

# **BALDOR**® • **RELIANCE**

## **Product Information Packet**

# **EM7085T**

**50HP, 1180RPM, 3PH, 60HZ, 365T, XPFC, F1**

| Part Detail |         |                |         |             |           |               |                |
|-------------|---------|----------------|---------|-------------|-----------|---------------|----------------|
| Revision:   | -       | Status:        | PRD/A   | Change #:   |           | Proprietary:  | No             |
| Type:       | AC      | Prod. Type:    | A36064M | Elec. Spec: | A36WG0793 | CD Diagram:   | 416820-002     |
| Enclosure:  | TEFC    | Mfg Plant:     |         | Mech. Spec: |           | Layout:       | 611742-983-SH1 |
| Frame:      | 365T    | Mounting:      | F1      | Poles:      | 06        | Created Date: | 03-09-2016     |
| Base:       |         | Rotation:      | R       | Insulation: | F         | Eff. Date:    | 04-14-2016     |
| Leads:      | 3#4,6#6 |                |         |             |           | Replaced By:  |                |
| Literature: |         | Elec. Diagram: |         |             |           |               |                |

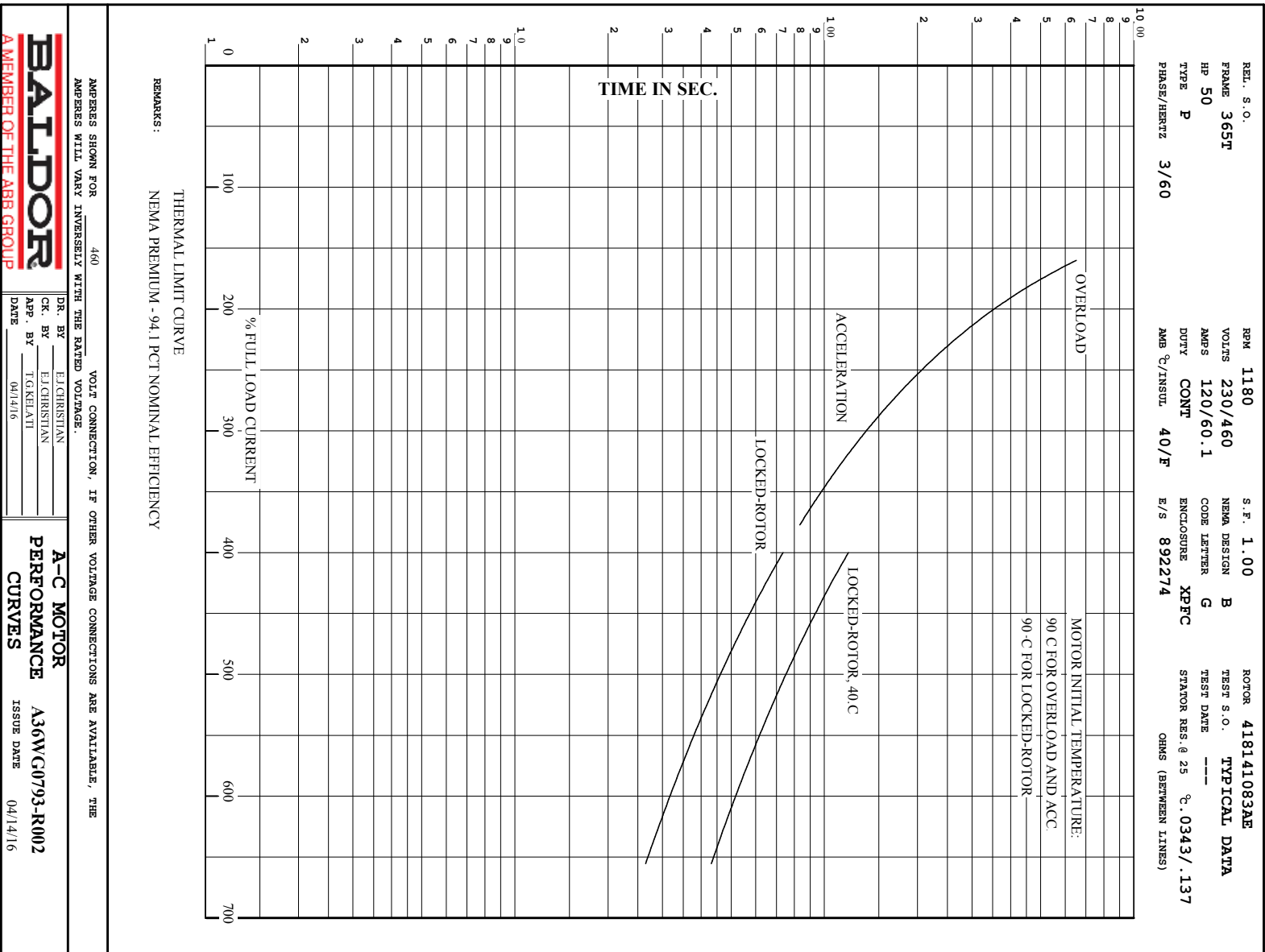
Nameplate 000613006PC

|                     |       |
|---------------------|-------|
| CLASS I GROUP       | D X X |
| CLASS II GROUP      | F G X |
| OPERATING TEMP CODE | T4    |

| Nameplate NP2293L |                    |                          |          |
|-------------------|--------------------|--------------------------|----------|
| CAT.NO.           | EM7085T            | SPEC NO.                 | P36G4718 |
| HP                | 50//40             | PHASE                    | 3        |
| RPM               | 1180//980          | DESIGN                   | B        |
| VOLTS             | 230/460//190/380   | TYPE                     | P        |
| AMPS              | 120/60.1//117/58.5 | AMB                      | 40       |
| DRIVE END BEARING | 65BC03JPP30A       | SF                       | 1.00     |
| OPP D.E. BEARING  | 65BC03JPP30A       | DUTY                     | CONT     |
| SER.NO.           |                    | ENCL                     | TEFC     |
|                   |                    | INSUL.CLASS              | F        |
|                   |                    | CODE                     | G        |
|                   |                    | NEMA-NOM-EFFICIENCY      | 94.1     |
|                   |                    | SUIT FOR 208V @ 132 AMPS |          |
|                   |                    | FRAME                    | 365T     |
|                   |                    | MOTOR WEIGHT             | 886      |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA316497    | SA P36G4718                              | 1.000 EA |
| RA304071    | RA P36G4718                              | 1.000 EA |
| 000613006PC | N/P U/L (REL QTY 500)                    | 1.000 EA |
| NP2293L     | BALDOR RELIANCE INDUST. MTR,SS,CSA-C US, | 1.000 EA |
| 000692000VD | LABEL WARNING                            | 1.000 EA |
| 421948032   | LABEL, MYLAR                             | 1.000 EA |
| 004824015A  | GREASE POLYREX EM                        | 0.544 LB |
| 032018008AK | HHCS 1/4-20X1 PLATED                     | 4.000 EA |
| 032018018CK | HHCS 3/8-16X2-1/4 PLTD.                  | 2.000 EA |
| 032130020DB | HSHCS 1/2-13X2-1/2 PLTD.                 | 4.000 EA |
| 034017012AB | LCKW 1/4 STD. PLATED                     | 4.000 EA |
| 034017014AB | LCKW 3/8 STD. PLATED                     | 2.000 EA |
| 034017016AB | LCKW 1/2" PLATED                         | 4.000 EA |
| 034180012DA | KEY 1X4X1/4X1-1/2 L                      | 1.000 EA |
| 034530056AC | P/NIP 1/8X7L GALV-365                    | 1.000 EA |
| 034690001AB | SQHDPLG, COND                            | 1.000 EA |
| 034690002AB | "unbulked" PPLG 1/4" PLTD.               | 1.000 EA |
| 078548001K  | FAN KB 100/30 (70) 360                   | 1.000 EA |
| 078559001A  | +FANCV - 360                             | 1.000 EA |
| 087793050B  | BRKT 360 087793050WCB                    | 1.000 EA |
| 410700004F  | WSHR                                     | 1.000 EA |
| 415072001B  | CLAMP                                    | 1.000 EA |
| 415096002A  | CPLG 1/8 HEX TYPE                        | 1.000 EA |
| 032018018CK | HHCS 3/8-16X2-1/4 PLTD.                  | 2.000 EA |

| Parts List (continued) |   |          |
|------------------------|---|----------|
| Part Number            | Description                               | Quantity |
| 032130020DB            | SHSCS 1/2-13X2-1/2 PLTD.                  | 4.000 EA |
| 034017014AB            | LCKW 3/8 STD. PLATED                      | 2.000 EA |
| 034017016AB            | LCKW 1/2" PLATED                          | 4.000 EA |
| 034690001AB            | SQHDPLG, COND                             | 1.000 EA |
| 034690002AB            | "unbulked" PPLG 1/4" PLTD.                | 1.000 EA |
| 415045002E             | SLGR                                      | 1.000 EA |
| 087793050A             | BRKT 360 087793050WCB                     | 1.000 EA |
| 032018004AM            | HHCS 1/4-20X1/2PLTD GREN                  | 1.000 EA |
| 032018010CK            | HHCS 3/8-16X1-1/4 PLTD.                   | 6.000 EA |
| 034017014AB            | LCKW 3/8 STD. PLATED                      | 6.000 EA |
| 034036012AB            | LCKW EXTERNAL TOOTH 1/4"                  | 1.000 EA |
| 14CB1500A01            | CONDUIT BOX LID MACH                      | 1.000 EA |
| 14CB1000A01            | CONDUIT BOX, BOLT-ON, MACH, XP 360 & 400  | 1.000 EA |
| 406099000A             | PLUG - FAN COVER 320-440                  | 1.000 EA |
| 415000103A             | T/LUG #14AWG-#4AWG W/HOLE FOR .250 BOLT   | 1.000 EA |
| MG1025G05              | WILKOFASST, 789.227, MED. GRAY CHAR. MET. | 0.250 GA |
| 033775004EA            | DRSCR #6-1/4 304 S.S.                     | 8.000 EA |
| 034180034HA            | KEY 5/8X5/8X4-1/4 L                       | 1.000 EA |
| 14PA1000               | PACKAGING 314 GROUP COMBINED PRINT        | 1.000 EA |
| 032018010CK            | HHCS 3/8-16X1-1/4 PLTD.                   | 4.000 EA |
| 034017014AB            | LCKW 3/8 STD. PLATED                      | 4.000 EA |
| LB1073                 | ALUM XP CAUTION LABEL                     | 1.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS               | 2.000 EA |



|           |             |                |           |   |             |         |
|-----------|-------------|----------------|-----------|---|-------------|---------|
| REL. S.O. | FRAME       | HP             | TYPE      | PHASE/ HERTZ                            | RPM         | VOLTS   |
|           | 365T        | 50             | P         | 3/60                                    | 1180        | 230/460 |
| AMPS      | DUTY        | AMB °C/ INSUL. | S.F.      | NEMA DESIGN                             | CODE LETTER | ENCL.   |
| 120/60.1  | CONT        | 40/F           | 1.00      | B                                       | G           | XPFC    |
| E/S       | ROTOR       | TEST S.O.      | TEST DATE | STATOR RES. @25 °C OHMS (BETWEEN LINES) |             |         |
| 892274    | 418141083AE | ---            | ---       | .0343/.137                              |             |         |

PERFORMANCE

| LOAD    | HP   | AMPERES | RPM  | POWER FACTOR % | EFFICIENCY % |
|---------|------|---------|------|----------------|--------------|
| NO LOAD | 0    | 21.7    | 1200 | 4.21           | 0            |
| 1/4     | 12.5 | 25.8    | 1196 | 49.6           | 91.9         |
| 2/4     | 25.0 | 35.0    | 1192 | 70.9           | 94.4         |
| 3/4     | 37.5 | 46.7    | 1187 | 79.4           | 94.6         |
| 4/4     | 50.0 | 60.1    | 1182 | 82.7           | 94.1         |
| 5/4     | 62.5 | 75.1    | 1177 | 83.5           | 93.3         |

SPEED TORQUE

|              | RPM  | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|--------------|------|--------------------|----------------|---------|
| LOCKED ROTOR | 0    | 187                | 416            | 358     |
| PULL UP      | 420  | 149                | 331            | 321     |
| BREAKDOWN    | 1121 | 229                | 508            | 194     |
| FULL LOAD    | 1182 | 100                | 222            | 60.1    |

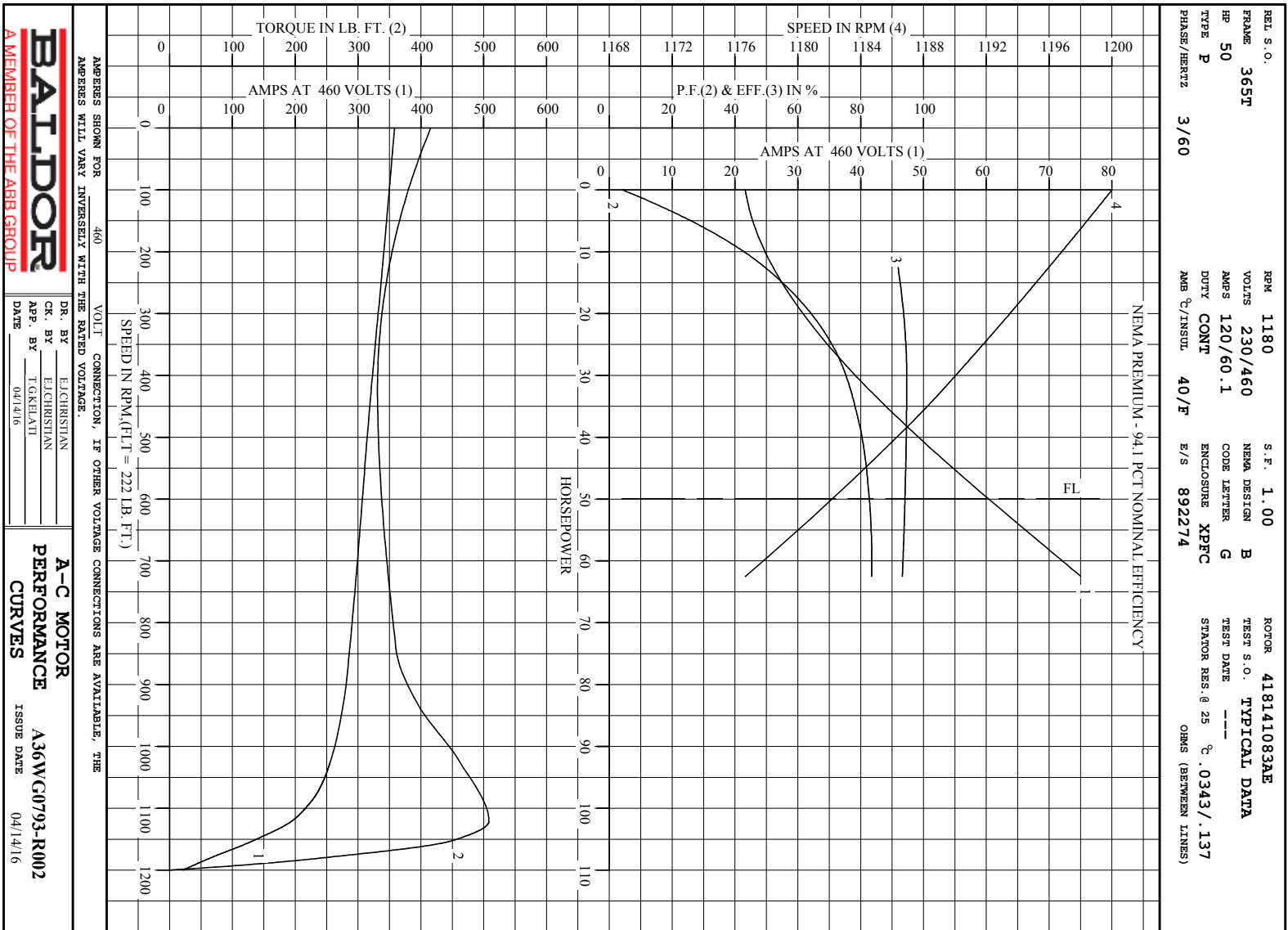
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS: TYPICAL DATA  
NEMA PREMIUM - 94.1 PCT NOMINAL EFFICIENCY



DR. BY E.J. CHRISTIAN  
CK. BY F.J. CHRISTIAN  
APP. BY T.G. KEHLMTI  
DATE 04/14/16

A-C MOTOR  
PERFORMANCE DATA  
A36WG0793-R002  
ISSUE DATE 04/14/16



611742-983-SH1

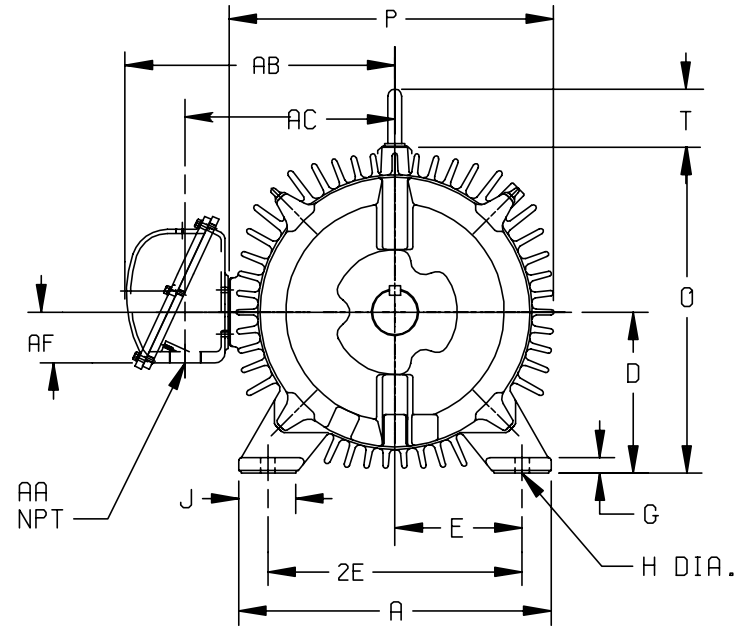
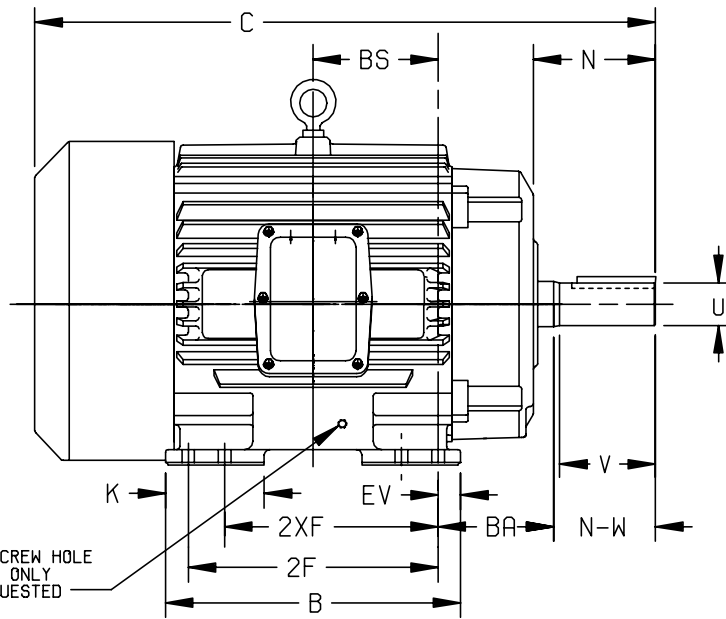
# DUTY MASTER ALTERNATING CURRENT MOTORS

ENCLOSURE: TOTALLY ENCLOSED  
 UNDERWRITERS LISTED MOTOR  
 MOUNTING: FOOT

SQUIRREL-CAGE INDUCTION

FRAMES E364T-E365TS

COOLING: FAN COOLED  
 BOLTED ON CONDUIT BOX



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

| FRAME       | A     | D(1) | E    | G   | H   | J    | K    | O     | P     | T    | XP TERMINAL BOX |       |       |      |      | BA   | EV |
|-------------|-------|------|------|-----|-----|------|------|-------|-------|------|-----------------|-------|-------|------|------|------|----|
|             |       |      |      |     |     |      |      |       |       |      | AA              | AB    | AC    | AF   | AF   |      |    |
| E364T-365TS | 17.00 | 9.00 | 7.00 | .88 | .69 | 2.75 | 4.00 | 19.11 | 20.25 | 2.94 | 2-1/2           | 18.64 | 14.14 | 4.00 | 5.88 | 1.38 |    |

| FRAME SIZE | C     | BS   | B     | 2F    | (3) 2XF | N    | SHAFT AND KEY |       |      |      |       | WEIGHT LBS. (4) |
|------------|-------|------|-------|-------|---------|------|---------------|-------|------|------|-------|-----------------|
|            |       |      |       |       |         |      | N-W(5)        | U(2)  | V    | SQ.  | LGTH. |                 |
| E364T      | 33.44 | 6.12 | 15.00 | ---   | 11.25   | 6.00 | 5.88          | 2.375 | 5.62 | .625 | 4.25  | 910             |
| E364TS     | 31.31 | 6.12 | 15.00 | ---   | 11.25   | 3.88 | 3.75          | 1.875 | 3.50 | .500 | 2.00  | 904             |
| E365T      | 33.44 | 6.12 | 15.00 | 12.25 | ---     | 6.00 | 5.88          | 2.375 | 5.62 | .625 | 4.25  | 950             |
| E365TS     | 31.31 | 6.12 | 15.00 | 12.25 | ---     | 3.88 | 3.75          | 1.875 | 3.50 | .500 | 2.00  | 944             |

- (1) "D" VARIES +.00, -.06.
- (2) "U" VARIES +.000, -.001.
- (3) ALL FRAMES HAVE EIGHT MOUNTING HOLES FOR DUAL MOUNTING.
- (4) MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.
- (5) "N-W" VARIES +.00, -.25.

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2,W-1, W-4,W-5,W-7, OR C-1 MOUNTING IS SPECIFIED.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .003

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

|                      |                                |                   |
|----------------------|--------------------------------|-------------------|
| REV. DESC: NEW ISSUE |                                |                   |
| REV. LTR: -          | VERSION: 00                    | TDR: 000000969971 |
| FILE: \RAG\00021\494 | REVISED: 02: 20: 27 03/09/2016 | BY: RAGGDM        |
| MTL: -               |                                |                   |

## BALDOR

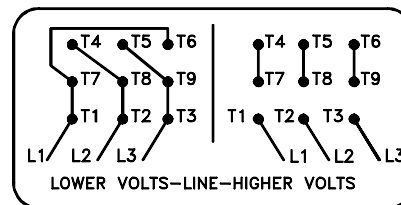
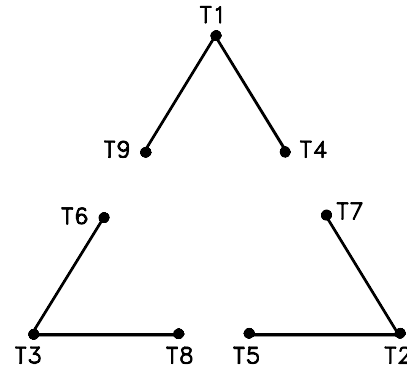
DIM SHT FCXP FT E360T BOLTED ON C/B W/2-1/2"NPT

SH 1 of 1

611742-983-SH1

416820-002

A-C MOTOR  
 CONNECTION DIAGRAM  
 STANDARD 9 LEAD DELTA-CONNECTED



(N.P. 1575-B)

416820-002

|                                      |                                |                   |
|--------------------------------------|--------------------------------|-------------------|
| REV. DESC: LOADED TO BUS, C/R 335225 |                                |                   |
| REV. LTR: -                          | VERSION: 00                    | TDR: 000000538207 |
| FILE: \MGA\00000\661                 | REVISED: 10: 47: 51 04/30/2010 |                   |
| MTL: -                               | BY: RAGRA                      |                   |

**BALDOR**

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

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>