

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **CEM7081T-I-5**

**50HP,3560RPM,3PH,60HZ,326TSC,1264M,XPFC**

| Part Detail |        |                |       |             |          |               |            |
|-------------|--------|----------------|-------|-------------|----------|---------------|------------|
| Revision:   | F      | Status:        | PRD/A | Change #:   |          | Proprietary:  | No         |
| Type:       | AC     | Prod. Type:    | 1264M | Elec. Spec: | 12WGY735 | CD Diagram:   | CD0006     |
| Enclosure:  | XPFC   | Mfg Plant:     |       | Mech. Spec: | 12F665   | Layout:       | 12LYF665   |
| Frame:      | 326TSC | Mounting:      | F1    | Poles:      | 02       | Created Date: | 11-21-2013 |
| Base:       | RG     | Rotation:      | R     | Insulation: | F        | Eff. Date:    | 08-29-2016 |
| Leads:      | 3#8    |                |       |             |          | Replaced By:  |            |
| Literature: |        | Elec. Diagram: |       |             |          |               |            |

| Nameplate NP0977XPSLEV |                           |  |  |        |            |      |              |           |      |    |    |
|------------------------|---------------------------|--|--|--------|------------|------|--------------|-----------|------|----|----|
| NO.                    |                           |  |  |        |            |      | CC           | 010A      |      |    |    |
| SER.                   |                           |  |  |        |            |      |              | TEMP CODE | T3C  |    |    |
| SPEC.                  | 12F665Y735G1              |  |  |        |            |      |              |           |      |    |    |
| CAT.NO.                | CEM7081T-I-5              |  |  |        |            |      |              |           |      |    |    |
| HP                     | 50 NEMA MG-1 PT.5,IP55    |  |  |        |            |      |              |           |      |    |    |
| VOLTS                  | 575                       |  |  |        |            |      |              |           |      |    |    |
| AMPS                   | 45                        |  |  |        |            |      |              |           |      |    |    |
| RPM                    | 3560                      |  |  |        |            |      | MOTOR WEIGHT | 766       |      |    |    |
| HERTZ                  | 60                        |  |  | PH     | 3          | CL   | F            | DE BRG    | 6312 |    |    |
| SER.F.                 | 1.15                      |  |  | DES    | A          | CODE | K            | ODE BRG   | 6311 |    |    |
| FRAME                  | 326TSC                    |  |  | GREASE | POLYREX EM |      |              |           |      |    |    |
| RATING                 | 40C AMB-CONT              |  |  |        |            |      |              |           |      |    |    |
| USABLE AT 208V         |                           |  |  |        |            |      | NEMA-NOM-EFF | 93        |      | PF | 89 |
|                        | 55C AMB @ 1.0 SF,60C RISE |  |  |        |            |      |              |           |      |    |    |

| Parts List   |   |          |
|--------------|---|----------|
| Part Number  | Description                               | Quantity |
| SA272802     | SA 12F665Y735G1                           | 1.000 EA |
| RA259407     | RA 12F665Y735G1                           | 1.000 EA |
| 37FN3002C04  | EXFN, PLASTIC, 6.00 OD, 2.000 ID          | 1.000 EA |
| 12CB1003A01  | CONDUIT BOX MACH. GROUP C MTRS            | 1.000 EA |
| 10XN3118K24  | 5/16-18 X 1.50" HEX HD, GRADE 5           | 4.000 EA |
| HW1001A31    | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 4.000 EA |
| WD1000B19    | TERMINAL BURNDY L250HP                    | 1.000 EA |
| 10XN3816K12  | 3/8-16 X 3/4 HEX HD CAP GRADE 5           | 1.000 EA |
| HW1001A38    | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I  | 1.000 EA |
| 12EP1705A12P | EP, MACH. XPFC, 311 BRG. GRP C, HW4505A0  | 1.000 EA |
| HW3023E06    | .125 X .625 SPIRAL SPRING PIN             | 1.000 EA |
| HA3051A03    | 1/2-13X2.75 BLT GR8 1.75 TO E NC F/S      | 4.000 EA |
| HW1001A50    | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 4.000 EA |
| HW5100A13    | W4627-047 WVY WSHER                       | 1.000 EA |
| 12EP1707A11P | FACE MTD. EP XPFC, W/DRN HW4505A02 W/PRI  | 1.000 EA |
| HW3023E06    | .125 X .625 SPIRAL SPRING PIN             | 1.000 EA |
| 10XN3118K44  | 5/16-18 X 2.75" HEX HD, GRADE 5           | 4.000 EA |
| HW1001A31    | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 4.000 EA |
| HA3051A03    | 1/2-13X2.75 BLT GR8 1.75 TO E NC F/S      | 4.000 EA |
| HW1001A50    | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 4.000 EA |
| HA2067A02    | SLINGER ALUM (AUTO)                       | 1.000 EA |
| 80XN1032A07  | SET SCREW, HEX XOCK, ZN                   | 2.000 EA |
| 12FH1001A06  | FAN HOUSING 312 EXPLOSION PROOF MOTORS    | 1.000 EA |
| 10XN3118K12  | 5/16-18 X .75 GRADE 5, ZINC PLATED        | 3.000 EA |

| <b>Parts List (continued)</b> |   |                 |
|-------------------------------|---|-----------------|
| <b>Part Number</b>            | <b>Description</b>                        | <b>Quantity</b> |
| HW1001A31                     | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 3.000 EA        |
| 12CB1502A01                   | CONDUIT BOX LID MACH. GROUP C MTRS        | 1.000 EA        |
| 84XN5013J32                   | SOCKET HD.CAP SCR,1/2-13 X 2"LG,ALLOY ST  | 10.000 EA       |
| HW1001A50                     | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 10.000 EA       |
| HW2501H18                     | KEY, 1/2 SQ X 2.000                       | 1.000 EA        |
| LB1115N                       | LABEL,LIFTING DEVICE (ON ROLLS)           | 1.000 EA        |
| LB1081C                       | ALUM XP CAUTION LABEL (COL PLANT ONLY-    | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 11/14  | 1.000 EA        |
| HW4500A20                     | 1/8NPT SL PIPE PLUG                       | 2.000 EA        |
| HW4505A02                     | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS  | 1.000 EA        |
| MJ1000A02                     | GREASE, POLYREX EM EXXON (USe 4824-15A)   | 0.200 LB        |
| HW4500A20                     | 1/8NPT SL PIPE PLUG                       | 2.000 EA        |
| HW4505A02                     | BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS  | 1.000 EA        |
| HW2500A25                     | WOODRUFF KEY USA #1008 #BLOW CARBON STEE  | 1.000 EA        |
| 51XB1214A20                   | 12-14X1.25 HXWSSLD SERTYB                 | 1.000 EA        |
| MG1025G05                     | WILKOFASST, 789.227, MED. GRAY CHAR. MET. | 0.080 GA        |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS               | 6.000 EA        |
| LB1119N                       | WARNING LABEL                             | 1.000 EA        |
| LC0006                        | CONNECTION LABEL                          | 1.000 EA        |
| NP0977XPSLEV                  | SS XP UL CSA-EEV CC CL-I GP-C&D           | 1.000 EA        |
| 14PA1000                      | PACKAGING 314 GROUP COMBINED PRINT        | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 44035 - Typical performance - not guaranteed values

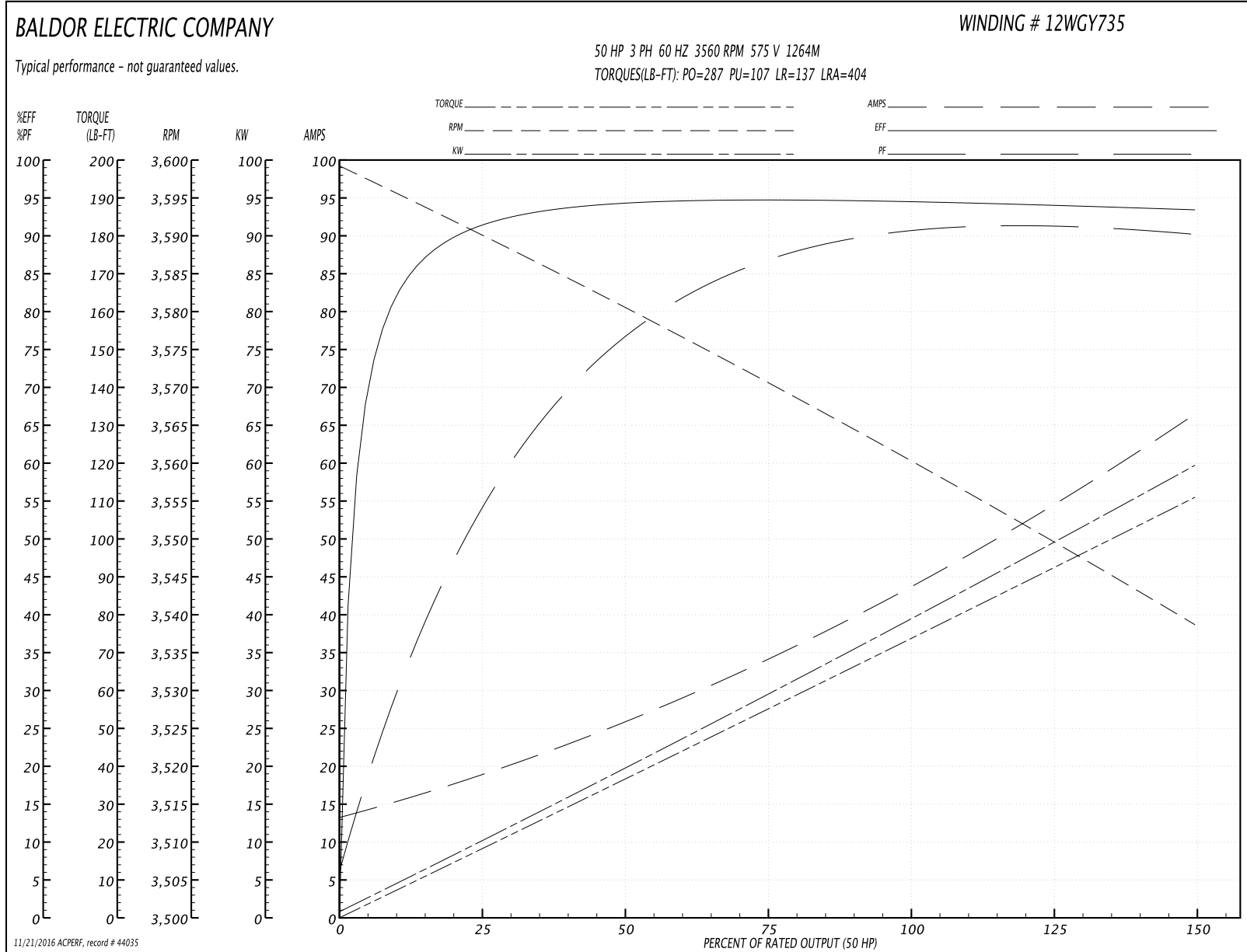
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 12WGY735-R001 | <b>Type:</b> 1264M | <b>Enclosure:</b> XPFC |
|-------------------------------|--------------------|------------------------|

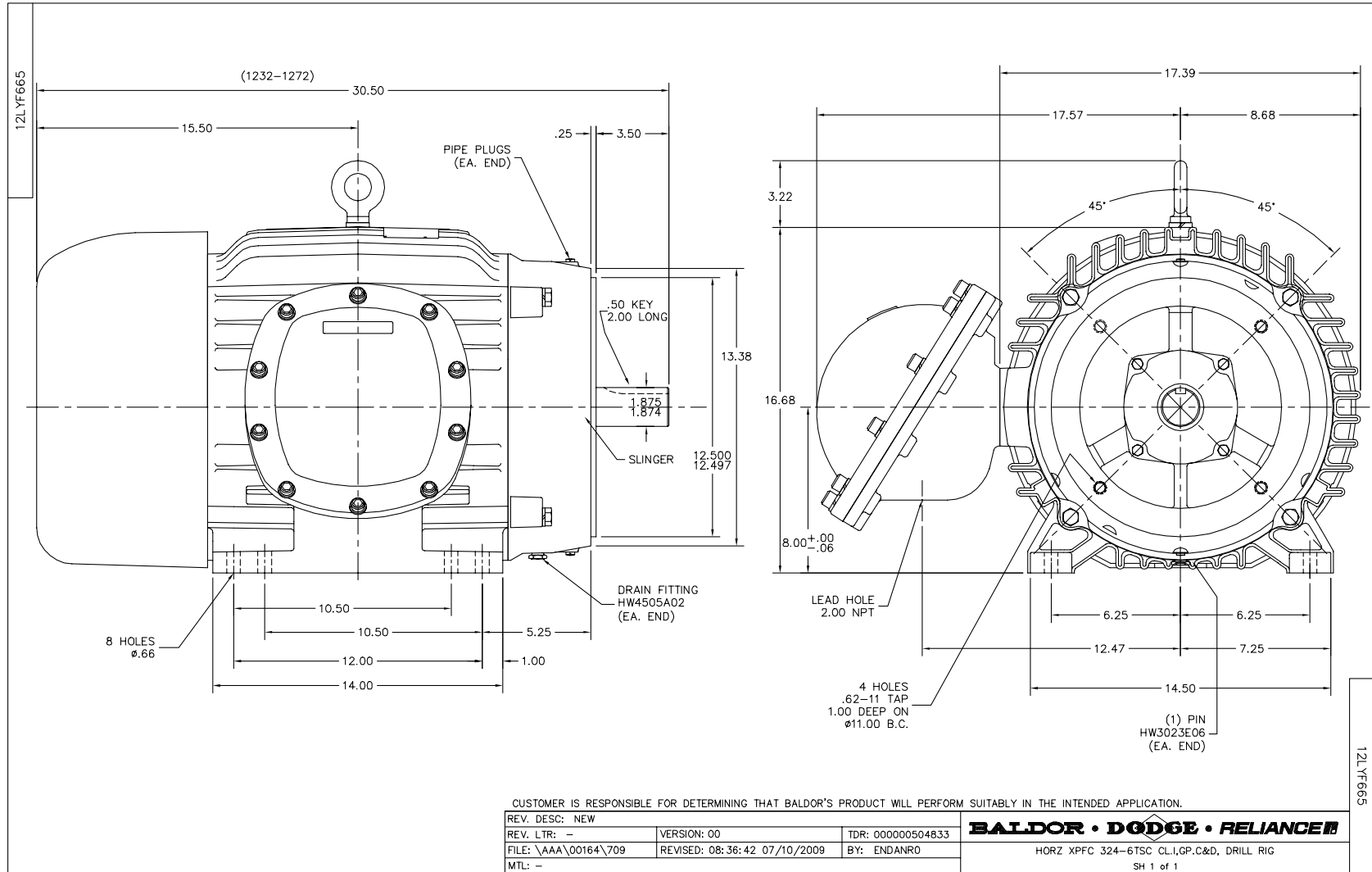
| Nameplate Data        |              |              |    | 575 V, 60 Hz:<br>Single Voltage Motor |                         |
|-----------------------|--------------|--------------|----|---------------------------------------|-------------------------|
| Rated Output (HP)     | 50           |              |    | Full Load Torque                      | 74.1 LB-FT              |
| Volts                 | 575          |              |    | Start Configuration                   | direct on line          |
| Full Load Amps        | 45           |              |    | Breakdown Torque                      | 287 LB-FT               |
| R.P.M.                | 3560         |              |    | Pull-up Torque                        | 107 LB-FT               |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                   | 137 LB-FT               |
| NEMA Design Code      | A            | KVA Code     | K  | Starting Current                      | 404 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                       | 14.1 A                  |
| NEMA Nom. Eff.        | 93           | Power Factor | 89 | Line-line Res. @ 25°C                 | 0.132 Ω                 |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load               | 53°C                    |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                | 64°C                    |
|                       |              |              |    | Locked-rotor Power Factor             | 22                      |
|                       |              |              |    | Rotor inertia                         | 4.98 LB-FT <sup>2</sup> |

Load Characteristics 575 V, 60 Hz, 50 HP

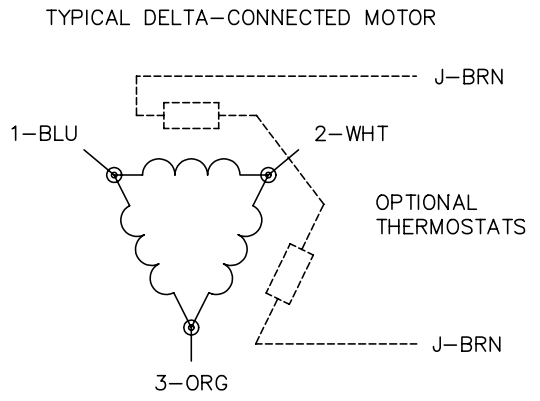
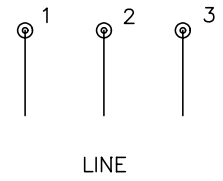
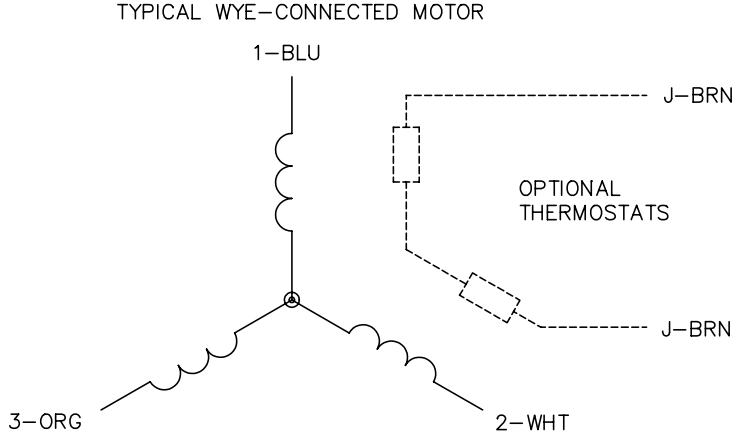
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 58   | 79   | 86   | 89   | 90   | 91   | 90   |
| Efficiency      | 91.5 | 94.3 | 94.7 | 94.6 | 94.1 | 93.4 | 94.3 |
| Speed           | 3590 | 3581 | 3570 | 3560 | 3549 | 3539 | 3553 |
| Line amperes    | 17.9 | 25.4 | 34.8 | 44.5 | 55.2 | 65.9 | 50.9 |

Performance Graph at 575V, 60Hz, 50.0HP Typical performance - Not guaranteed values





CD0006



- NOTES:
1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
  2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
  5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

|   |         |                        |              |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                        |              |
| REV. LTR: D                               | BY: JLP | REVISED: 01/21/99 4:02 | TDR: 0171435 |
| 9000D                                     |         | FILE: AAA00005141      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**  
3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

CD0006