

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM4408TR-4**

**250HP,1785RPM,3PH,60HZ,449T,TEFC,F1**

| Part Detail |                      |                |         |             |           |               |            |
|-------------|----------------------|----------------|---------|-------------|-----------|---------------|------------|
| Revision:   | B                    | Status:        | PRD/A   | Change #:   |           | Proprietary:  | No         |
| Type:       | AC                   | Prod. Type:    | A44144M | Elec. Spec: | A44WG5150 | CD Diagram:   | 416820-036 |
| Enclosure:  | TEFC                 | Mfg Plant:     |         | Mech. Spec: |           | Layout:       | 617427-209 |
| Frame:      | 449T                 | Mounting:      | F1      | Poles:      | 04        | Created Date: | 04-13-2015 |
| Base:       |                      | Rotation:      | R       | Insulation: | F         | Eff. Date:    | 06-03-2016 |
| Leads:      | 3#1/0 (02 per group) |                |         |             |           | Replaced By:  |            |
| Literature: |                      | Elec. Diagram: |         |             |           |               |            |

Nameplate NP2496L

MOBIL SHC 220

## Nameplate NP2349L

|                   |               |  |       |              |            |       |                         |       |        |                       |      |    |      |
|-------------------|---------------|--|-------|--------------|------------|-------|-------------------------|-------|--------|-----------------------|------|----|------|
| SPEC NO.          | A44-7126-5150 |  |       | CAT.NO.      | EM4408TR-4 |       |                         | FRAME | 449T   |                       |      |    |      |
| HP                | 250           |  | VOLTS | 460          |            | PHASE | 3                       |       | DESIGN | B                     | TYPE | P  |      |
| RPM               | 1785          |  | AMPS  | 276          |            | HZ    | 60                      |       | AMB    | 40                    |      | SF | 1.15 |
| DRIVE END BEARING | 110RU02M30X   |  |       | DUTY         | CONT       |       | INSUL.CLASS             | F     |        |                       |      |    |      |
| OPP D.E. BEARING  | 90BC03J30X    |  |       | ENCL         | TEFC       |       | CODE                    | G     |        |                       |      |    |      |
| SER.NO.           |               |  |       | POWER FACTOR | 88         |       | NEMA-NOM-EFFICIENCY     | 96.2  |        |                       |      |    |      |
|                   |               |  |       |              |            |       | MAX CORR KVAR           | 39    |        | GUARANTEED EFFICIENCY | 95.4 |    |      |
|                   |               |  |       |              |            |       | NEMA NOM/CSA QUOTED EFF |       |        |                       |      |    |      |
|                   |               |  |       |              |            |       | MOTOR WEIGHT            | 2888  |        |                       |      |    |      |

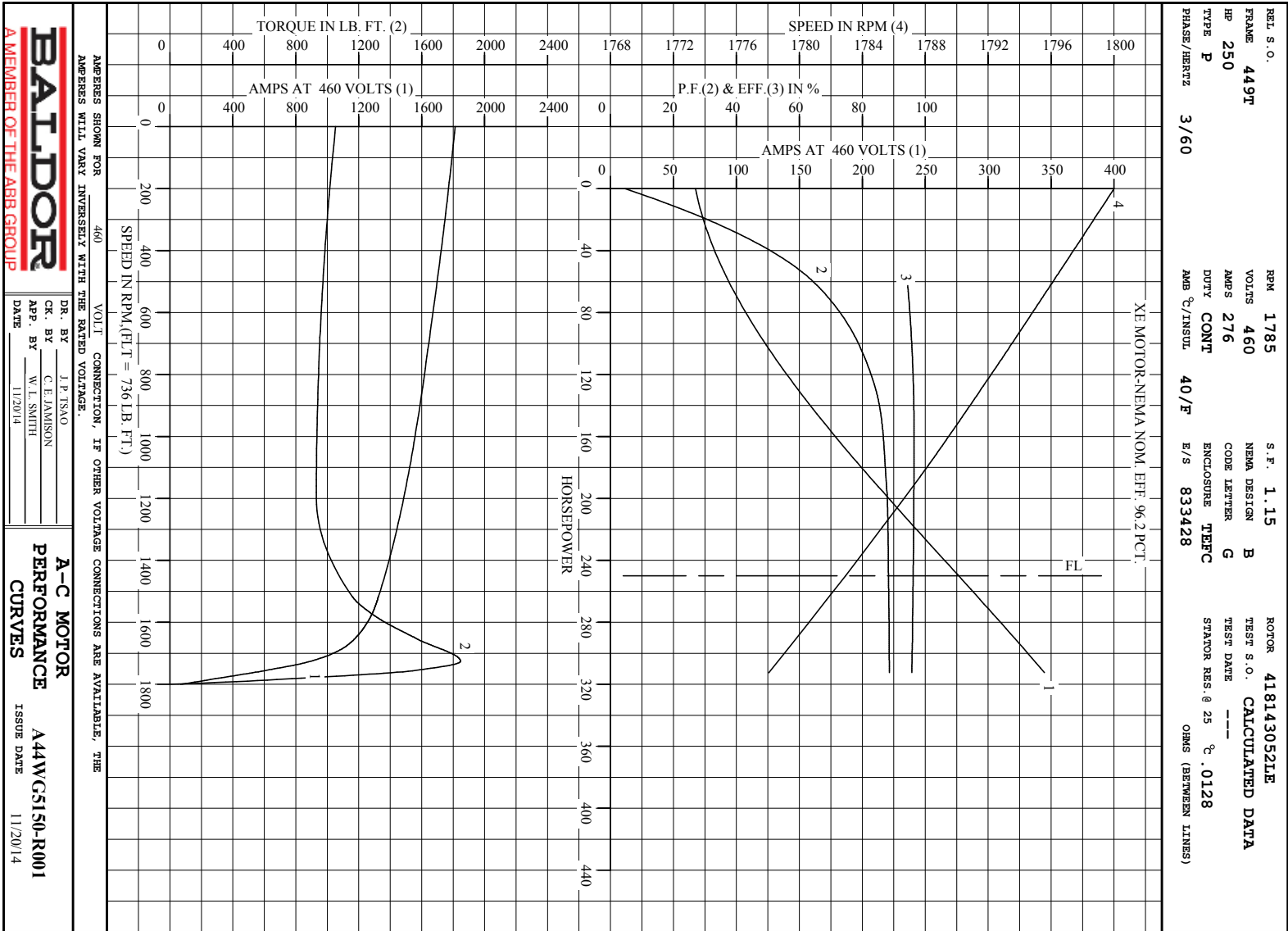
| Parts List  |                                        |          |
|-------------|----------------------------------------|----------|
| Part Number | Description                            | Quantity |
| SA299284    | SA A44-7126-5150                       | 1.000 EA |
| RA286299    | RA A44-7126-5150                       | 1.000 EA |
| 421948051   | LABEL, MYLAR                           | 1.000 EA |
| NP2496L     | MOTOR LUBE NAMEPLATE                   | 1.000 EA |
| 000613006PU | N/P (RELEASE QTY 10,000) UL CSA LABEL  | 1.000 EA |
| 000692000FF | N/P                                    | 1.000 EA |
| 000692000VD | LABEL WARNING                          | 1.000 EA |
| NP2349L     | SUPER-E ,SS, CSA, CSA SUPER-E          | 1.000 EA |
| 418151014H  | RETAIN RING                            | 1.000 EA |
| 089490099A  | G28 BRKT 089490098WCA KB               | 1.000 EA |
| 415072001B  | CLAMP                                  | 1.000 EA |
| 083199126RA | G28 MOLDED FAN COVER W/BAFFLE ASSEMBLY | 1.000 EA |
| 034180014DA | KEY 1/4X1/4X1-3/4 L                    | 1.000 EA |
| 078548001R  | FAN KB 234/150 (84) 400                | 1.000 EA |
| 004824015AP | GREASE MOBILITH SHC 220                | 1.160 LB |
| 032018020FK | HHCS 3/4-10X2-1/2 PLTD.                | 4.000 EA |
| 032018008CK | HHCS 3/8-16X1L PLATED                  | 4.000 EA |
| 032018030DK | HHCS 1/2-13X3-3/4 PLTD.                | 3.000 EA |
| 415096002A  | CPLG 1/8 HEX TYPE                      | 1.000 EA |
| 034630002AB | CPLG 1/4" PLATED                       | 1.000 EA |
| 034017014AB | LCKW 3/8 STD. PLATED                   | 4.000 EA |
| 034530072BB | PIPE NIPPLE,DE - 440-BS                | 1.000 EA |
| 034530072AB | P/NIP 1/8X9"L Threaded both ends       | 1.000 EA |
| 034690005AB | PPLG 3/4 PLATED                        | 1.000 EA |

| Parts List (continued) |                                        |          |
|------------------------|----------------------------------------|----------|
| Part Number            | Description                            | Quantity |
| 034690002AB            | "unbulked" PPLG 1/4" PLTD.             | 1.000 EA |
| 034690001AB            | SQHDPLG, COND                          | 1.000 EA |
| 032620016LA            | SOCKET SET SCREW-449                   | 3.000 EA |
| 702623022A             | G28 AIR DEFLECTOR DRIVE END -- PLASTIC | 1.000 EA |
| 418151014G             | RETAIN RING                            | 1.000 EA |
| 418151014G             | RETAIN RING                            | 1.000 EA |
| 034630002AB            | CPLG 1/4" PLATED                       | 1.000 EA |
| 034530072BB            | PIPE NIPPLE,DE - 440-BS                | 1.000 EA |
| 034690002AB            | "unbulked" PPLG 1/4" PLTD.             | 1.000 EA |
| 034690001AB            | SQHDPLG, COND                          | 1.000 EA |
| 702623013A             | THERMAL BARRIER -- G28 -- BRACKET MTD  | 1.000 EA |
| 032018004BK            | HHCS 5/16-18X1/2 PLATED                | 3.000 EA |
| 034017013AB            | LCKW 5/16 STD. PLATED                  | 3.000 EA |
| 089490101A             | G28 BRKT 089490100WCA                  | 1.000 EA |
| 032018020FK            | HHCS 3/4-10X2-1/2 PLTD.                | 4.000 EA |
| 032018030DK            | HHCS 1/2-13X3-3/4 PLTD.                | 3.000 EA |
| 034530072AB            | P/NIP 1/8X9"L Threaded both ends       | 1.000 EA |
| 415096002A             | CPLG 1/8 HEX TYPE                      | 1.000 EA |
| 032018006BK            | HHCS 5/16-18X3/4 PLATED                | 3.000 EA |
| 034001013AB            | FLTW BAFFLE                            | 3.000 EA |
| 415915007G             | GASK, LAC                              | 1.000 FT |
| 702658001B             | +C/BOX, PAINTED 440                    | 1.000 EA |
| 702658002A             | +C/BOX CVR, PAINTED 440                | 1.000 EA |
| 406056008A             | GASKET, TERBD 440                      | 1.000 EA |

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|             |                                         |          |
|-------------|-----------------------------------------|----------|
| 418153001A  | GASK 440                                | 1.000 EA |
| 418150003A  | GREASE FITTING CAP                      | 1.000 EA |
| 032018008DK | HHCS 1/2-13X1 PLATED                    | 4.000 EA |
| 035000001A  | ALFTG 1/8" 1610-BL                      | 1.000 EA |
| 415000103D  | T/LUG #4AWG-1/0AWG W/HOLE FOR .250 BOLT | 1.000 EA |
| 033512006LB | HHTTS 1/4-20X3/4 PLTD.                  | 8.000 EA |
| 406099000A  | PLUG - FAN COVER 320-440                | 1.000 EA |
| 033512004LB | HHTTS 1/4-20X1/2 PLTD.                  | 1.000 EA |
| 035000001A  | ALFTG 1/8" 1610-BL                      | 1.000 EA |
| 418150003A  | GREASE FITTING CAP                      | 1.000 EA |
| MG1025Y03   | WILKOFAS, 789.701, SUPER E PEARL GOLD   | 2.000 QT |
| 033775004EA | DRSCR #6-1/4 304 S.S.                   | 2.000 EA |
| 034180054KA | KEY 7/8X7/8X6-3/4 L                     | 1.000 EA |
| 604797056   | 400-447 FRAME 60 X 42                   | 1.000 EA |
| 032510026D  | CARRIAGE BOLT - 440                     | 2.000 EA |
| 034001014AB | FLAT WASHER 3/8"PLATED                  | 2.000 EA |
| 032018028CK | HHCS 3/8-16X3-1/2 PLTD.                 | 1.000 EA |
| 604797001R  | 440 FR. ROLLER BEARING MOTOR SHAFT      | 1.000 EA |
| 034001016AB | WSHR .562ID 1.375OD .109                | 2.000 EA |
| 034001014AB | FLAT WASHER 3/8"PLATED                  | 1.000 EA |
| 033300014AC | HEX NUT, SHIPPING - 400                 | 2.000 EA |
| 604797003C  | SHIPPING BAG                            | 1.000 EA |
| 034001016AB | WSHR .562ID 1.375OD .109                | 1.000 EA |

|                                                                                                                                               |             |                                                                                   |                       |                                                                        |                 |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------|-----------------|-------|
| REL.<br>S.O.                                                                                                                                  | FRAME       | HP                                                                                | TYPE                  | PHASE/<br>HERTZ                                                        | RPM             | VOLTS |
|                                                                                                                                               | 449T        | 250                                                                               | P                     | 3/60                                                                   | 1785            | 460   |
| AMPS                                                                                                                                          | DUTY        | AMB°C/<br>INSUL.                                                                  | S.F.                  | NEMA<br>DESIGN                                                         | CODE<br>LETTER  | ENCL. |
| 276                                                                                                                                           | CONT        | 40/F                                                                              | 1.15                  | B                                                                      | G               | TEFC  |
|                                                                                                                                               |             |                                                                                   |                       |                                                                        |                 |       |
| E/S                                                                                                                                           | ROTOR       | TEST<br>S.O.                                                                      | TEST<br>DATE          | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES)                             |                 |       |
| 833428                                                                                                                                        | 4181430521E | ---                                                                               | ---                   | .0128                                                                  |                 |       |
| PERFORMANCE                                                                                                                                   |             |                                                                                   |                       |                                                                        |                 |       |
| LOAD                                                                                                                                          | HP          | AMPERES                                                                           | RPM                   | POWER<br>FACTOR %                                                      | %<br>EFFICIENCY |       |
| NO LOAD                                                                                                                                       | 0           | 67.9                                                                              | 1800                  | 4.53                                                                   | 0               |       |
| 1/4                                                                                                                                           | 62.6        | 94.4                                                                              | 1796                  | 65.7                                                                   | 94.4            |       |
| 2/4                                                                                                                                           | 125         | 145                                                                               | 1792                  | 83.6                                                                   | 96.2            |       |
| 3/4                                                                                                                                           | 187         | 208                                                                               | 1788                  | 87.6                                                                   | 96.4            |       |
| 4/4                                                                                                                                           | 250         | 276                                                                               | 1783                  | 88.3                                                                   | 96.2            |       |
| 5/4                                                                                                                                           | 313         | 345                                                                               | 1778                  | 88.6                                                                   | 95.7            |       |
| SPEED TORQUE                                                                                                                                  |             |                                                                                   |                       |                                                                        |                 |       |
|                                                                                                                                               |             | RPM                                                                               | TORQUE<br>% FULL LOAD | TORQUE<br>LB.-FT.                                                      | AMPERES         |       |
| LOCKED ROTOR                                                                                                                                  | 0           |                                                                                   | 143                   | 1053                                                                   | 1813            |       |
| PULL UP                                                                                                                                       | 1200        |                                                                                   | 126                   | 931                                                                    | 1486            |       |
| BREAKDOWN                                                                                                                                     | 1726        |                                                                                   | 251                   | 1847                                                                   | 893             |       |
| FULL LOAD                                                                                                                                     | 1783        |                                                                                   | 100                   | 736                                                                    | 276             |       |
| AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE<br>AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE |             |                                                                                   |                       |                                                                        |                 |       |
| REMARKS: CALCULATED DATA                                                                                                                      |             |                                                                                   |                       |                                                                        |                 |       |
| XE MOTOR-NEMA NOM. EFF. 96.2 PCT.                                                                                                             |             |                                                                                   |                       |                                                                        |                 |       |
| <b>BALDOR</b><br>A MEMBER OF THE ABB GROUP                                                                                                    |             | DR. BY J. P. TSAO<br>CK. BY C. E. JAMISON<br>APP. BY W. L. SMITH<br>DATE 11/20/14 |                       | A-C MOTOR<br>PERFORMANCE DATA<br>A44WG5150-R001<br>ISSUE DATE 11/20/14 |                 |       |



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# DUTY MASTER ALTERNATING CURRENT MOTORS

## SQUIRREL-CAGE INDUCTION

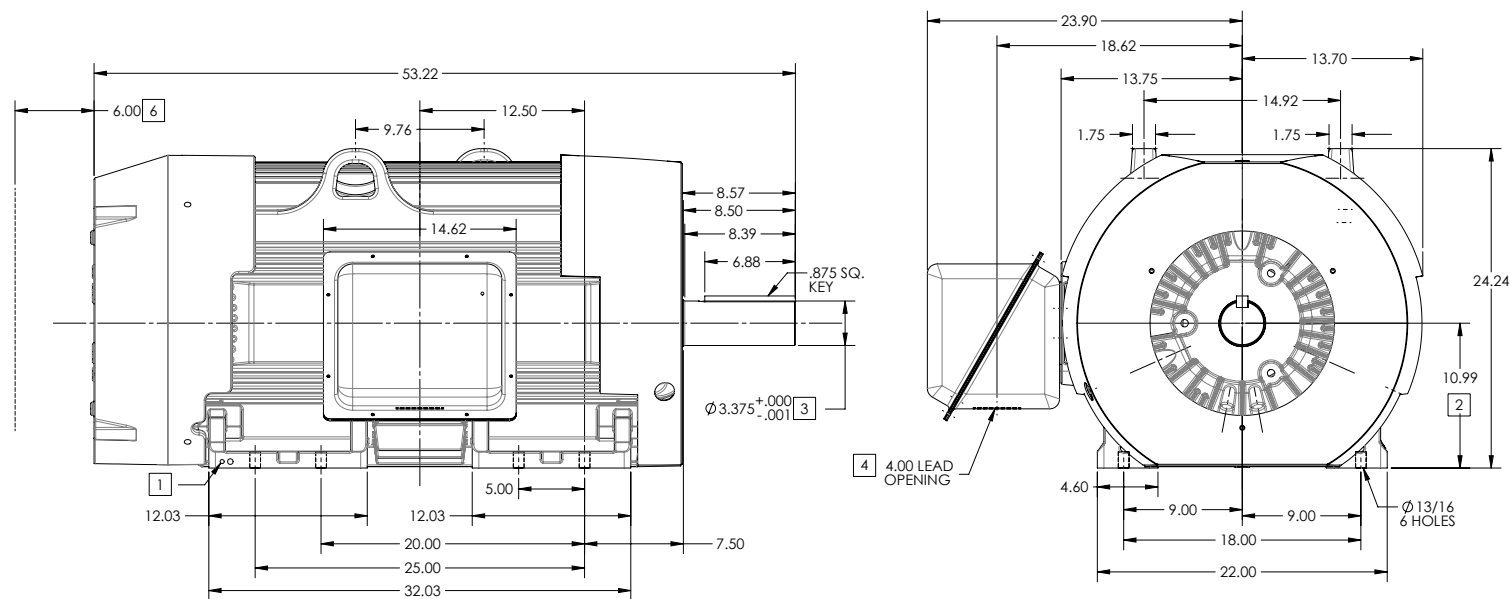
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00, -.06
3. VARIES +.00, -.001
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO ENCROACH ON AIR INLET

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.  
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF  
STANDARD SHAFT EXTENSION IS .003" T.I.R. TO 5 INCH DIA.

[5] WEIGHT (LBS): 3080

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN INCHES; SEE SHEET 2 FOR DIMENSIONS IN MILLIMETERS

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER  
1 OF 1  
60C-17427-209

REV. DESC: NEW ISSUE  
REV: - VERSION: 00 REVISED: 04/59/09 08/26/2014 TDR: 000000867637  
MODEL NO. 617427-209  
BY: RAGGDM

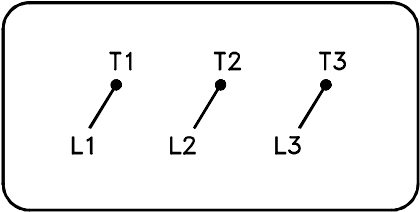
**BALDOR**  
G449T/447T STD FOOTED SIDE/CENTER STEEL CIB, F1 BA-7.50

416820-036

A-C MOTOR

CONNECTION DIAGRAM

STANDARD 3 LEAD                      CONNECTED



(N.P. 1575-BA)

416820-036

|                                      |             |                                |                             |
|--------------------------------------|-------------|--------------------------------|-----------------------------|
| REV. DESC: LOADED TO BUS, C/R 335225 |             |                                | <b>BALDOR</b>               |
| REV. LTR: -                          | VERSION: 00 | TDR: 000000538207              |                             |
| FILE: \MGA\00000\682                 |             | REVISED: 11: 54: 06 04/30/2010 | CONN DIAG - STANDARD 3 LEAD |
| MTL: -                               |             | BY: RAGRA                      | SH 1 of 1                   |

Marketing maintained PDF of MN408:

<http://www.baldor.com/support/Literature/Load.ashx/MN408?ManNumber=MN408>

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>