

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM4406TR-4**

**150HP,1785RPM,3PH,60HZ,445T,A4488M,TEFC**

| Part Detail |      |                |        |             |           |               |            |
|-------------|------|----------------|--------|-------------|-----------|---------------|------------|
| Revision:   | E    | Status:        | PRD/A  | Change #:   |           | Proprietary:  | No         |
| Type:       | AC   | Prod. Type:    | A4488M | Elec. Spec: | A44WG3783 | CD Diagram:   | 416820-008 |
| Enclosure:  | TEFC | Mfg Plant:     |        | Mech. Spec: |           | Layout:       | 617427-001 |
| Frame:      | 445T | Mounting:      | F1     | Poles:      | 04        | Created Date: | 02-18-2013 |
| Base:       |      | Rotation:      | R      | Insulation: | F         | Eff. Date:    | 09-26-2016 |
| Leads:      | 6#2  |                |        |             |           | Replaced By:  |            |
| Literature: |      | Elec. Diagram: |        |             |           |               |            |

## Nameplate NP2383L

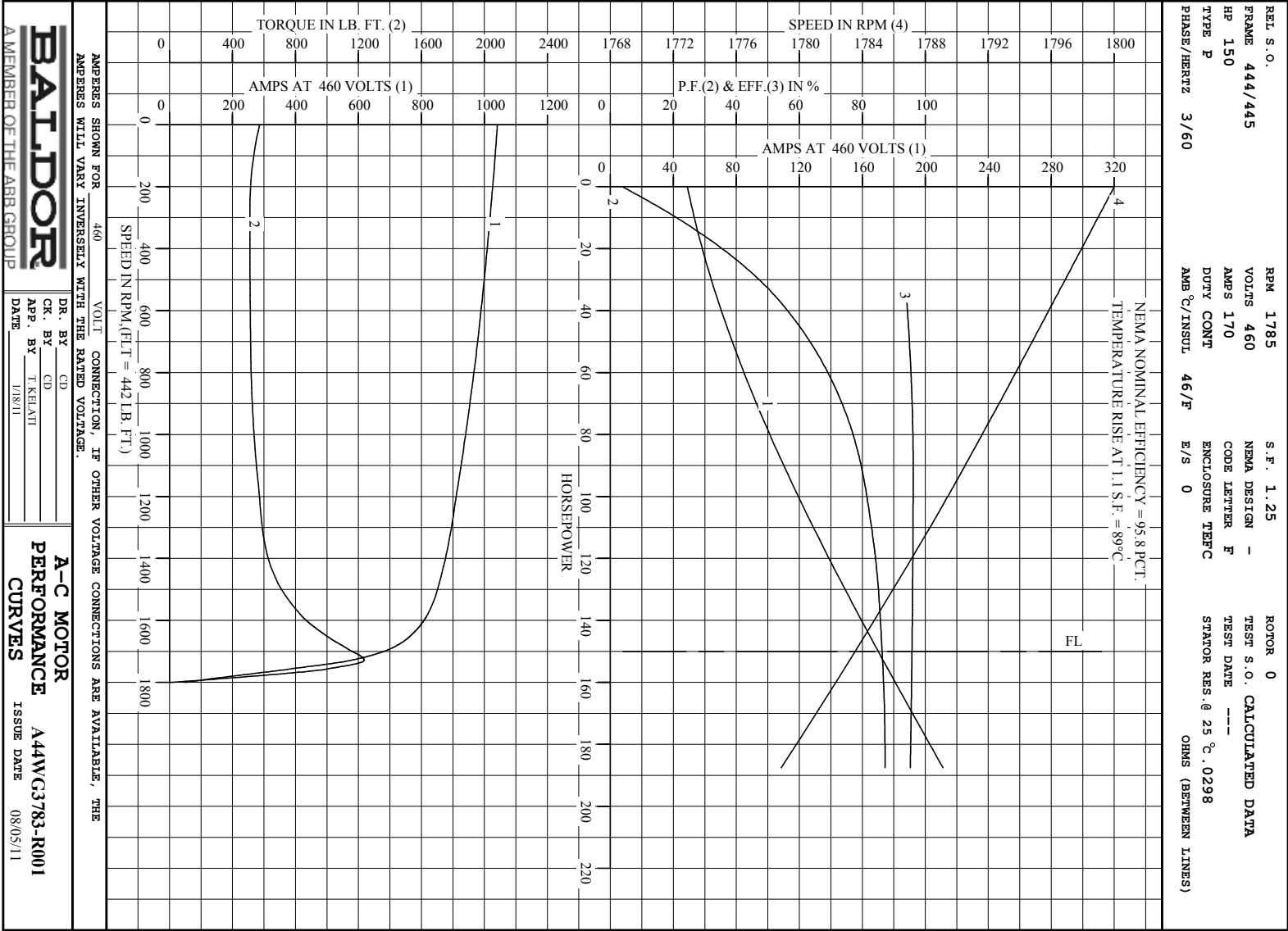
|                         |             |                       |          |
|-------------------------|-------------|-----------------------|----------|
| CAT.NO.                 | EM4406TR-4  | SPEC NO.              | P44G4026 |
| HP                      | 150         | AMPS                  | 169      |
| VOLTS                   | 460         | DESIGN                | B        |
| FRAME                   | 445T        | RPM                   | 1785     |
|                         |             | HZ                    | 60       |
|                         |             | AMB                   | 40       |
|                         |             | SF                    | 1.15     |
| DRIVE END BEARING       | 110RU02M30X | PHASE                 | 3        |
| OPP D.E. BEARING        | 90BC03J30X  | DUTY                  | CONT     |
|                         |             | INSUL.CLASS           | F        |
|                         |             | TYPE                  | P        |
|                         |             | ENCL                  | TEFC     |
| SER.NO.                 |             | CODE                  | F        |
|                         |             | POWER FACTOR          | 86       |
|                         |             | NEMA-NOM-EFFICIENCY   | 95.8     |
|                         |             | MAX CORR KVAR         | 30       |
|                         |             | GUARANTEED EFFICIENCY | 95       |
| NEMA NOM/CSA QUOTED EFF |             | MOTOR WEIGHT          | 1826     |

| Parts List  |                                        |          |
|-------------|----------------------------------------|----------|
| Part Number | Description                            | Quantity |
| SA258746    | SA P44G4026                            | 1.000 EA |
| RA245512    | RA P44G4026                            | 1.000 EA |
| 421948044   | LABEL, MYLAR                           | 1.000 EA |
| 000613006PU | N/P (RELEASE QTY 10,000) UL CSA LABLE  | 1.000 EA |
| 000692000VD | LABEL WARNING                          | 1.000 EA |
| NP2383L     | SUPER-E ,SS, CC, CSA-C US, CSA EEV     | 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 |
| 032018036DK | HHCS 1/2-13X4-1/2 PLTD.                | 3.000 EA |
| 415096002A  | CPLG 1/8 HEX TYPE                      | 1.000 EA |
| 034017014AB | LCKW 3/8 STD. PLATED                   | 4.000 EA |
| 034530072AB | P/NIP 1/8X9"L Threaded both ends       | 1.000 EA |
| 034692001AB | HCSPP 1/8" PLATED                      | 1.000 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 |
| 702658001A  | CONDUIT BOX, E440                      | 1.000 EA |
| 702658002A  | +C/BOX CVR, PAINTED 440                | 1.000 EA |

| Parts List (continued) |                                         |          |
|------------------------|-----------------------------------------|----------|
| Part Number            | Description                             | Quantity |
| 415915007G             | GASK, LAC                               | 1.000 FT |
| 406056008A             | GASKET, TERBD 440                       | 1.000 EA |
| 418153001A             | GASK 440                                | 1.000 EA |
| 032018008DK            | HHCS 1/2-13X1 PLATED                    | 4.000 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 |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,     | 0.250 GA |
| 033775004EA            | DRSCR #6-1/4 304 S.S.                   | 2.000 EA |
| 034180054KA            | KEY 7/8X7/8X6-3/4 L                     | 1.000 EA |
| 035000001A             | ALFTG 1/8" 1610-BL                      | 1.000 EA |
| 035000001A             | ALFTG 1/8" 1610-BL                      | 1.000 EA |
| 034690002AB            | "unbulked" PPLG 1/4" PLTD.              | 1.000 EA |
| 034690005AB            | PPLG 3/4 PLATED                         | 2.000 EA |
| 418151014H             | RETAIN RING                             | 1.000 EA |
| 032018004BK            | HHCS 5/16-18X1/2 PLATED                 | 3.000 EA |
| 034692001AB            | HCSPP 1/8" PLATED                       | 1.000 EA |
| 415096002A             | CPLG 1/8 HEX TYPE                       | 1.000 EA |
| 032018006BK            | HHCS 5/16-18X3/4 PLATED                 | 3.000 EA |
| 702623013A             | THERMAL BARRIER -- G28 -- BRACKET MTD   | 1.000 EA |
| 034017013AB            | LCKW 5/16 STD. PLATED                   | 3.000 EA |
| 034690002AB            | "unbulked" PPLG 1/4" PLTD.              | 1.000 EA |
| 034530072AB            | P/NIP 1/8X9"L Threaded both ends        | 1.000 EA |

Product Information Packet: EM4406TR-4 - 150HP,1785RPM,3PH,60HZ,445T,A4488M,TEFC

|             |                                     |          |
|-------------|-------------------------------------|----------|
| 032620016LA | SOCKET SET SCREW-449                | 3.000 EA |
| 000692000FF | N/P                                 | 1.000 EA |
| PK5004A09   | BASE 48 X 39-1/4 STACK 2 X 4 RUUNER | 1.000 EA |
| 032510024D  | CARRIAGE BOLT - 444                 | 2.000 EA |
| 034001014AB | FLAT WASHER 3/8"PLATED              | 2.000 EA |
| 000692000RT | N/P                                 | 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 |
| 604797001R  | 440 FR. ROLLER BEARING MOTOR SHAFT  | 1.000 EA |
| 032018028CK | HHCS 3/8-16X3-1/2 PLTD.             | 1.000 EA |
| 034001016AB | WSHR .562ID 1.375OD .109            | 1.000 EA |



|           |         |                |           |                                         |             |       |
|-----------|---------|----------------|-----------|-----------------------------------------|-------------|-------|
| REL. S.O. | FRAME   | HP             | TYPE      | PHASE/ HERTZ                            | RPM         | VOLTS |
|           | 444/445 | 150            | P         | 3/60                                    | 1785        | 460   |
| AMPS      | DUTY    | AMB °C/ INSUL. | S.F.      | NEMA DESIGN                             | CODE LETTER | ENCL. |
| 170       | CONT    | 46/F           | 1.25      | -                                       | F           | TEFC  |
| E/S       | ROTOR   | TEST S.O.      | TEST DATE | STATOR RES. @25 °C OHMS (BETWEEN LINES) |             |       |
| 0         | 0       | ---            | ---       | .0298                                   |             |       |

| PERFORMANCE |      |         |      |                |              |
|-------------|------|---------|------|----------------|--------------|
| LOAD        | HP   | AMPERES | RPM  | % POWER FACTOR | % EFFICIENCY |
| NO LOAD     | 0    | 48.9    | 1800 | 3.78           | 0            |
| 1/4         | 37.6 | 68.8    | 1796 | 54.3           | 94.2         |
| 2/4         | 75.0 | 97.0    | 1792 | 75.5           | 96.0         |
| 3/4         | 112  | 132     | 1788 | 83.3           | 96.1         |
| 4/4         | 150  | 170     | 1784 | 86.3           | 95.8         |
| 5/4         | 188  | 211     | 1779 | 87.3           | 95.2         |

| SPEED TORQUE |      |                    |                |         |
|--------------|------|--------------------|----------------|---------|
|              | RPM  | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
| LOCKED ROTOR | 0    | 130                | 572            | 1041    |
| PULL UP      | 270  | 116                | 511            | 1020    |
| BREAKDOWN    | 1729 | 280                | 1237           | 579     |
| FULL LOAD    | 1784 | 100                | 442            | 170     |

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

REMARKS: CALCULATED DATA  
NEMA NOMINAL EFFICIENCY = 95.8 PCT.  
TEMPERATURE RISE AT 1.1 S.F. = 89°C

**BALDOR**

A MEMBER OF THE ABB GROUP

DR. BY CD

CK. BY CD

APP. BY T. KEIATT

DATE 1/18/11

A-C MOTOR

PERFORMANCE DATA

A44WG3783-R001

ISSUE DATE 08/05/11



# DUTY MASTER ALTERNATING CURRENT MOTORS

## SQUIRREL-CAGE INDUCTION

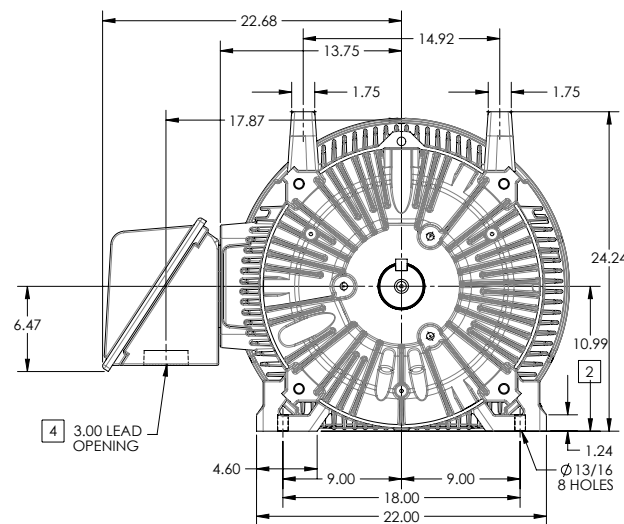
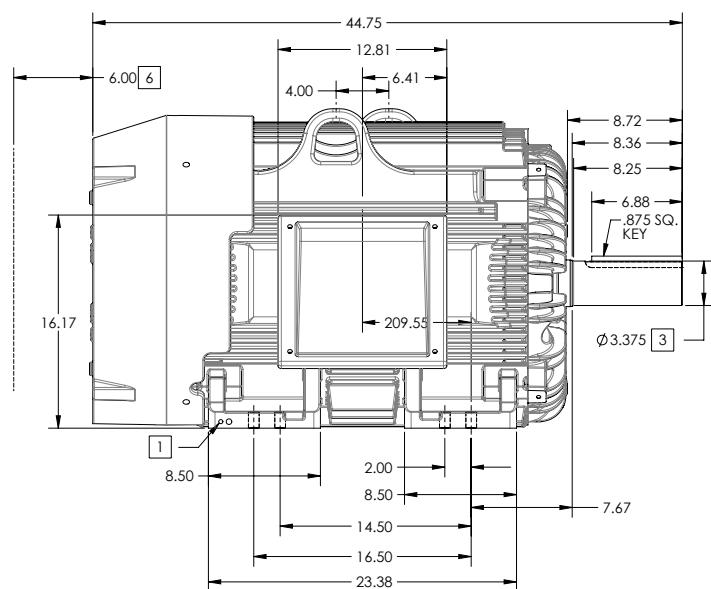
ENCLOSURE: TOTALLY ENCLOSED

FRAME G445T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 444T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00-.06
3. VARIES +.000-.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 NOT ENCR OACH 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): 2130**

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 2

100-2272-119

|                                                     |             |                              |                   |
|-----------------------------------------------------|-------------|------------------------------|-------------------|
| REV. DESC: SHEET 2 NEEDS METRIC FOOT HOLE DIMENSION |             |                              |                   |
| REV: E                                              | VERSION: 05 | REVISED: 09-22-56 06/12/2014 | TDR: 000000857938 |
| MODEL NO. 617427-001                                |             |                              | REF:              |
| BY: RAGRA                                           | Material:   |                              |                   |

**BALDOR**

G445T/444T STD - FOOTED - SIDE/CENTER C/B

## DUTY MASTER ALTERNATING CURRENT MOTORS

### SQUIRREL-CAGE INDUCTION

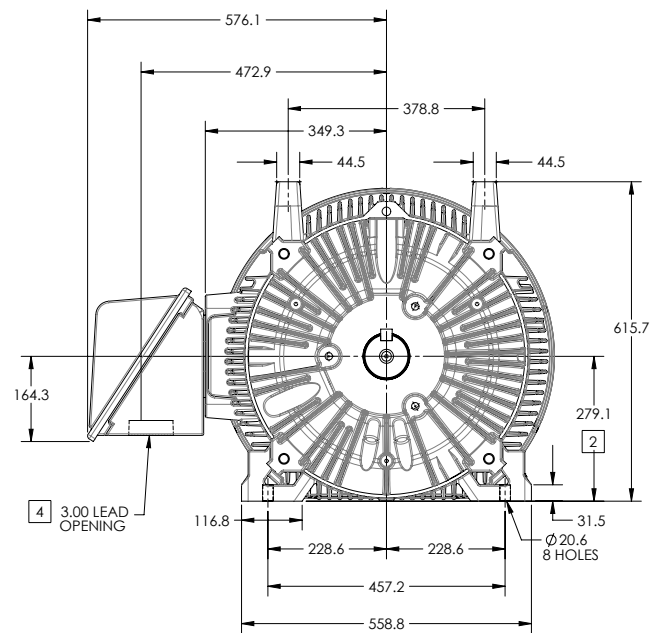
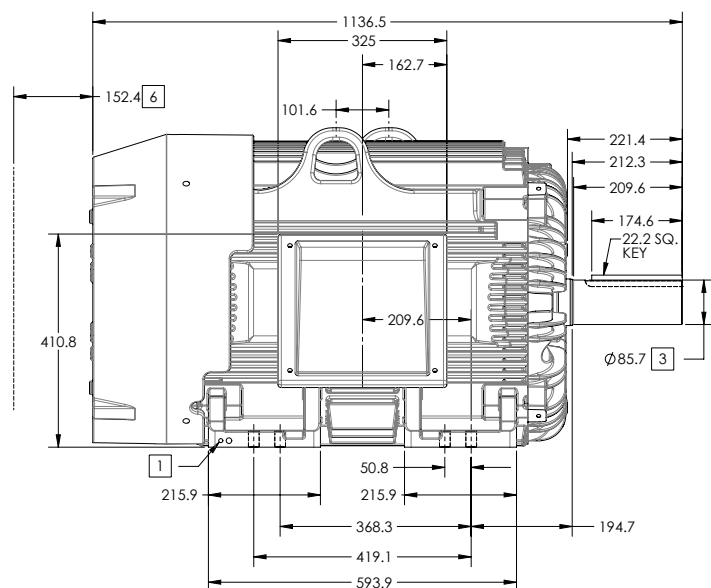
ENCLOSURE: TOTALLY ENCLOSED

FRAME G445T ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 444T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +0,-1.5
3. VARIES +00,-.03
4. ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
5. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
6. OBSTRUCTION MUST NOT 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 .08 MM T.I.R. TO 127 MM DIA.

**[5] WEIGHT (KGS): 970**

DRIVE END AIR DEFLECTOR IS ONLY INCLUDED WHEN NECESSARY.

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

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

 SHEET NUMBER  
2 OF 2

100-227-119

|                                                     |                              |
|-----------------------------------------------------|------------------------------|
| REV. DESC: SHEET 2 NEEDS METRIC FOOT HOLE DIMENSION |                              |
| REV: E                                              | VERSION: 05                  |
| MODEL NO. 617427-001                                | REVISED: 09-22-56 06/12/2014 |
| BY: RAGRA                                           | TDR: 00000087938             |
| Material:                                           | REF:                         |

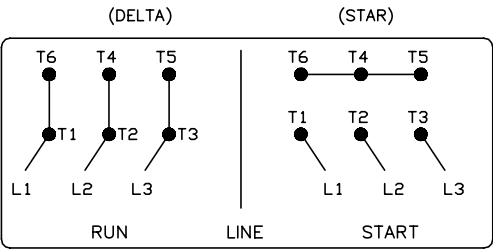
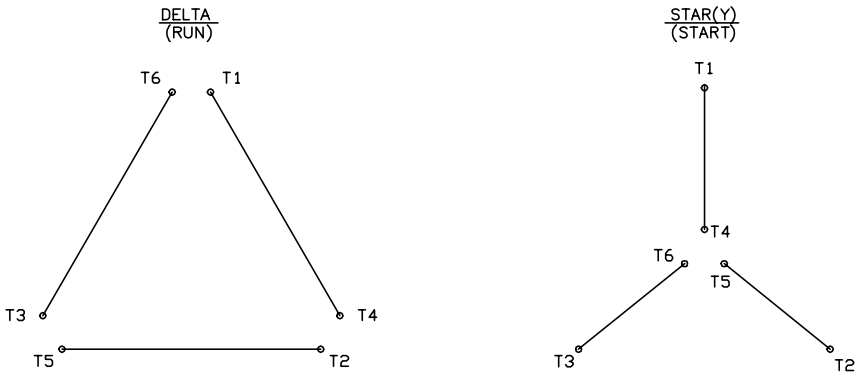
**BALDOR**

G445T/444T STD - FOOTED - SIDE/CENTER C/B

416820-008

A-C MOTOR  
CONNECTION DIAGRAM

STANDARD 6 LEAD      Y START – DELTA RUN



(N. P. 1767-DC)

|                                          |                                |                   |
|------------------------------------------|--------------------------------|-------------------|
| 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: -                                   |                                |                   |

**BALDOR**

CONNECT DIAGRAM STD 6 LEAD Y START DELTA RUN  
SH 1 of 1

416820-008