

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3157T-G**

**2HP,1750RPM,3PH,60HZ,145T,3526M,OPSB,F1**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | U      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 35WGM496   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 35Z069 | Layout:     | 35LYZ069   | Poles:      | 04     | Created Date: | 10-20-2010 |
| Base:       | RG     | Eff. Date:  | 09-20-2018 | Leads:      | 9#18   |               |            |

| Specs                           |                         |                                |                 |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number:                 | EM3157T-G               | Insulation Class:              | H               |
| Enclosure:                      | OPSB                    | Inverter Code:                 | Inverter Ready  |
| Frame:                          | 145T                    | KVA Code:                      | K               |
| Frame Material:                 | Steel                   | Lifting Lugs:                  | No Lifting Lugs |
| Output @ Frequency:             | 2.000 HP @ 60 HZ        | Locked Bearing Indicator:      | Locked Bearing  |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 9 @ 18 AWG      |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box          |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads    |
| XP Class and Group:             | None                    | Motor Type:                    | 3526M           |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1              |
| Agency Approvals:               | UR                      | Power Factor:                  | 76              |
|                                 | CSA EEV                 | Product Family:                | General Purpose |
|                                 | CSA                     | Pulley End Bearing Type:       | Ball            |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | Standard        |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Standard        |
| Base Indicator:                 | Rigid                   | Rodent Screen:                 | None            |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | RoHS Status:                   | ROHS COMPLIANT  |
| Blower:                         | None                    | Shaft Extension Location:      | Pulley End      |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Current @ Voltage:</b>             | 2.900 A @ 460.0 V         | <b>Shaft Ground Indicator:</b>     | Shaft Grounding     |
|                                       | 5.800 A @ 208.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 5.800 A @ 230.0 V         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | B                         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Motor Standards:</b>            | NEMA                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Starting Method:</b>            | Direct on line      |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 2:</b>          | None                |

|                                  |              |  |             |            |      |                       |    |  |              |           |     |
|----------------------------------|--------------|--|-------------|------------|------|-----------------------|----|--|--------------|-----------|-----|
| <b>Nameplate NP3553L</b>         |              |  |             |            |      |                       |    |  |              |           |     |
| <b>CAT.NO.</b>                   | EM3157T-G    |  |             |            |      |                       |    |  |              |           |     |
| <b>SPEC</b>                      | 35Z069M496G2 |  |             |            |      |                       |    |  |              |           |     |
| <b>HP</b>                        | 2            |  |             |            |      |                       |    |  |              |           |     |
| <b>VOLTS</b>                     | 230/460      |  |             |            |      |                       |    |  |              |           |     |
| <b>AMPS</b>                      | 5.8/2.9      |  |             |            |      |                       |    |  |              |           |     |
| <b>RPM</b>                       | 1750         |  |             |            |      |                       |    |  |              |           |     |
| <b>FRAME</b>                     | 145T         |  |             |            |      | <b>HZ</b>             | 60 |  |              | <b>PH</b> | 3   |
| <b>SF</b>                        | 1.15         |  | <b>CODE</b> | K          |      | <b>DES</b>            | B  |  | <b>CLASS</b> | H         |     |
| <b>NEMA NOM. EFF</b>             | 86.5         |  | <b>PF</b>   | 76         |      |                       |    |  |              |           |     |
| <b>RATING</b>                    | 40C AMB-CONT |  |             |            |      |                       |    |  |              |           |     |
| <b>CC</b>                        | 010A         |  |             |            |      | <b>USABLE AT 208V</b> |    |  |              |           | 5.8 |
| <b>ENCL</b>                      | OPSB         |  | <b>SER</b>  |            |      |                       |    |  |              |           |     |
| <b>DE</b>                        | 6205         |  |             | <b>ODE</b> | 6203 |                       |    |  |              |           |     |
| <b>VPWM INVERTER READY</b>       |              |  |             |            |      |                       |    |  |              |           |     |
| <b>CT30-60(2:1) VT3-60(20:1)</b> |              |  |             |            |      |                       |    |  |              |           |     |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA204964    | SA 35Z069M496G2                          | 1.000 EA |
| RA192212    | RA 35Z069M496G2                          | 1.000 EA |
| NS2512A01   | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 35CB3009    | 35 CB W/1.09 DIA. LEAD HOLE @ 6:         | 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 |
| 35EP3209G00 | MASTER ODE,203 BRG                       | 1.000 EA |
| HW5100A03   | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 35EP3210C00 | MASTER DE,205 BRG,1.000SH,LCK BRG        | 1.000 EA |
| 51XN1032A18 | 10-32 X 1 1/8 HX WS SL SR (ESKAY)        | 2.000 EA |
| XY1032A02   | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 EA |
| 35CB4521    | 35 LIPPED CB LID (GALV & PHOSPH)         | 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 |
| LB1459      | AEGIS SGR LABEL "AEGISLBL-100"           | 1.000 EA |
| MJ1000A02   | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.050 LB |
| MG1000Y03   | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.017 GA |
| HA3100A38   | THRUBOLT 10-32 X 9.375                   | 4.000 EA |
| 35AD2005A01 | BAFFLE PLATE,MOD 35-SLTD BAND MTRS GL.F. | 1.000 EA |
| LC0005E01   | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3553L     | ALUM SUPER-E VPWM INVERTER READY UL CSA- | 1.000 EA |
| 35PA1066    | PKG GRP, PRINT PK1008A06                 | 1.000 EA |

| <b>Parts List (continued)</b> |   |                 |
|-------------------------------|---|-----------------|
| <b>Part Number</b>            | <b>Description</b>                      | <b>Quantity</b> |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA        |
| LB1350                        | BAR CODE LABEL FOR YORK                 | 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 # 35595 - Typical performance - not guaranteed values

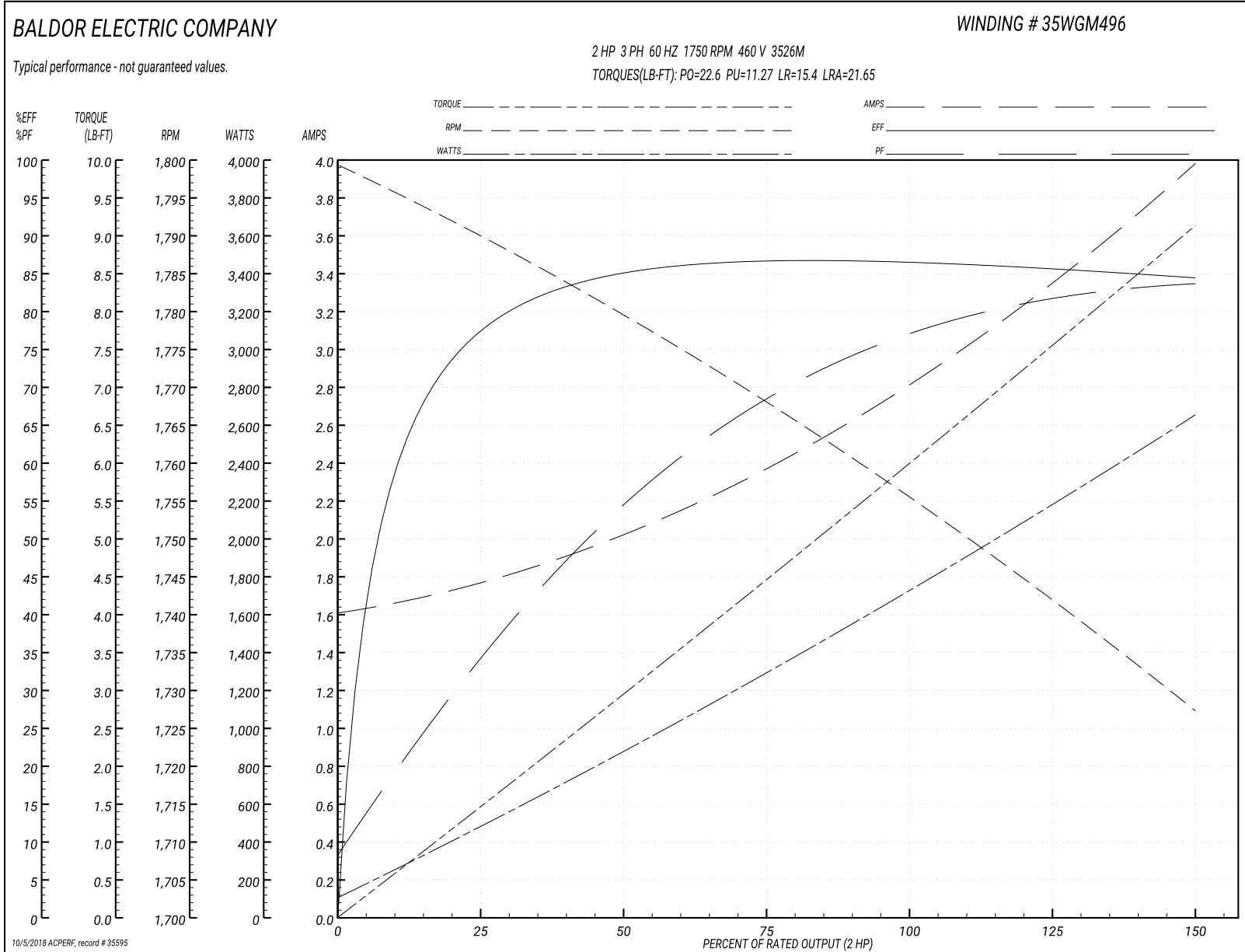
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGM496-R002 | <b>Type:</b> 3526M | <b>Enclosure:</b> OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP)     | 2            |              |    | Full Load Torque                         | 6.02 LB-FT               |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 5.8/2.9      |              |    | Breakdown Torque                         | 22.6 LB-FT               |
| R.P.M.                | 1750         |              |    | Pull-up Torque                           | 11.27 LB-FT              |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 15.4 LB-FT               |
| NEMA Design Code      | B            | KVA Code     | K  | Starting Current                         | 21.65 A                  |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.63 A                   |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 76 | Line-line Res. @ 25°C                    | 8.22 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 38°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 46°C                     |
|                       |              |              |    | Locked-rotor Power Factor                | 52.4                     |
|                       |              |              |    | Rotor inertia                            | 0.154 LB-FT <sup>2</sup> |

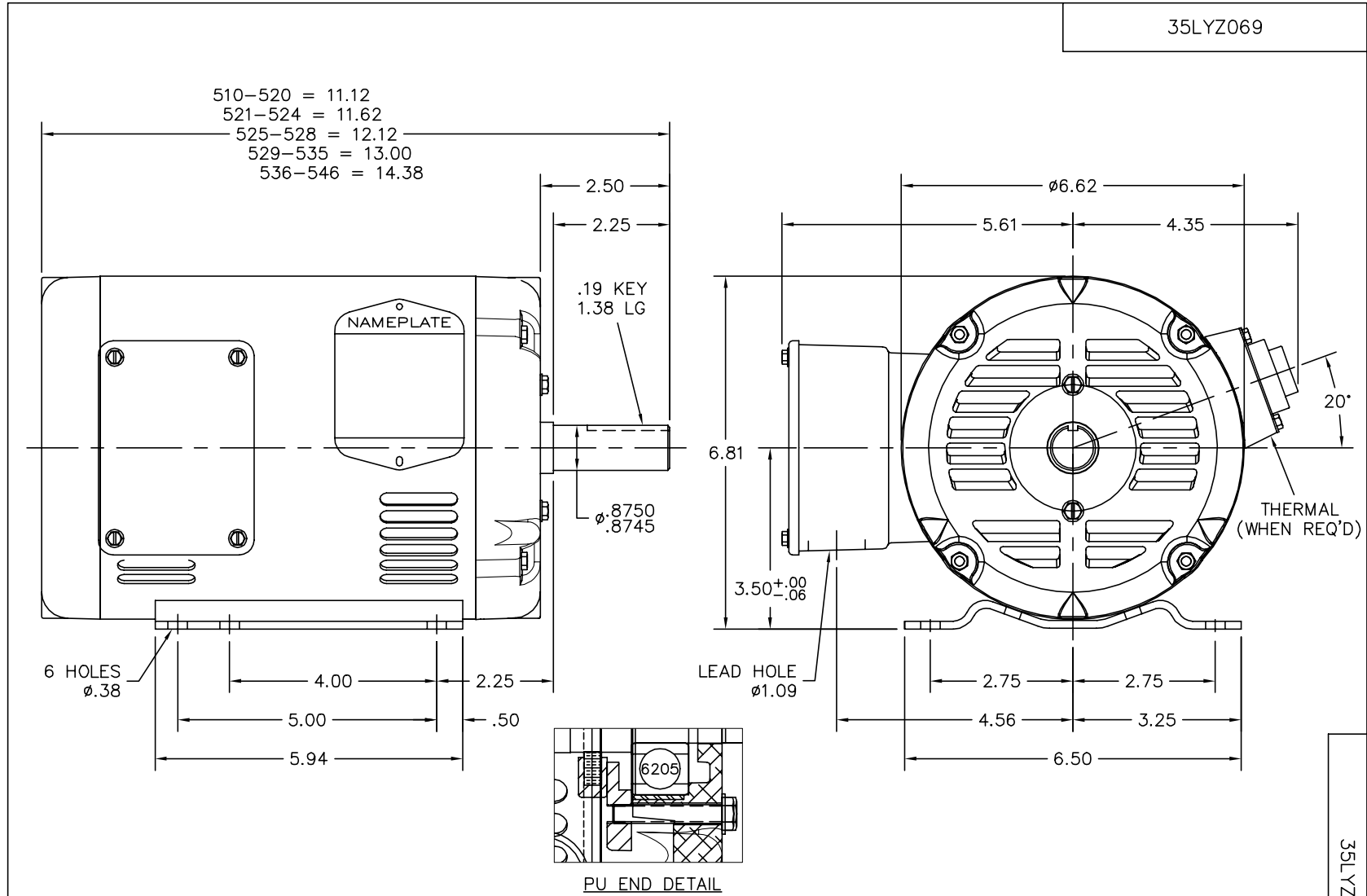
Load Characteristics 460 V, 60 Hz, 2 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 35   | 56   | 69   | 76   | 81   | 84   | 78   |
| Efficiency      | 77   | 84.7 | 86.8 | 86.6 | 85.8 | 84.3 | 86.2 |
| Speed           | 1789 | 1779 | 1768 | 1756 | 1742 | 1727 | 1749 |
| Line amperes    | 1.75 | 2.01 | 2.37 | 2.85 | 3.37 | 3.96 | 3.19 |

Performance Graph at 460V, 60Hz, 2.0HP Typical performance - Not guaranteed values







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

|                              |                                |                   |
|------------------------------|--------------------------------|-------------------|
| REV. DESC: REPLACE ENDPLATES |                                |                   |
| REV. LTR: E                  | VERSION: 05                    | TDR: 000001041474 |
| FILE: \AAA\00174\501         | REVISED: 01: 44: 49 09/05/2017 | BY: USJOBUR22     |
| MTL: -                       |                                |                   |

**BALDOR**

HOR 143-5T OPSB M, AEGIS INT SHAFT GND

SH 1 of 1

35LYZ069

CD0005

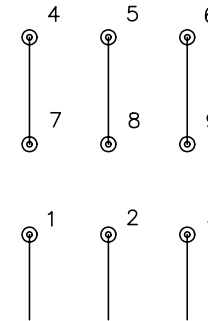


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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.

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 90000                                     |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005