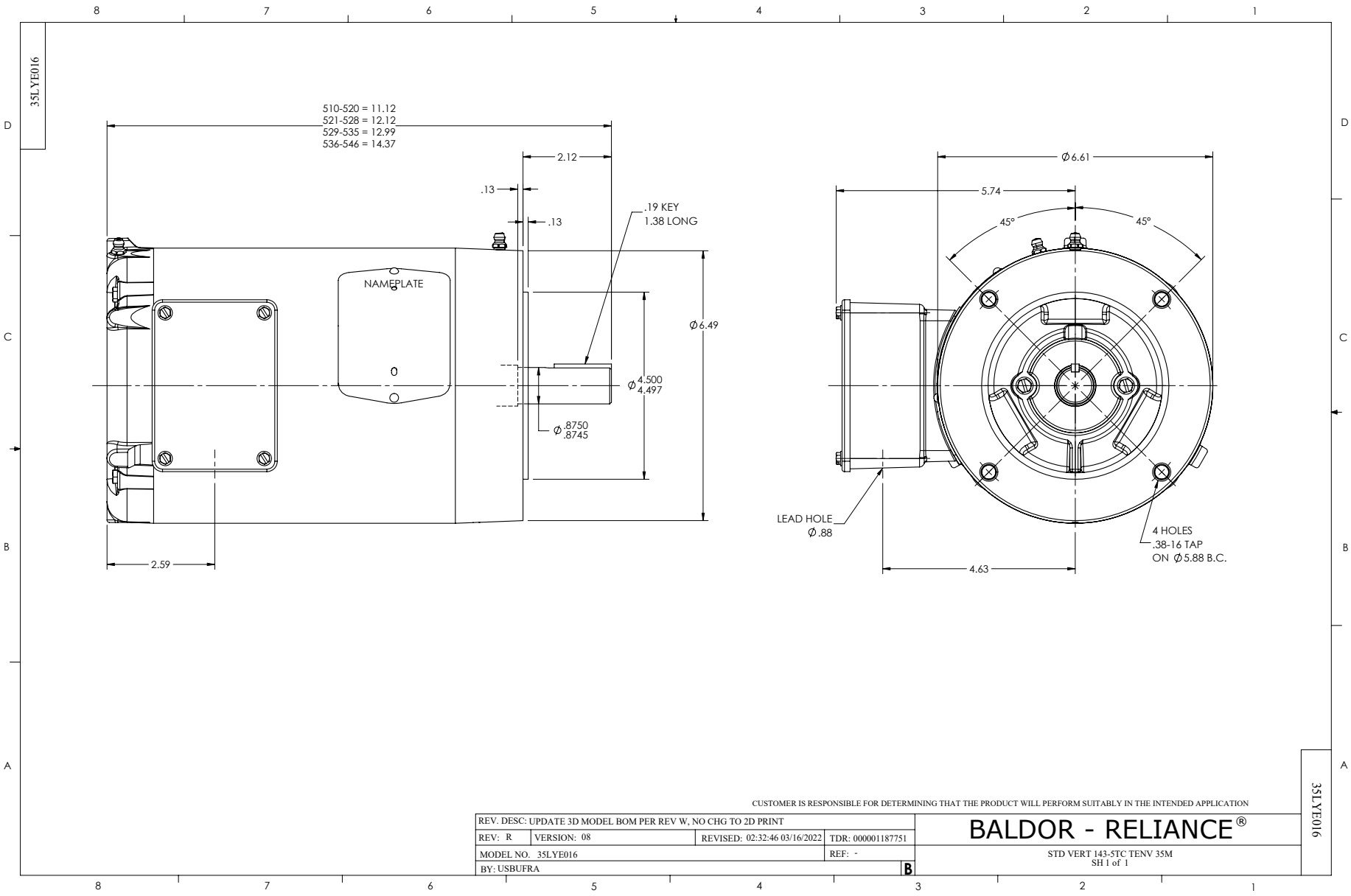
1 HP 3 PH 60 HZ 1770 RPM 460 V 3522M

Typical performance - not guaranteed values.

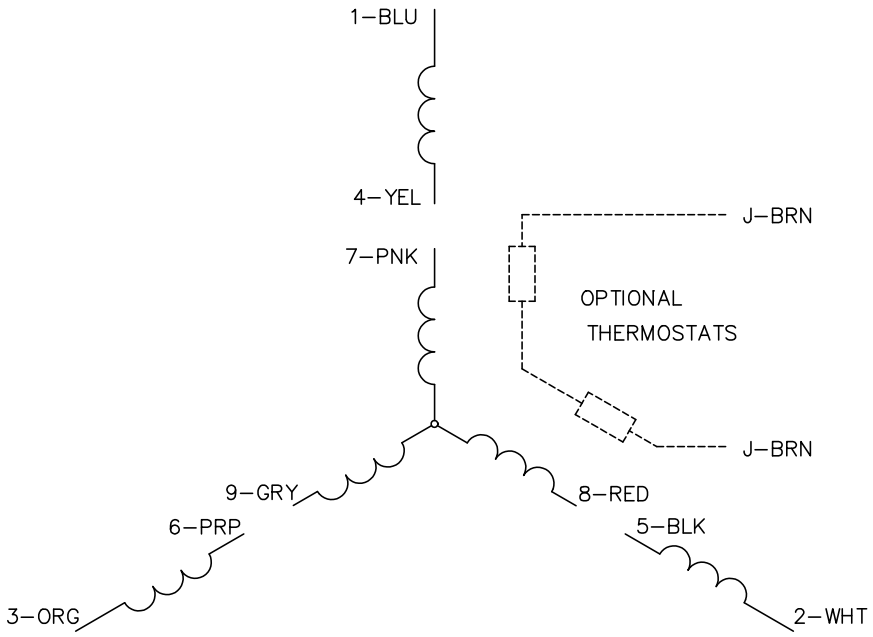
TORQUES(LB-FT): PO=16.6 PU=7.42 LR=10.32 LRA=16.1

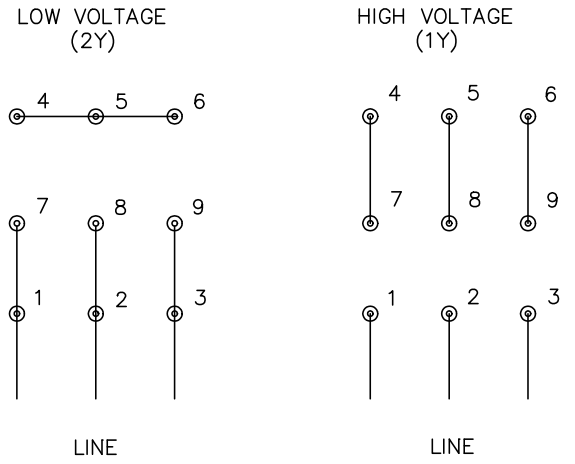



11/10/2026 ACPERF, record # 89784


35LYE016
510-520 = 11.12
521-528 = 12.12
529-535 = 12.99
536-546 = 14.37
2.12
.13
.13
.19 KEY
1.38 LONG
NAMEPLATE
Ø6.49
Ø4.500
4.497
Ø.8750
.8745
2.59
Ø6.61
5.74
45°
45°
LEAD HOLE
Ø.88
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
4.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV W, NO CHG TO 2D PRINT
REV: R
VERSION: 08
REVISED: 02:32:46 03/16/2022
TDR: 000001187751
MODEL NO. 35LYE016
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD VERT 143-5TC TENV 35M
SH 1 of 1
35LYE016

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 |