BALDOR • RELIANCE

# Product Information Packet

# CEM3554T-BG

## 1.5HP,1760RPM,3PH,60HZ,145TC,3526M,TEFC

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## Part Detail

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Revision:** | K | **Status:** | PRD/A | **Change #:** | | **Proprietary:** | No |
| **Type:** | AC | **Elec. Spec:** | 35WGM493 | **CD Diagram:** | CD0005 | **Mfg Plant:** | |
| **Mech. Spec:** | 35E2215 | **Layout:** | 35LYE2215 | **Poles:** | 04 | **Created Date:** | 10-04-2013 |
| **Base:** | RG | **Eff. Date:** | 03-13-2018 | **Leads:** | 9#18 | | |

## Specs

| | | | |
|---|---|---|---|
| **Catalog Number:** | CEM3554T-BG | **Heater Indicator:** | No Heater |
| **Enclosure:** | TEFC | **Insulation Class:** | H |
| **Frame:** | 145TC | **Inverter Code:** | Inverter Ready |
| **Frame Material:** | Steel | **KVA Code:** | L |
| **Output @ Frequency:** | 1.500 HP @ 60 HZ | **Lifting Lugs:** | No Lifting Lugs |
| **Synchronous Speed @ Frequency:** | 1800 RPM @ 60 HZ | **Locked Bearing Indicator:** | Locked Bearing |
| **Voltage @ Frequency:** | 460.0 V @ 60 HZ | **Motor Lead Quantity/Wire Size:** | 9 @ 18 AWG |
| | 230.0 V @ 60 HZ | **Motor Lead Exit:** | Ko Box |
| **XP Class and Group:** | None | **Motor Lead Termination:** | Flying Leads |
| **XP Division:** | Not Applicable | **Motor Type:** | 3526M |
| **Agency Approvals:** | UR | **Mounting Arrangement:** | F1 |
| | CSA EEV | **Power Factor:** | 73 |
| | CSA | **Product Family:** | General Purpose |
| **Auxillary Box:** | No Auxillary Box | **Pulley End Bearing Type:** | Ball |
| **Auxillary Box Lead Termination:** | None | **Pulley Face Code:** | C-Face |
| **Base Indicator:** | Rigid | **Pulley Shaft Indicator:** | Standard |
| **Bearing Grease Type:** | Polyrex EM (-20F +300F) | **Rodent Screen:** | None |
| **Blower:** | None | **Shaft Extension Location:** | Pulley End |

| | |
|---|---|
| **Current @ Voltage:** | 2.200 A @ 460.0 V |
| | 4.400 A @ 230.0 V |
| | 4.500 A @ 208.0 V |
| **Design Code:** | B |
| **Drip Cover:** | No Drip Cover |
| **Duty Rating:** | CONT |
| **Electrically Isolated Bearing:** | Not Electrically Isolated |
| **Feedback Device:** | NO FEEDBACK |
| **Front Face Code:** | Standard |
| **Front Shaft Indicator:** | None |

| | |
|---|---|
| **Shaft Ground Indicator:** | Shaft Grounding |
| **Shaft Rotation:** | Reversible |
| **Shaft Slinger Indicator:** | No Slinger |
| **Speed Code:** | Single Speed |
| **Motor Standards:** | NEMA |
| **Starting Method:** | Direct on line |
| **Thermal Device - Bearing:** | NONE (OLD) |
| **Thermal Device - Winding:** | None |
| **Vibration Sensor Indicator:** | No Vibration Sensor |
| **Winding Thermal 1:** | None |
| **Winding Thermal 2:** | None |

## Nameplate NP3441L

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | CEM3554T-BG | | | | | | | | |
| **SPEC.** | 35E2215M493G1 | | | | | | | | |
| **HP** | 1.5 | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | |
| **AMP** | 4.4/2.2 | | | | | | | | |
| **RPM** | 1760 | | | | | | | | |
| **FRAME** | 145TC | **HZ** | 60 | | | **PH** | 3 | | |
| **SER.F.** | 1.15 | **CODE** | L | **DES** | B | **CL** | H | | |
| **NEMA-NOM-EFF** | 86.5 | **PF** | 73 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | 010A | | | | | **USABLE AT 208V** | 4.5 | | |
| **DE** | 6205 | | | **ODE** | 6203 | | | | |
| **ENCL** | TEFC | **SN** | | | | | | | |
| **VPWM INVERTER READY** | | | | | | | | | |
| **CT6-60H(10:1)VT3-60H(20:1** | | | | | | | | | |

## Parts List

| Part Number | Description | Quantity |
|---|---|---|
| SA270527 | SA 35E2215M493G1 | 1.000 EA |
| RA257161 | RA 35E2215M493G1 | 1.000 EA |
| 34FN3002B01 | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/ | 1.000 EA |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 EA |
| 35CB3009 | 35 CB W/1.09 DIA. LEAD HOLE @ 6: | 1.000 EA |
| 36GS1000SP | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 EA |
| 51XB1016A07 | 10-16 X 7/16 HXWSSLD SERTYB | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 35EP3122A00 | MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 EA |
| 35EP3307D00 | MASTER DE,205 BRG,.998SH,#26 DRN,GRSR | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 2.000 EA |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 EA |
| 35FH4005A84SP | IEC FH W/GRSR, NO DIMPLES PRIMED | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 35CB4521GX | CONDUIT BOX LID KIT **ORDER INDIV PARTS | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 EA |
| HA7000A01 | KEY RETAINER 7/8" DIA SHAFT | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| LB1508 | LABEL "SHAFT GROUNDING BRUSH" 1.50 X .81 | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.050 LB |

## Parts List (continued)

| Part Number | Description | Quantity |
|---|---|---|
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.017 GA |
| HA3100A37 | THRUBOLT 10-32 X 8.500 | 4.000 EA |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3441L | ALUM SUPER-E VPWM INVERTER READY UL | 1.000 EA |
| 36PA1000 | PKG GRP, PRINT PK1016A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 EA |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 53325 - Typical performance - not guaranteed values

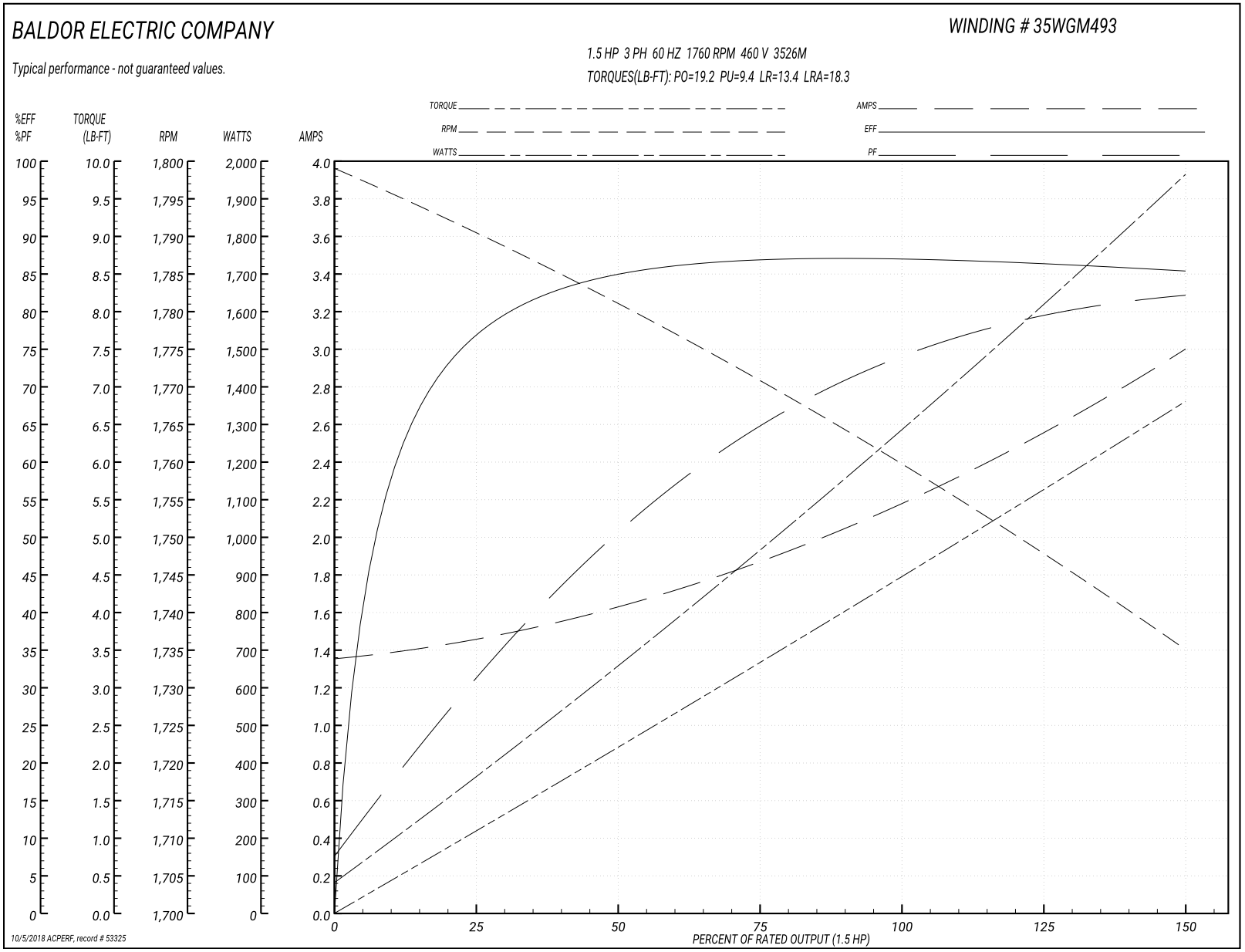
| **Winding:** 35WGM493-R079 | **Type:** 3526M | **Enclosure:** TEFC |
|---|---|---|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|---|---|---|---|---|---|
| Rated Output (HP) | 1.5 | | | Full Load Torque | 4.47 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 4.4/2.2 | | | Breakdown Torque | 19.2 LB-FT |
| R.P.M. | 1760 | | | Pull-up Torque | 9.4 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 13.4 LB-FT |
| NEMA Design Code | B | KVA Code | L | Starting Current | 18.3 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 1.37 A |
| NEMA Nom. Eff. | 86.5 | Power Factor | 73 | Line-line Res. @ 25ºC | 10.7 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 44°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 52°C |
| | | | | Locked-rotor Power Factor | 52 |
| | | | | Rotor inertia | 0.154 LB-FT2 |

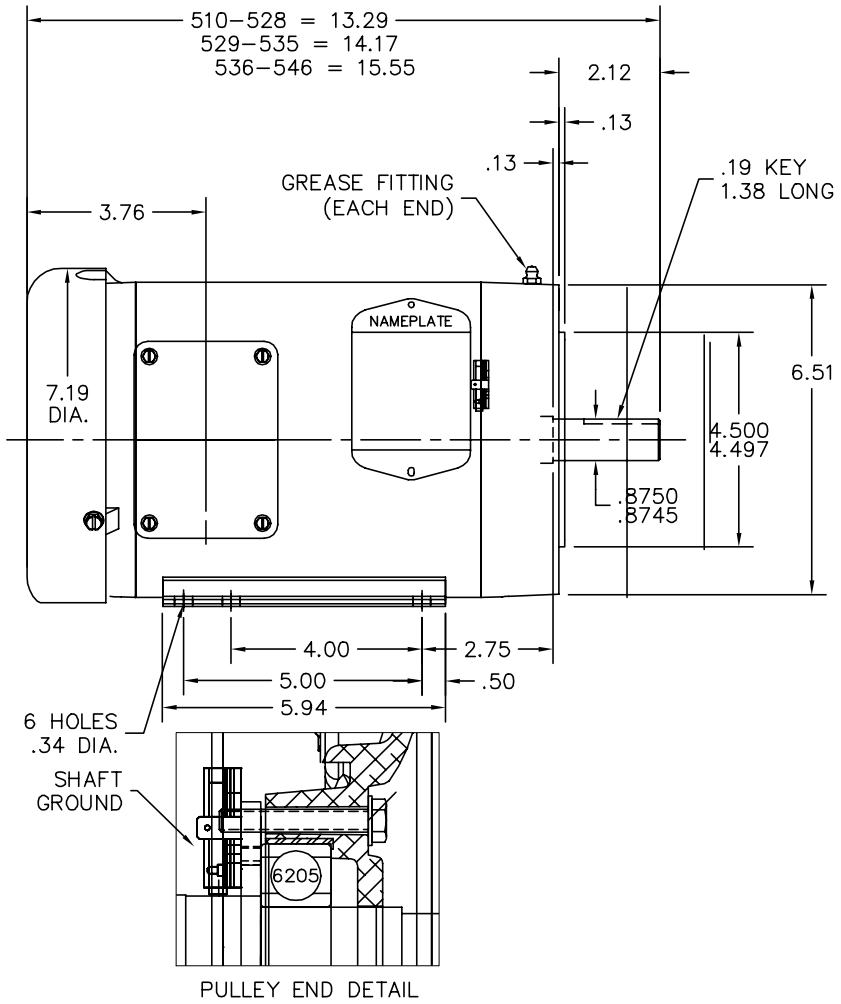
Load Characteristics 460 V, 60 Hz, 1.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|---|---|---|---|---|---|---|---|
| Power Factor | 31 | 51 | 65 | 73 | 79 | 83 | 77 |
| Efficiency | 76.2 | 84.5 | 86.9 | 87.2 | 86.5 | 85.3 | 86.8 |
| Speed | 1791 | 1781 | 1771 | 1760 | 1748 | 1735 | 1753 |
| Line amperes | 1.44 | 1.61 | 1.86 | 2.19 | 2.58 | 2.98 | 2.42 |

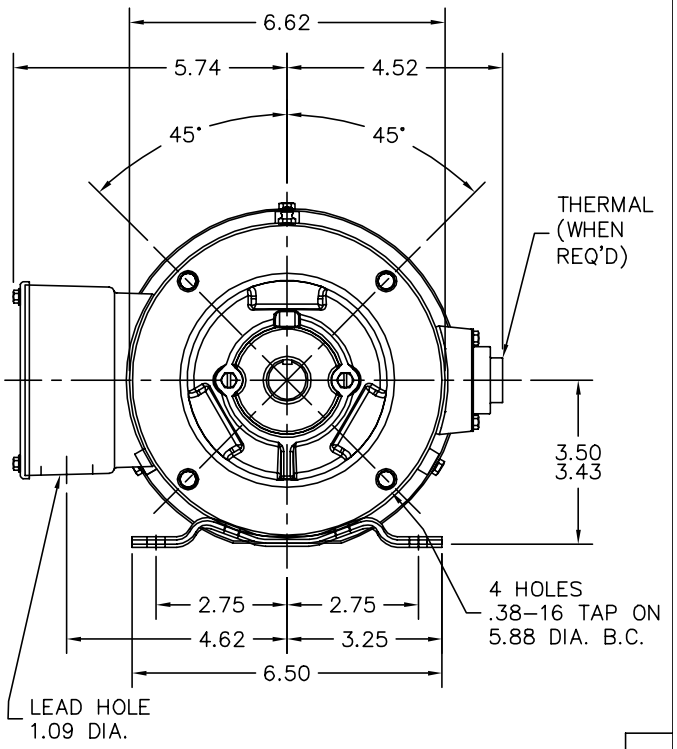
Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values



35LYE2215




PULLEY END DETAIL




CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

| | | |
|---|---|---|
| REV. DESC: REPLACE ENDPLATES | | |
| REV. LTR: B | VERSION: 02 | TDR: 000001063670 |
| FILE: \AAA\00203\935 | REVISED: 03:05:36 03/12/2018 | BY: FGCHAH1 |
| MTL: – | | |

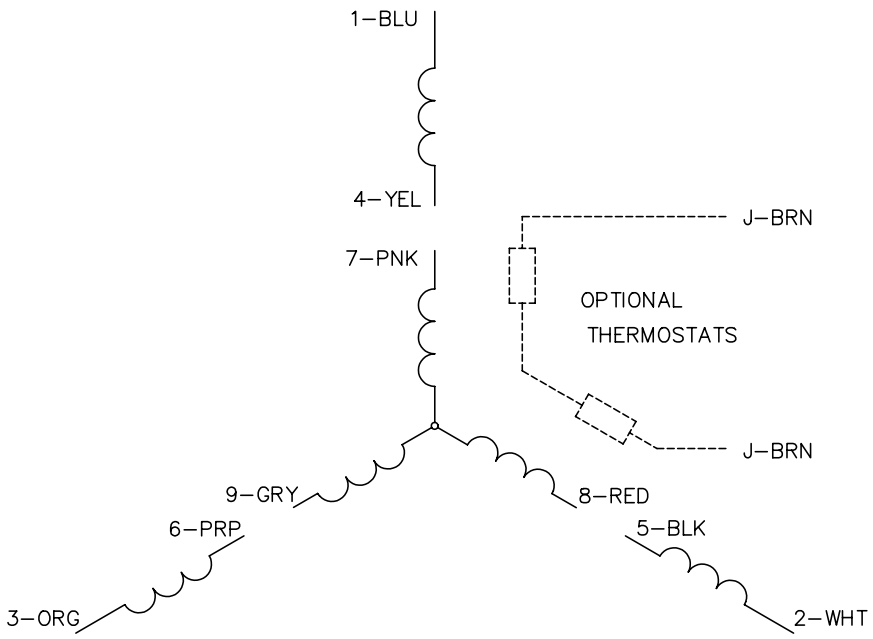
BALDOR

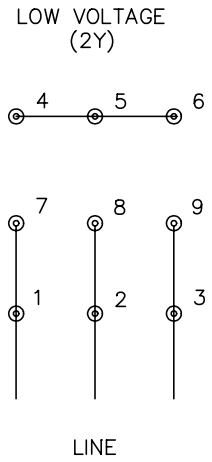
HOR 143–5TC TEFC 35M W/BALDOR INT SH GRD

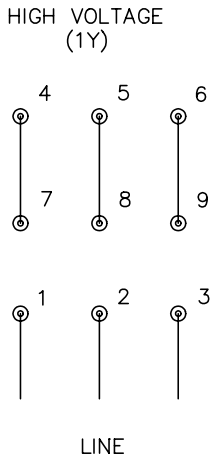
SH 1 of 1

35LYE2215

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 |