

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **EM25694T-4**

**300HP,1785RPM,3PH,60HZ,449T,DP,F1**

| Part Detail |       |                |         |             |           |               |            |
|-------------|-------|----------------|---------|-------------|-----------|---------------|------------|
| Revision:   | -     | Status:        | PRD/A   | Change #:   |           | Proprietary:  | No         |
| Type:       | AC    | Prod. Type:    | A44112M | Elec. Spec: | A44WG4249 | CD Diagram:   | 416820-008 |
| Enclosure:  | DP    | Mfg Plant:     |         | Mech. Spec: |           | Layout:       | 604989-380 |
| Frame:      | 449T  | Mounting:      | F1      | Poles:      | 04        | Created Date: | 04-29-2015 |
| Base:       |       | Rotation:      | R       | Insulation: | F         | Eff. Date:    | 05-08-2015 |
| Leads:      | 6#2/0 |                |         |             |           | Replaced By:  |            |
| Literature: |       | Elec. Diagram: |         |             |           |               |            |

|                   |  |
|-------------------|--|
| Nameplate NP2496L |  |
| MOBIL POLYREX EM  |  |
|                   |  |

| Nameplate NP2349L |               |              |            |                         |      |                       |    |      |      |
|-------------------|---------------|--------------|------------|-------------------------|------|-----------------------|----|------|------|
| SPEC NO.          | A44-7189-4249 | CAT.NO.      | EM25694T-4 | FRAME                   | 449T |                       |    |      |      |
| HP                | 300           | VOLTS        | 460        | PHASE                   | 3    | DESIGN                | B  | TYPE | P    |
| RPM               | 1785          | AMPS         | 331        | HZ                      | 60   | AMB                   | 40 | SF   | 1.15 |
| DRIVE END BEARING | 90BC03J30X    | DUTY         | CONT       | INSUL.CLASS             | F    |                       |    |      |      |
| OPP D.E. BEARING  | 90BC03J30X    | ENCL         | DP         | CODE                    | G    |                       |    |      |      |
| SER.NO.           |               | POWER FACTOR | 88         | NEMA-NOM-EFFICIENCY     | 95.8 |                       |    |      |      |
|                   |               |              |            | MAX CORR KVAR           | 59.9 | GUARANTEED EFFICIENCY | 95 |      |      |
|                   |               |              |            | NEMA NOM/CSA QUOTED EFF |      |                       |    |      |      |
|                   |               |              |            | MOTOR WEIGHT            | 2151 |                       |    |      |      |

| Parts List  |                                       |          |
|-------------|---------------------------------------|----------|
| Part Number | Description                           | Quantity |
| SA299797    | SA A44-7189-4249                      | 1.000 EA |
| RA286825    | RA A44-7189-4249                      | 1.000 EA |
| 421948044   | LABEL, MYLAR                          | 1.000 EA |
| NP2496L     | MOTOR LUBE NAMEPLATE                  | 1.000 EA |
| 000613006PU | N/P (RELEASE QTY 10,000) UL CSA LABLE | 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 |
| 702611001A  | BAFFL 440 SUB PAINT                   | 1.000 EA |
| 089439051A  | BRKT 440 089439051WCB                 | 1.000 EA |
| 004824015A  | GREASE POLYREX EM                     | 1.160 LB |
| 032018028EK | HHCS 5/8-11X3-1/2L PLTD               | 4.000 EA |
| 032018036DK | HHCS 1/2-13X4-1/2 PLTD.               | 3.000 EA |
| 410700004A  | WSHR                                  | 1.000 EA |
| 035000001G  | GREASE RELIEF FITTING, ALEMITE 317400 | 1.000 EA |
| 034017012AB | LCKW 1/4 STD. PLATED                  | 4.000 EA |
| 405851012AB | SPACE                                 | 4.000 EA |
| 032018006AK | HHCS 1/4-20X3/4L PLATED               | 4.000 EA |
| 034000012AB | WSHR 1/4 STD. PLATED                  | 4.000 EA |
| 034600001AA | BUSH 1/4TO1/8 BLACK                   | 1.000 EA |
| 418151014G  | RETAIN RING                           | 1.000 EA |
| 405851012AB | SPACE                                 | 4.000 EA |
| 034017012AB | LCKW 1/4 STD. PLATED                  | 4.000 EA |
| 034600001AA | BUSH 1/4TO1/8 BLACK                   | 1.000 EA |

| <b>Parts List (continued)</b> |   |                 |
|-------------------------------|---|-----------------|
| <b>Part Number</b>            | <b>Description</b>                      | <b>Quantity</b> |
| 034000012AB                   | WSHR 1/4 STD. PLATED                    | 4.000 EA        |
| 032018006AK                   | HHCS 1/4-20X3/4L PLATED                 | 4.000 EA        |
| 089439051A                    | BRKT 440 089439051WCB                   | 1.000 EA        |
| 702611001A                    | BAFFL 440 SUB PAINT                     | 1.000 EA        |
| 032018028EK                   | HHCS 5/8-11X3-1/2L PLTD                 | 4.000 EA        |
| 032018036DK                   | HHCS 1/2-13X4-1/2 PLTD.                 | 3.000 EA        |
| 035000001G                    | GREASE RELIEF FITTING, ALEMITE 317400   | 1.000 EA        |
| 406056008A                    | GASKET, TERBD 440                       | 1.000 EA        |
| 418150003A                    | GREASE FITTING CAP                      | 1.000 EA        |
| 032018008DK                   | HHCS 1/2-13X1 PLATED                    | 4.000 EA        |
| 048897010DJ                   | BUSH - 445                              | 1.000 EA        |
| 702616012T                    | CONDUIT BOX                             | 1.000 EA        |
| 035000001A                    | ALFTG 1/8" 1610-BL                      | 1.000 EA        |
| 035000001A                    | ALFTG 1/8" 1610-BL                      | 1.000 EA        |
| 418150003A                    | GREASE FITTING CAP                      | 1.000 EA        |
| MG1025Y03                     | WILKOFASST, 789.701, SUPER E PEARL GOLD | 1.000 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        |
| 034001016AB                   | WSHR .562ID 1.375OD .109                | 2.000 EA        |
| 033300014AC                   | HEX NUT, SHIPPING - 400                 | 2.000 EA        |
| 604797003C                    | SHIPPING BAG                            | 1.000 EA        |

|           |              |                               |           |  |             |       |
|-----------|--------------|-------------------------------|-----------|--|-------------|-------|
| REL. S.O. | FRAME        | HP                            | TYPE      | PHASE/HERTZ  | RPM         | VOLTS |
|           | 449T         | 300                           | P         | 3/60   | 1785        | 460   |
| AMPS      | DUTY         | AMB <sup>o</sup> C/<br>INSUL. | S.F.      | NEMA DESIGN  | CODE LETTER | ENCL. |
| 331       | CONT         | 40/F                          | 1.15      | B  | G           | ODP   |
| E/S       | ROTOR        | TEST S.O.                     | TEST DATE | STATOR RES (@25 <sup>o</sup> C<br>(BETWEEN LINES)) |             |       |
| 833139    | 418143042ZEE | ---                           | ---       | .0152  |             |       |

PERFORMANCE


| LOAD    | HP   | AMPERES | RPM  | POWER FACTOR % | EFFICIENCY % |
|---------|------|---------|------|----------------|--------------|
| NO LOAD | 0    | 83.6    | 1800 | 4.22           | 0            |
| 1/4     | 75.1 | 115     | 1796 | 64.7           | 94.6         |
| 2/4     | 150  | 176     | 1792 | 82.7           | 96.2         |
| 3/4     | 225  | 251     | 1787 | 87.3           | 96.2         |
| 4/4     | 300  | 331     | 1783 | 88.5           | 95.9         |
| 5/4     | 375  | 415     | 1777 | 88.7           | 95.3         |

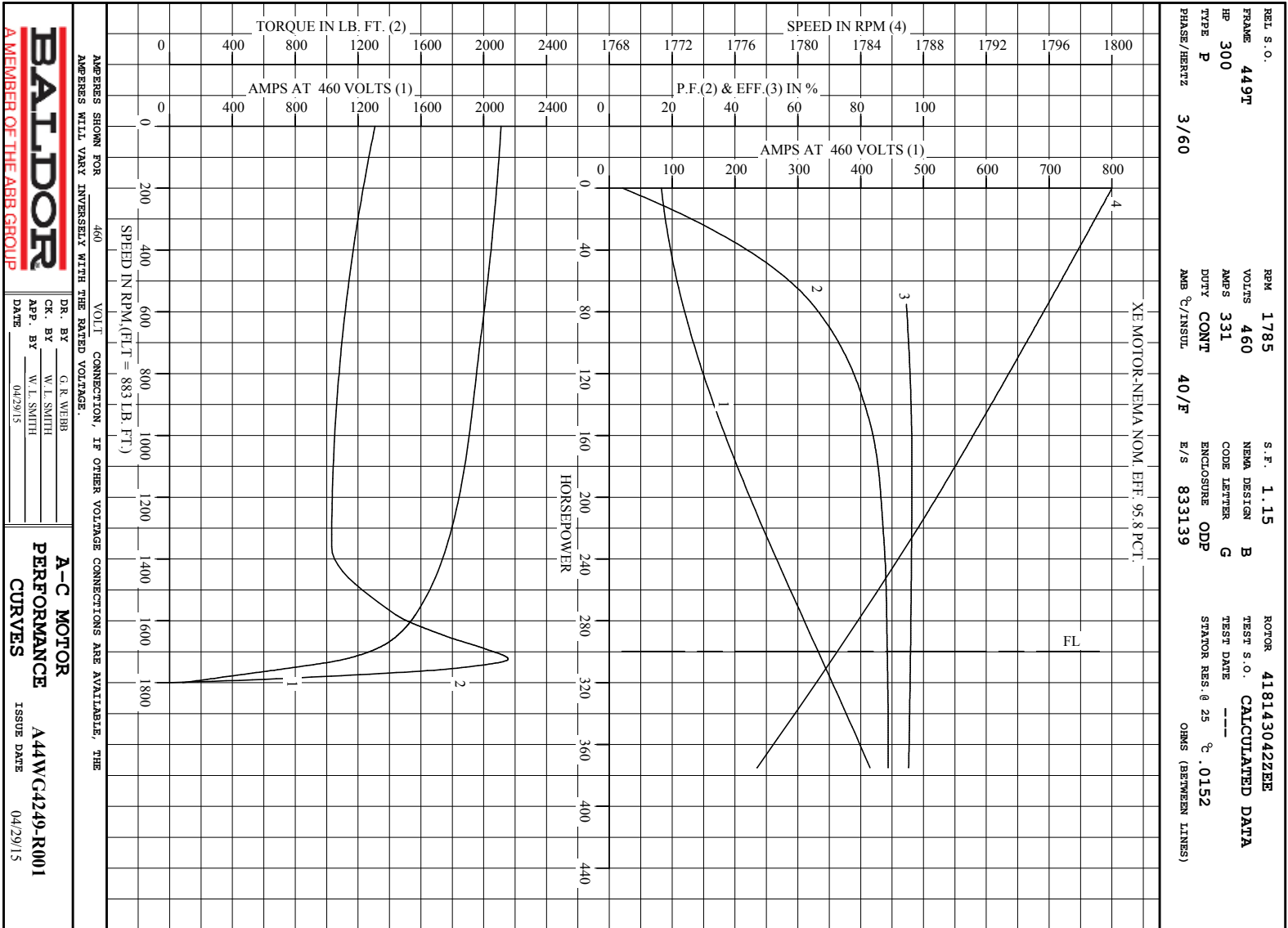
SPEED TORQUE

|              | RPM  | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|--------------|------|--------------------|----------------|---------|
| LOCKED ROTOR | 0    | 148                | 1308           | 2111    |
| PULL UP      | 1360 | 117                | 1032           | 1764    |
| BREAKDOWN    | 1724 | 244                | 2156           | 1114    |
| FULL LOAD    | 1783 | 100                | 883            | 331     |

AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS : CALCULATED DATA  
XE MOTOR-NEMA NOM. EFF. 95.8 PCT.

|  |         |             |  |
|--|---------|-------------|--|
|  <p>A MEMBER OF THE ABB GROUP</p> | DR. BY  | G. R. WEBB  | <p>A-C MOTOR<br/>PERFORMANCE<br/>DATA</p> <p>AA4WG4249-R001</p> <p>ISSUE DATE 04/29/15</p> |
|  | CR. BY  | W. I. SMITH |  |
|  | APP. BY | W. I. SMITH |  |
|  | DATE    | 04/29/15    |  |



AMPS SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPS WILL VARY INVERSELY WITH THE RATED VOLTAGE.

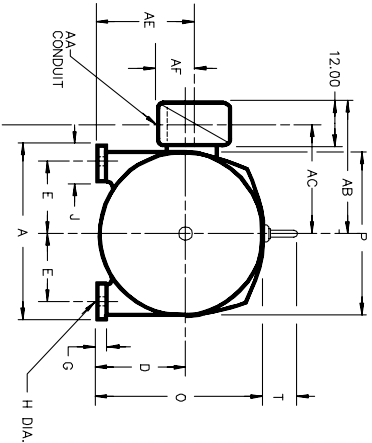
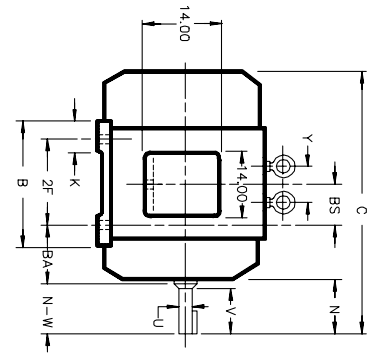
DR. BY G. R. WEBB  
 CK. BY W. L. SMITH  
 APP. BY W. L. SMITH  
 DATE 04/29/15

**A-C MOTOR PERFORMANCE CURVES** A44WC4240-R001  
 ISSUE DATE 04/29/15

Printed on 4/29/15 10:02 @ rsgsun

604989-380

**DUTY MASTER ALTERNATING CURRENT MOTORS**  
 ENCLOSURE: PROTECTED SQUIRREL-CAGE INDUCTION COOLING: SELF-VENTILATED  
 TOTALLY ENCLOSED NON-VENTILATED  
 MOUNTING: FOOT  
 FRAMES 445T THRU 449TS ABOVE NEMA RATINGS  
 WITH SPECIAL CONDUIT BOX



DIMENSIONS ARE IN INCHES

| FRAME | A     | D(2)  | E    | G    | H   | J    | O     | P     | BA   | K    | T    | Y (4) |
|-------|-------|-------|------|------|-----|------|-------|-------|------|------|------|-------|
| 445T  | 21.00 | 11.00 | 9.00 | 1.12 | .81 | 3.25 | 23.62 | 24.25 | 7.50 | 3.25 | 3.25 | ---   |
| 447S  | 21.00 | 11.00 | 9.00 | 1.12 | .81 | 3.25 | 23.62 | 24.25 | 7.50 | 3.25 | 3.25 | ---   |
| 447T  | 21.00 | 11.00 | 9.00 | 1.12 | .81 | 3.25 | 24.25 | 24.25 | 7.50 | 3.25 | 4.25 | 5.00  |
| 447S  | 21.00 | 11.00 | 9.00 | 1.12 | .81 | 3.25 | 24.25 | 24.25 | 7.50 | 3.25 | 4.25 | 5.00  |
| 449T  | 21.00 | 11.00 | 9.00 | 1.12 | .81 | 3.25 | 24.25 | 24.25 | 7.50 | 3.25 | 4.25 | 5.00  |
| 449TS | 21.00 | 11.00 | 9.00 | 1.12 | .81 | 3.25 | 24.25 | 24.25 | 7.50 | 3.25 | 4.25 | 5.00  |

| FRAME | C     | BS    | B     | BACK END SHAFT AND KEY          | SO.  | WT.  |
|-------|-------|-------|-------|---------------------------------|------|------|
| 445T  | 39.56 | 8.25  | 19.00 | 2F N N-W U(3) V LGTH. KEY (LBS) | .875 | 1410 |
| 447S  | 35.81 | 8.25  | 19.00 | 8.94 8.50 3.375 8.25 6.88       | .875 | 1410 |
| 447T  | 43.06 | 10.00 | 22.50 | 8.94 8.50 3.375 8.25 6.88       | .875 | 1750 |
| 447S  | 39.31 | 10.00 | 22.50 | 8.94 8.50 3.375 8.25 6.88       | .875 | 1750 |
| 449T  | 48.06 | 12.50 | 27.50 | 8.94 8.50 3.375 8.25 6.88       | .875 | 2100 |
| 449TS | 44.31 | 12.50 | 27.50 | 8.94 8.50 3.375 8.25 6.88       | .875 | 2100 |

| FRAME | AA | AB    | AC    | AF   | PROT  | AE    |
|-------|----|-------|-------|------|-------|-------|
| 445T  | 4" | 24.63 | 18.63 | 7.00 | 12.00 | 11.00 |
| 447S  | 4" | 24.63 | 18.63 | 7.00 | 12.00 | 11.00 |
| 447T  | 4" | 24.63 | 18.63 | 7.00 | 12.00 | 11.00 |
| 447S  | 4" | 24.63 | 18.63 | 7.00 | 12.00 | 11.00 |
| 449T  | 4" | 24.63 | 18.63 | 7.00 | 12.00 | 11.00 |
| 449TS | 4" | 24.63 | 18.63 | 7.00 | 12.00 | 11.00 |

- (1) SPECIAL DIMENSIONS ON THIS LINE
- (2) "D" VARIES +.00, -.06
- (3) "U" & "V" VARY +.00, -.001
- (4) 445 FRAME HAS ONE EYEBOULT CENTERLINE OF FRAME.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. STANDARD DOUBLE SHAFT SUPPLIED ONLY WHEN SPECIFIED. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED CONSULT FACTORY. MAXIMUM PERMISSIBLE SHAFT ROUNDOFF WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003 T.I.R.

FRAME \_\_\_\_\_ TYPE \_\_\_\_\_ CERTIFIED FOR \_\_\_\_\_  
 ORDER \_\_\_\_\_ ITEM \_\_\_\_\_ HP \_\_\_\_\_ RPM \_\_\_\_\_ PH \_\_\_\_\_ HZ \_\_\_\_\_ VOLTS \_\_\_\_\_  
 SALES ORDER \_\_\_\_\_ APPROVED BY \_\_\_\_\_ DATE \_\_\_\_\_

604989-380

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

|                                      |                              |                   |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: CHANGING TO CORRECT TITLE | VERSION: 02                  | TDR: 000000752338 |
| REV. LTR: B                          | REVISED: 01:05:26 06/27/2012 | BY: RAGRA         |
| FILE: \RAG\00012\166                 |                              |                   |
| MTL: -                               |                              |                   |

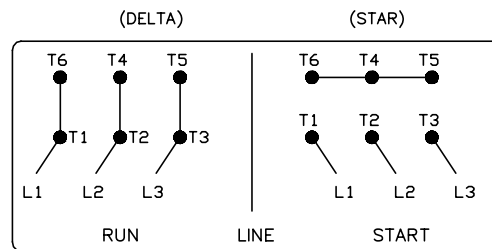
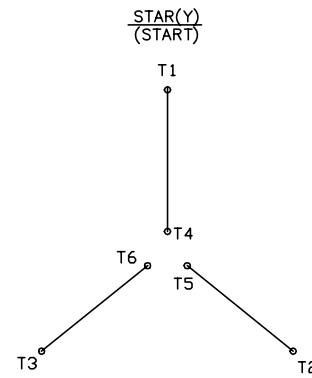
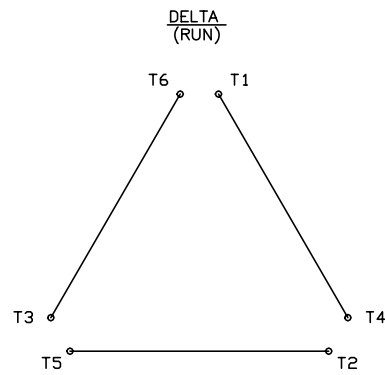
**BALDOR**  
 DIM SHEET PROT 445T-449TS ABV/NEMA - SPCL C/BOX - 14X14X12  
 SH 1 of 1

416820-008

# A-C MOTOR CONNECTION DIAGRAM

STANDARD 6 LEAD

Y START - DELTA RUN



< N. P. 1767-DC >

416820-008

|  |                                |                   |
|--|--------------------------------|-------------------|
| REV. DESC: ADDED T4 TO Y CONNECT DIAGRAM |                                |                   |
| REV. LTR: D                              | VERSION: 04                    | TDR: 000000847713 |
| FILE: \RAG\00001\808                     | REVISED: 10: 41: 26 04/08/2014 | BY: RAGJSS1       |
| MTL: -                                   | Ⓢ □                            |                   |



CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN

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>