

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **EM4400TS**

**100HP,1785RPM,3PH,60HZ,405TS,A40064M,TEF**

| Part Detail |         |                |         |             |           |               |            |
|-------------|---------|----------------|---------|-------------|-----------|---------------|------------|
| Revision:   | E       | Status:        | PRD/A   | Change #:   |           | Proprietary:  | No         |
| Type:       | AC      | Prod. Type:    | A40064M | Elec. Spec: | A40WG0692 | CD Diagram:   | 416820-002 |
| Enclosure:  | TEFC    | Mfg Plant:     |         | Mech. Spec: |           | Layout:       | 617429-002 |
| Frame:      | 405TS   | Mounting:      | F1      | Poles:      | 04        | Created Date: | 07-17-2013 |
| Base:       |         | Rotation:      | R       | Insulation: | B         | Eff. Date:    | 09-26-2016 |
| Leads:      | 3#2,6#4 |                |         |             |           | Replaced By:  |            |
| Literature: |         | Elec. Diagram: |         |             |           |               |            |

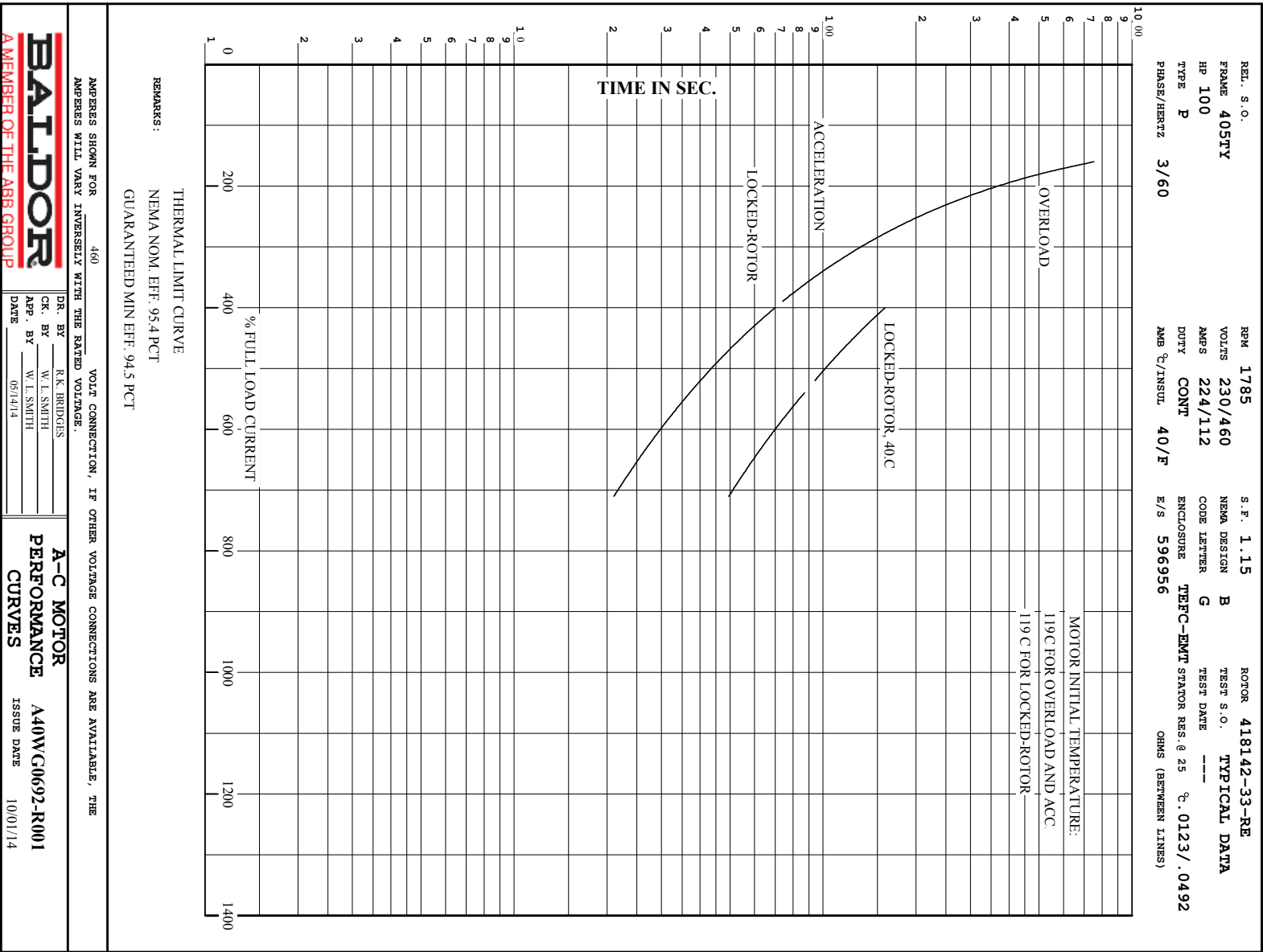
## Nameplate NP2383L

|                         |            |                       |          |
|-------------------------|------------|-----------------------|----------|
| CAT.NO.                 | EM4400TS   | SPEC NO.              | P40G3928 |
| HP                      | 100        | AMPS                  | 224/112  |
| VOLTS                   | 230/460    | DESIGN                | B        |
| FRAME                   | 405TS      | RPM                   | 1785     |
| HZ                      | 60         | AMB                   | 40       |
| SF                      | 1.15       | INSUL.CLASS           | F        |
| DRIVE END BEARING       | 80BC03J30X | PHASE                 | 3        |
| DUTY                    | CONT       | TYPE                  | P        |
| OPP D.E. BEARING        | 80BC03J30X | ENCL                  | TEFC     |
| CODE                    | G          | POWER FACTOR          | 87       |
| SER.NO.                 |            | NEMA-NOM-EFFICIENCY   | 95.4     |
|                         |            | MAX CORR KVAR         | 18       |
|                         |            | GUARANTEED EFFICIENCY | 94.5     |
| NEMA NOM/CSA QUOTED EFF |            | MOTOR WEIGHT          | 1326     |

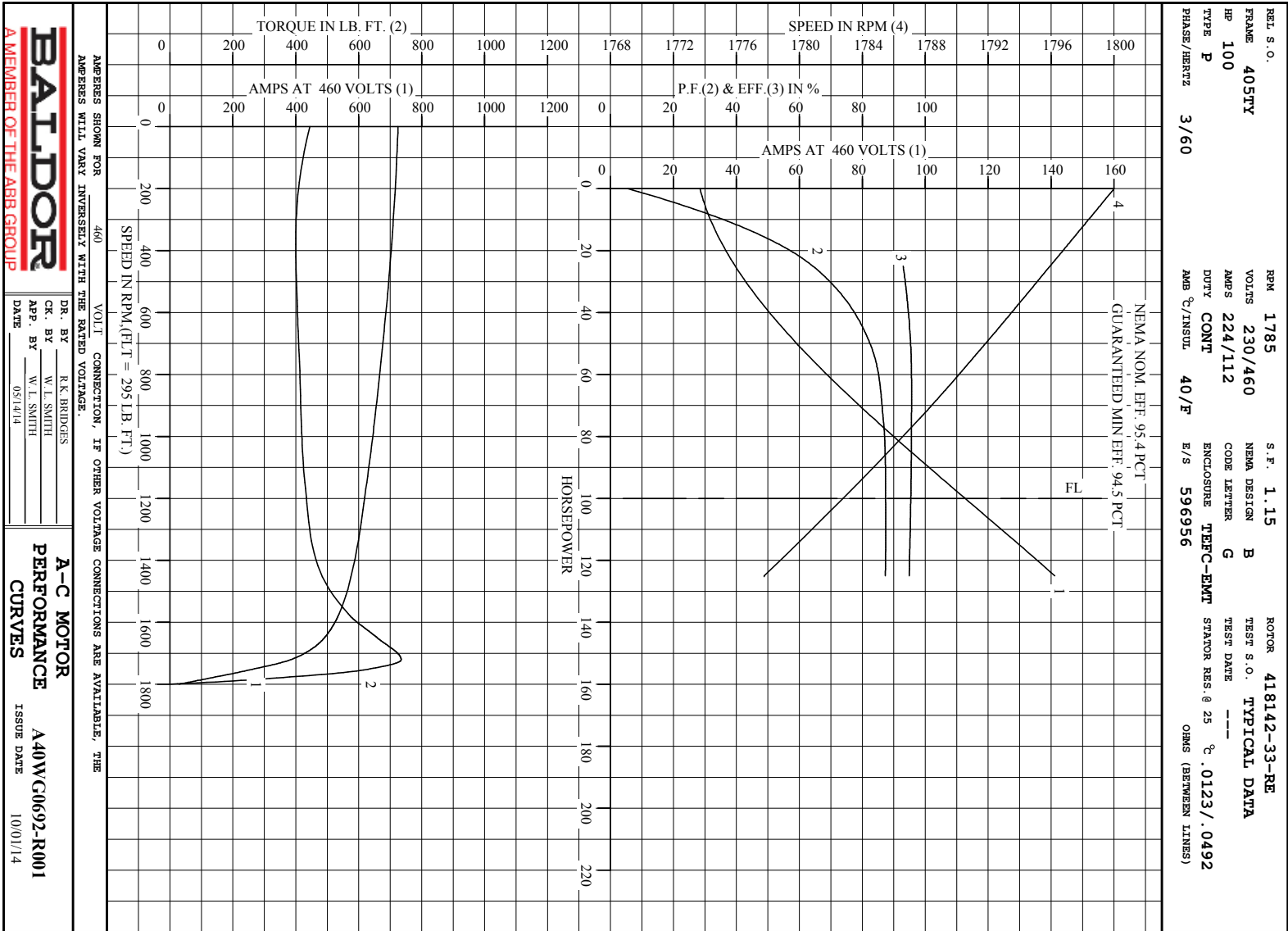
| Parts List  |                                          |          |
|-------------|------------------------------------------|----------|
| Part Number | Description                              | Quantity |
| SA267717    | SA P40G3928                              | 1.000 EA |
| RA254387    | RA P40G3928                              | 1.000 EA |
| 421948032   | LABEL, MYLAR                             | 1.000 EA |
| 000692000FF | N/P                                      | 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 |
| 089412501A  | BRKT FTMT G400 FIN MACH 6316 89412500WCA | 1.000 EA |
| 415072001B  | CLAMP                                    | 1.000 EA |
| 083198101A  | G400 STD FAN COVER MACHINING             | 1.000 EA |
| 034692005AA | P PLUG 3/4"BLK.                          | 1.000 EA |
| 034180012DA | KEY 1X4X1/4X1-1/2 L                      | 1.000 EA |
| 078548001R  | FAN KB 234/150 (84) 400                  | 1.000 EA |
| 004824015A  | GREASE POLYREX EM                        | 0.880 LB |
| 032018020EK | HHCS 5/8-11X2-1/2 PLTD.                  | 4.000 EA |
| 032018008CK | HHCS 3/8-16X1L PLATED                    | 4.000 EA |
| 032018008CK | HHCS 3/8-16X1L PLATED                    | 4.000 EA |
| 032018024CK | HHCS 3/8-16X3 PLTD.                      | 3.000 EA |
| 415096002A  | CPLG 1/8 HEX TYPE                        | 1.000 EA |
| 410700000DA | WAVY SPRING WASHER                       | 1.000 EA |
| 034000014AB | WSH ID.406 OD.812 TH.065                 | 4.000 EA |
| 034530052AB | P/NIP 1/8X6-1/2 GALV.                    | 1.000 EA |
| 034530056BB | P/NIP 1/4X7 SCHED 40                     | 1.000 EA |
| 034690001AB | SQHDPLG, COND                            | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| 034690001AB            | SQHDPLG, COND                            | 1.000 EA |
| 034631002AB            | BUSH 1/4 TO 1/8 PLTD.                    | 1.000 EA |
| 034690001AB            | SQHDPLG, COND                            | 1.000 EA |
| 034690002AB            | "unbulked" PPLG 1/4" PLTD.               | 1.000 EA |
| 089412501A             | BRKT FTMT G400 FIN MACH 6316 89412500WCA | 1.000 EA |
| 032018020EK            | HHCS 5/8-11X2-1/2 PLTD.                  | 4.000 EA |
| 032018024CK            | HHCS 3/8-16X3 PLTD.                      | 3.000 EA |
| 077176000L             | C/BOX, PAINTED 360-400                   | 1.000 EA |
| 077176001A             | CBOXC, PAINTED 360-400                   | 1.000 EA |
| 043292000AJ            | GASK 320-400                             | 1.000 EA |
| 402731001A             | GASK 360-440                             | 1.000 EA |
| 418150003A             | GREASE FITTING CAP                       | 1.000 EA |
| 032018005AK            | HHCS 1/4-20X5/8 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 |
| 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 |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.375 GA |
| 033775004EA            | DRSCR #6-1/4 304 S.S.                    | 2.000 EA |
| 034180022GA            | KEY 1/2X1/2X2-3/4 L                      | 1.000 EA |
| PK5004A02              | WOOD BASE 40X32 STACK 2X4 RUNNER         | 1.000 EA |

| Accessories |                                |            |
|-------------|--------------------------------|------------|
| Part Number | Description                    | Multiplier |
| K40G71      | C-FACE KIT G400 4/6/8 POLES    | A8         |
| 089412054B  | D-FLANGE BRKT 400 089416055WCB | P1         |



|                                                                                                                                                                                                                                       |              |                                                                                 |                   |                                                                        |                 |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------------------------------------------------------------------|-------------------|------------------------------------------------------------------------|-----------------|----------|
| REL.<br>S.O.                                                                                                                                                                                                                          | FRAME        | HP                                                                              | TYPE              | PHASE/<br>HERTZ                                                        | RPM             | VOLTS    |
|                                                                                                                                                                                                                                       | 405TY        | 100                                                                             | P                 | 3/60                                                                   | 1785            | 230/460  |
| AMPS                                                                                                                                                                                                                                  | DUTY         | AMB <sup>°C</sup> /<br>INSUL.                                                   | S.F.              | NEMA<br>DESIGN                                                         | CODE<br>LETTER  | ENCL.    |
| 224/112                                                                                                                                                                                                                               | CONT         | 40/F                                                                            | 1.15              | B                                                                      | G               | TEFC-EMT |
| E/S                                                                                                                                                                                                                                   | ROTOR        | TEST<br>S.O.                                                                    | TEST<br>DATE      | STATOR RES. @25 <sup>°C</sup><br>OHMS (BETWEEN LINES)                  |                 |          |
| 596956                                                                                                                                                                                                                                | 418142-33-RE | ---                                                                             | ---               | .0123/.0492                                                            |                 |          |
| PERFORMANCE                                                                                                                                                                                                                           |              |                                                                                 |                   |                                                                        |                 |          |
| LOAD                                                                                                                                                                                                                                  | HP           | AMPERES                                                                         | RPM               | POWER FACTOR                                                           | %<br>EFFICIENCY |          |
| NO LOAD                                                                                                                                                                                                                               | 0            | 28.6                                                                            | 1800              | 5.49                                                                   | 0               |          |
| 1/4                                                                                                                                                                                                                                   | 25.0         | 39.2                                                                            | 1796              | 64.3                                                                   | 93.0            |          |
| 2/4                                                                                                                                                                                                                                   | 50.0         | 59.5                                                                            | 1792              | 82.5                                                                   | 95.4            |          |
| 3/4                                                                                                                                                                                                                                   | 75.0         | 84.6                                                                            | 1788              | 86.7                                                                   | 95.7            |          |
| 4/4                                                                                                                                                                                                                                   | 100          | 112                                                                             | 1783              | 87.4                                                                   | 95.4            |          |
| 5/4                                                                                                                                                                                                                                   | 125          | 141                                                                             | 1778              | 87.3                                                                   | 94.9            |          |
| SPEED TORQUE                                                                                                                                                                                                                          |              |                                                                                 |                   |                                                                        |                 |          |
|                                                                                                                                                                                                                                       | RPM          | TORQUE<br>% FULL LOAD                                                           | TORQUE<br>LB.-FT. | AMPERES                                                                |                 |          |
| LOCKED ROTOR                                                                                                                                                                                                                          | 0            | 151                                                                             | 445               | 725                                                                    |                 |          |
| PULL UP                                                                                                                                                                                                                               | 360          | 136                                                                             | 400               | 706                                                                    |                 |          |
| BREAKDOWN                                                                                                                                                                                                                             | 1721         | 250                                                                             | 735               | 382                                                                    |                 |          |
| FULL LOAD                                                                                                                                                                                                                             | 1783         | 100                                                                             | 295               | 112                                                                    |                 |          |
| AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE<br>AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE<br><br>REMARKS: TYPICAL DATA<br>NEMA NOM. EFF. 95.4 PCT<br>GUARANTEED MIN EFF. 94.5 PCT |              |                                                                                 |                   |                                                                        |                 |          |
| <b>BALDOR</b><br>A MEMBER OF THE ABB GROUP                                                                                                                                                                                            |              | DR. BY R.K. BRIDGES<br>CK. BY W.L. SMITH<br>APP. BY W.L. SMITH<br>DATE 05/14/14 |                   | A-C MOTOR<br>PERFORMANCE DATA<br>A40WG0692-R001<br>ISSUE DATE 10/01/14 |                 |          |



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# DUTY MASTER ALTERNATING CURRENT MOTORS

## SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

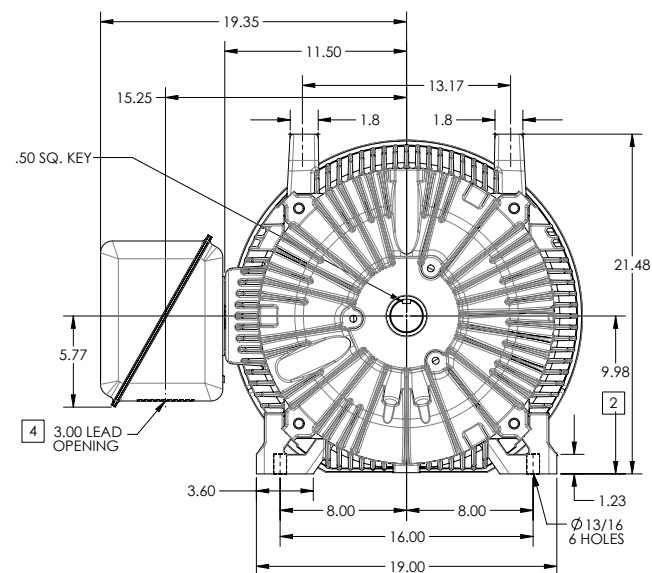
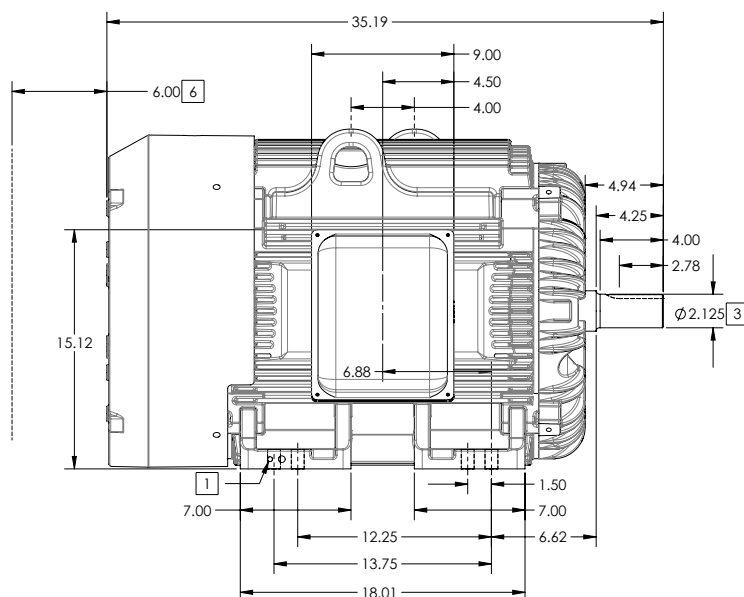
FRAME G405TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404TS FRAME MOUNTING HOLES

STANDARD INDUSTRIAL ENCLOSURE



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 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 .003" T.I.R. TO 5 INCH DIA.

**5** WEIGHT (LBS): 1160

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

000-629-119

|                                        |             |                              |                   |
|----------------------------------------|-------------|------------------------------|-------------------|
| REV. DESC: CHANGE BA FROM 6.76 TO 6.62 |             |                              |                   |
| REV: B                                 | VERSION: 02 | REVISED: 04/37/41 04/14/2014 | TDR: 000000848770 |
| MODEL NO. 617429-002                   |             | REF:                         |                   |
| BY: MGHUMZ2                            |             | Material:                    |                   |

**BALDOR**

G405TS/404TS STD - FOOTED - STANDARD ENCLOSURE

## DUTY MASTER ALTERNATING CURRENT MOTORS

### SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

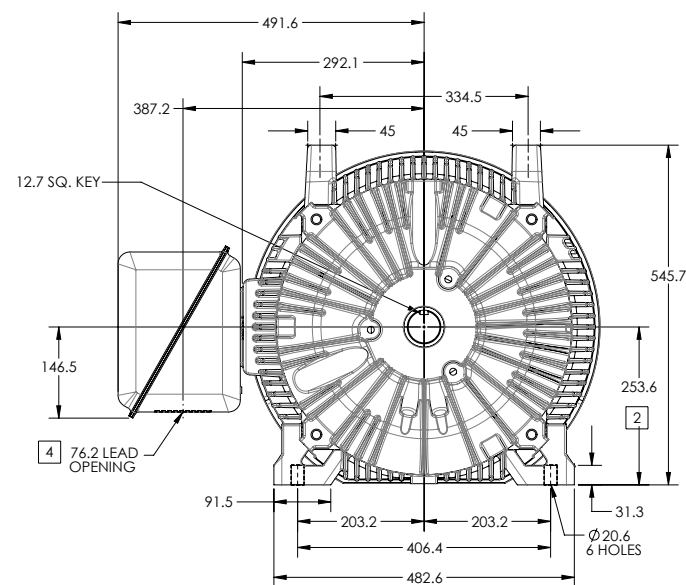
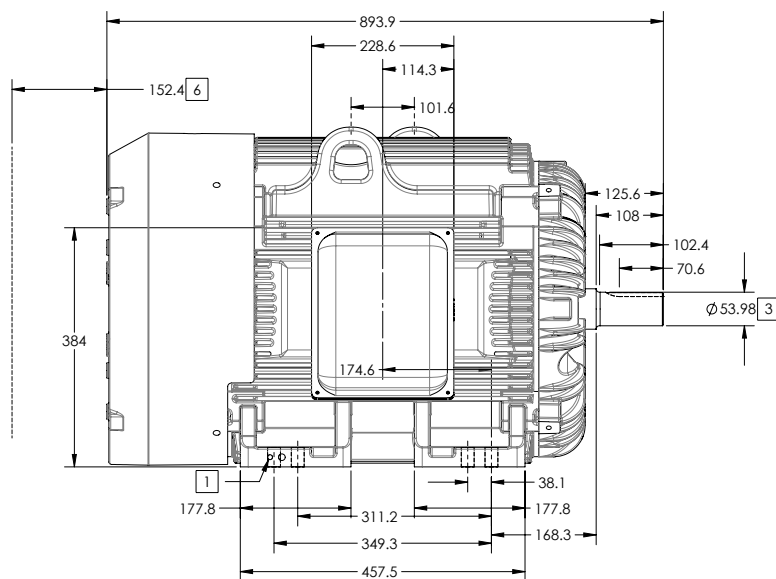
FRAME G405TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404TS FRAME MOUNTING HOLES

STANDARD INDUSTRIAL ENCLOSURE



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): 530

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

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

|                                        |                              |
|----------------------------------------|------------------------------|
| REV. DESC: CHANGE BA FROM 6.76 TO 6.62 | TDR: 000000848770            |
| REV: B VERSION: 02                     | REVISED: 04/37/41 04/14/2014 |
| MODEL NO. 617429-002                   | REF:                         |
| BY: MGHUMZ2                            | Material:                    |

**BALDOR**

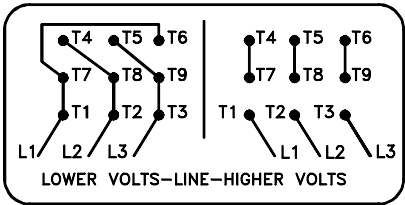
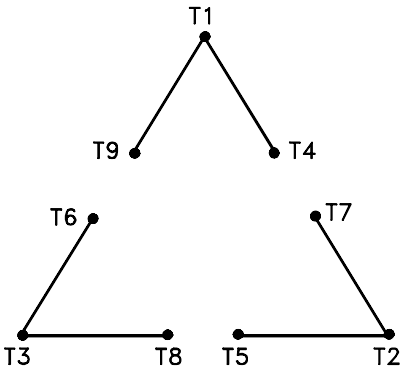
G405TS/404TS STD - FOOTED - STANDARD ENCLOSURE

SHEET NUMBER  
2 OF 2

000-627-119

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 |             |                                | <div>BALDOR</div> <div>CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED</div> <div>SH 1 of 1</div> |
| REV. LTR: -                          | VERSION: 00 | TDR: 000000538207              |                                                                                                |
| FILE: \MGA\00000\661                 |             | REVISED: 10: 47: 51 04/30/2010 |                                                                                                |
| MTL: -                               |             | BY: RAGRA                      |                                                                                                |