

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM2535T-CI**

**30HP, 1775RPM, 3PH, 60HZ, 286T, 1052M, OPEN, F1**

| Part Detail |       |             |            |             |        |               |            |
|-------------|-------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | D     | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC    | Elec. Spec: | 10WZ654    | CD Diagram: | CD0180 | Mfg Plant:    |            |
| Mech. Spec: | 10D01 | Layout:     | 10LYD001   | Poles:      | 04     | Created Date: | 06-30-2017 |
| Base:       | RG    | Eff. Date:  | 09-22-2017 | Leads:      | 9#10   |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | EM2535T-CI              | Heater Indicator:              | No Heater             |
| Enclosure:                      | OPEN                    | Insulation Class:              | F                     |
| Frame:                          | 286T                    | Inverter Code:                 | Inverter Ready        |
| Frame Material:                 | Iron                    | KVA Code:                      | H                     |
| Output @ Frequency:             | 30.000 HP @ 60 HZ       | Lifting Lugs:                  | Standard 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 @ 10 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:                    | 1052M                 |
| Agency Approvals:               | UR                      | Mounting Arrangement:          | F1                    |
|                                 | CSA EEV                 | Power Factor:                  | 77                    |
|                                 | CSA                     | Product Family:                | General Purpose       |
| Auxillary Box:                  | No Auxillary Box        | Pulley End Bearing Type:       | Ball                  |
| Auxillary Box Lead Termination: | None                    | Pulley Face Code:              | Standard              |
| Base Indicator:                 | Rigid                   | Pulley Shaft Indicator:        | Standard              |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Rodent Screen:                 | None                  |
| Blower:                         | None                    | Shaft Extension Location:      | Pulley End            |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Current @ Voltage:</b>             | 38.000 A @ 460.0 V        | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
|                                       | 76.000 A @ 208.0 V        | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 76.000 A @ 230.0 V        | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | A                         | <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 (OLD)          |
| <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>Winding Thermal 2:</b>          | None                |

| Nameplate NP3554LUA |                           |  |                |        |      |                         |                     |      |         |            |      |
|---------------------|---------------------------|--|----------------|--------|------|-------------------------|---------------------|------|---------|------------|------|
| CAT.NO.             | EM2535T-CI                |  |                | P/N    |      |                         |                     | ENCL | OPEN    |            |      |
| SPEC.               | 10D001Z654G1              |  | CC             | 010A   |      | FRAME                   | 286T                |      | SER.NO. |            |      |
| HP                  | 30                        |  | CLASS          | F      |      | HZ                      | 60                  |      |         |            |      |
| RPM                 | 1775                      |  | PH             | 3      |      | DES                     | A                   |      |         |            |      |
| VOLTS               | 230/460                   |  |                | CODE   | H    |                         | ODE BRG             | 6309 |         | DE BRG     | 6310 |
| AMPS                | 76/38                     |  | USABLE AT 208V | 76     |      | NEMA-NOM-EFF            | 94.1                |      | GREASE  | POLYREX EM |      |
| RATING              | 40C AMB-CONT              |  |                | SER.F. | 1.15 |                         | VPWM INVERTER READY |      |         |            |      |
| PF                  | 77                        |  |                |        |      |                         |                     |      |         |            |      |
| USABLE AT           | 50Hz 30HP 190/380V 88/44A |  |                |        | SF   | 1.0                     |                     |      |         |            |      |
| HTR-VOLTS           |                           |  | HTR-AMPS       |        |      | MAX. SPACE HEATER TEMP. |                     |      |         |            |      |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA340927    | SA 10D001Z654G1                          | 1.000 EA |
| RA329300    | RA 10D001Z654G1                          | 1.000 EA |
| 10CB3000SP  | STD KO BOX MODEL 310,312,314 MTRS W/2.00 | 1.000 EA |
| 10XN3118K12 | 5/16-18 X .75 GRADE 5, ZINC PLATED       | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| WD1000B25   | GND LUG, BURNDY L125HP OR T&B L125HP-BB  | 1.000 EA |
| 19XW3118G08 | .31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN   | 1.000 EA |
| 10EP1200A04 | ENDPLATE, MACH                           | 1.000 EA |
| 10AD2000A02 | AIR DEFLECTOR, STAT                      | 1.000 EA |
| 51XF1032A08 | 10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED | 3.000 EA |
| 10XN3816K76 | 3/8-16 X 4.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW5100A11   | W3917-042 WVY WSHR (WB)                  | 1.000 EA |
| 10XN3118K32 | 5/16-18 X 2.00" HEX HD, GRADE 5          | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| 10EP1200A03 | ENDPLATE, MACH PU                        | 1.000 EA |
| 10XN3816K76 | 3/8-16 X 4.75 HEX HD CAP SCREW, GRADE 5  | 4.000 EA |
| HW1001A38   | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10XN3118K32 | 5/16-18 X 2.00" HEX HD, GRADE 5          | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| 10AD2000A02 | AIR DEFLECTOR, STAT                      | 1.000 EA |
| 51XF1032A08 | 10/32X1/2 HXWSHR HD, SL, TYPE F ,SERATED | 3.000 EA |
| 10CB3500SP  | CONDUIT BOX LID, CAST                    | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 4.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| HW2501H28                     | KEY, 1/2 SQ X 3.250                      | 1.000 EA        |
| LB1115N                       | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA        |
| HW4500A03                     | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA        |
| HW4500A20                     | 1/8NPT SL PIPE PLUG                      | 1.000 EA        |
| HA4051A00                     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA        |
| MJ1000A02                     | GREASE, POLYREX EM EXXON (USe 4824-15A)  | 0.130 LB        |
| HW4500A03                     | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA        |
| HW4500A20                     | 1/8NPT SL PIPE PLUG                      | 1.000 EA        |
| HA4051A00                     | PLASTIC CAP FOR GREASE FITTING           | 1.000 EA        |
| MG1000Y03                     | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.125 GA        |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS              | 4.000 EA        |
| LB1119N                       | WARNING LABEL                            | 1.000 EA        |
| LC0181                        | CONNECTION LABEL                         | 1.000 EA        |
| NP3554LUA                     | SS SUPER-E VPWM INV READY UL CSA-EEV PRE | 1.000 EA        |
| 10PA1000                      | PACKAGING GROUP COMBINED PRINT PK1023A06 | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 5/18  | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 66162 - Typical performance - not guaranteed values

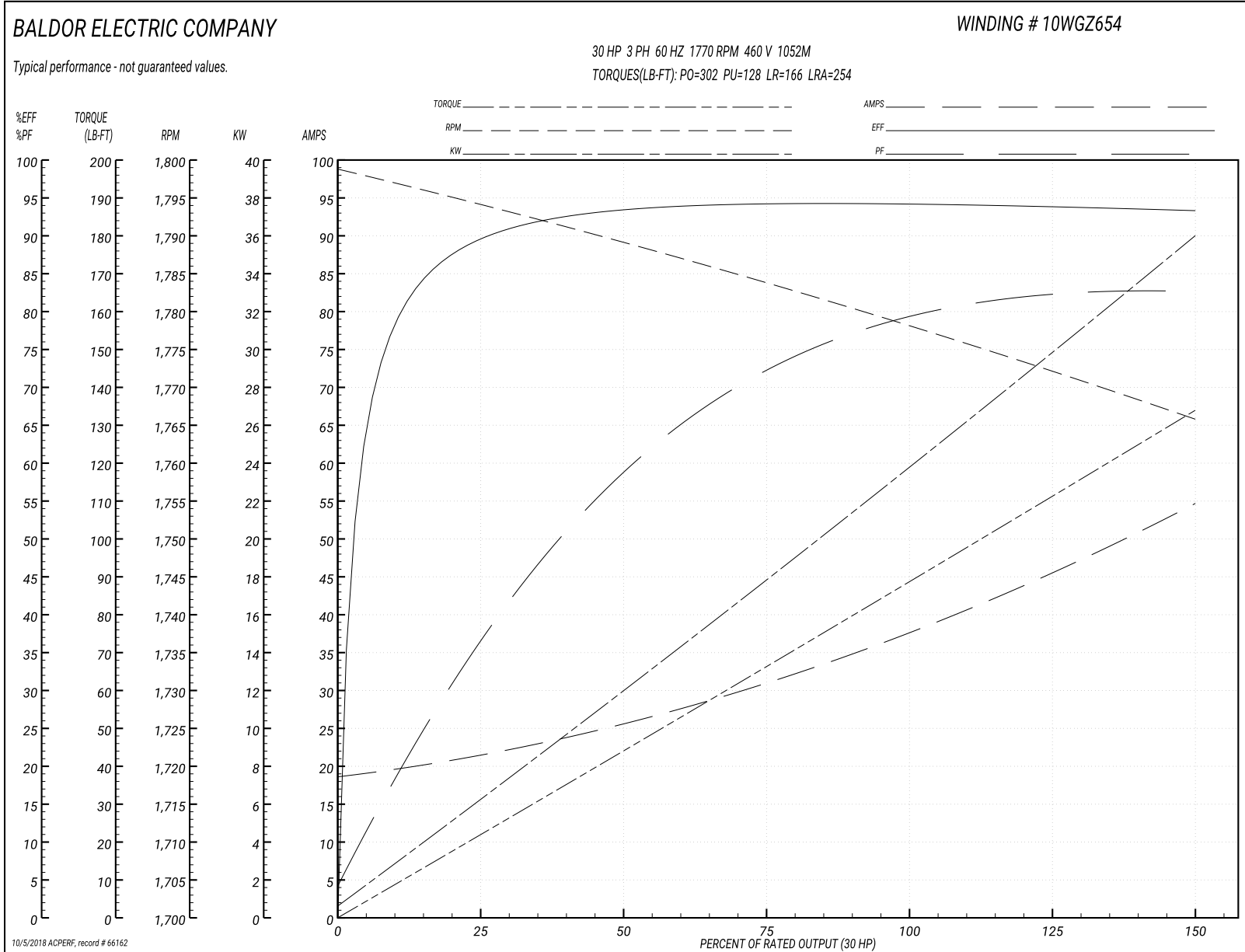
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 10WGZ654-R001 | <b>Type:</b> 1052M | <b>Enclosure:</b> OPEN |
|-------------------------------|--------------------|------------------------|

| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                |
|-----------------------|--------------|--------------|----|--|----------------|
| Rated Output (HP)     | 30           |              |    | Full Load Torque                         | 88.57 LB-FT    |
| Volts                 | 230/460      |              |    | Start Configuration                      | direct on line |
| Full Load Amps        | 78/39        |              |    | Breakdown Torque                         | 302 LB-FT      |
| R.P.M.                | 1770         |              |    | Pull-up Torque                           | 128 LB-FT      |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 166 LB-FT      |
| NEMA Design Code      | A            | KVA Code     | H  | Starting Current                         | 254 A          |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 19.1 A         |
| NEMA Nom. Eff.        | 94.1         | Power Factor | 77 | Line-line Res. @ 25°C                    | 0.22704 Ω      |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 33°C           |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 39°C           |
|                       |              |              |    | Locked-rotor Power Factor                | 32.4           |

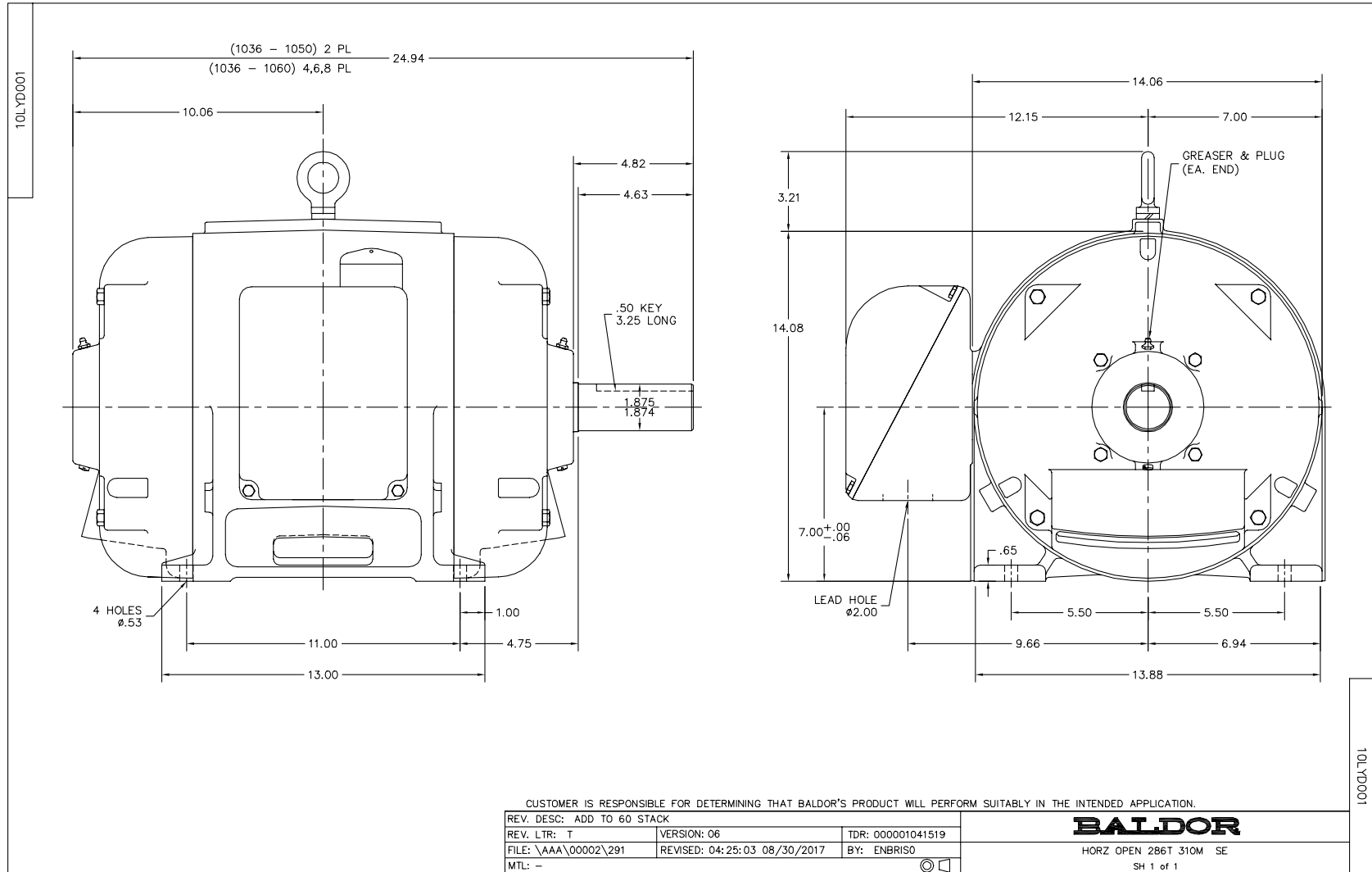
Load Characteristics 460 V, 60 Hz, 30 HP

| % of Rated Load | 25   | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|------|--------|--------|--------|--------|--------|------|
| Power Factor    | 38   | 60     | 72     | 78     | 82     | 83     | 80   |
| Efficiency      | 89.4 | 93.3   | 94.2   | 94.2   | 93.9   | 93.3   | 94   |
| Speed           | 1794 | 1789.1 | 1783.8 | 1778.2 | 1772.3 | 1765.7 | 1775 |
| Line amperes    | 20.9 | 25.2   | 31.1   | 38     | 45.8   | 54.3   | 42.7 |

Performance Graph at 460V, 60Hz, 30.0HP Typical performance - Not guaranteed values



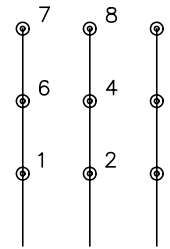




CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



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: C                               | BY: JLP | REVISED: 01/21/99 2:28 | TDR: 0171435 |
| 0810D0                                    |         | FILE: AAA00005148      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180

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