

BALDOR® • RELIANCE 

Product Information Packet

EM4400TS

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

| Part Detail | | | | | | | |
|-------------|----|-------------|------------|-------------|------------|---------------|------------|
| Revision: | G | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | A40WG0692 | CD Diagram: | 416820-002 | Mfg Plant: | |
| Mech. Spec: | | Layout: | 617429-002 | Poles: | 04 | Created Date: | 07-17-2013 |
| Base: | | Eff. Date: | 04-06-2018 | Leads: | 3#2,6#4 | | |

| Specs | | | |
|--------------------------------|---------------------|--------------------------------|-----------------------|
| Catalog Number: | EM4400TS | Feedback Device: | NO FEEDBACK |
| Enclosure: | TEFC | Heater Indicator: | No Heater |
| Frame: | 405TS | Insulation Class: | F |
| Frame Material: | Iron | Inverter Code: | Inverter Ready |
| Output @ Frequency: | 100.000 HP @ 60 HZ | KVA Code: | G |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Voltage @ Frequency: | 230.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 3 @ 2 AWG |
| | 460.0 V @ 60 HZ | Motor Type: | A40064M |
| XP Class and Group: | None | Mounting Arrangement: | F1 |
| XP Division: | Not Applicable | Power Factor: | 87 |
| Agency Approvals: | CCSA US | Product Family: | General Industrial |
| | CSA EEV | Pulley End Bearing Type: | Ball |
| Auxillary Box: | No Auxillary Box | Pulley Face Code: | Standard |
| Base Indicator: | Rigid | Shaft Ground Indicator: | No Shaft Grounding |
| Bearing Grease Type: | No Grease | Shaft Rotation: | Reversible |
| Current @ Voltage: | 112.000 A @ 460.0 V | Shaft Slinger Indicator: | No Slinger |
| | 224.000 A @ 230.0 V | Speed Code: | Single Speed |
| Design Code: | B | Motor Standards: | NEMA |

| | | | |
|---------------------|---------------|----------------------------------|----------------|
| Drip Cover: | No Drip Cover | Starting Method: | Direct on line |
| Duty Rating: | CONT | Thermal Device - Bearing: | None |
| | | Thermal Device - Winding: | None |

| | | | | | | | | | | |
|--------------------------------|------------|-------------|---------|----------------------|--------------|-------------|------------------------------|---------------|--------------------|---|
| 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 | |
| DRIVE END BEARING | 80BC03J30X | | | PHASE | 3 | DUTY | CONT | | INSUL.CLASS | F |
| OPP D.E. BEARING | 80BC03J30X | | | TYPE | P | ENCL | TEFC | CODE | G | |
| SER.NO. | | | | POWER FACTOR | 87 | | NEMA-NOM-EFFICIENCY | 95.4 | | |
| NEMA NOM/CSA QUOTED EFF | | | | MAX CORR KVAR | 18 | | GUARANTEED EFFICIENCY | 94.5 | | |
| | | | | MOTOR WEIGHT | | | | | | |

| 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 LABEL | 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 |
| 083198127A | G400 MOLDED FAN COVER | 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 | 1/8" NPT SQHDPLG | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| 034690001AB | 1/8" NPT SQHDPLG | 1.000 EA |
| 034631002AB | BUSH 1/4 TO 1/8 PLTD. | 1.000 EA |
| 034690001AB | 1/8" NPT SQHDPLG | 1.000 EA |
| 034690002AB | 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, 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 |
| MG1025Y17 | WILKOFAS, 789.701, SUPER E PEARL GOLD | 0.375 GA |
| 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 |
| 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. S.O. | FRAME | HP | TYPE | PHASE/HERTZ | RPM | VOLTS |
| | 405T | 100 | P | 3/60 | 1785 | 230/460 |
| AMPS | DUTY | AMB °C/ INSUL. | S.F. | NEMA DESIGN | CODE LETTER | ENCL. |
| 224/112 | CONT | 40/F | 1.15 | B | G | TEFC |
| E/S | ROTOR | TEST S.O. | TEST DATE | STATOR RES. @25 °C (OHMS BETWEEN LINES) | | |
| 596956 | 418142-33-RE | --- | --- | .0123/.0492 | | |

PERFORMANCE

| LOAD | HP | AMPERES | RPM | POWER FACTOR % | 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 % FULL LOAD | TORQUE 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 AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

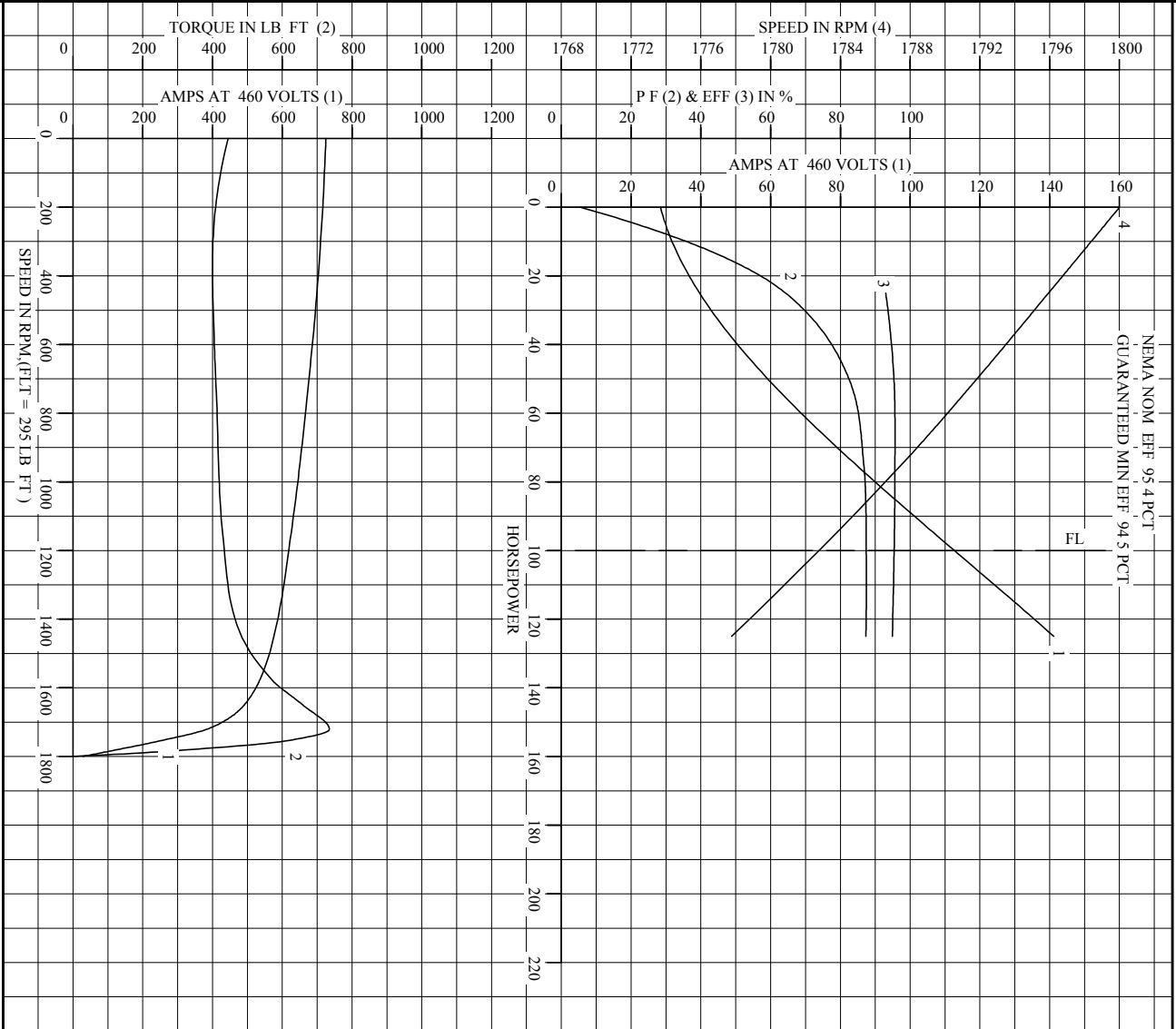
REMARKS: TYPICAL DATA
NEMA NOM. EFF. 95.4 PCT
GUARANTEED MIN EFF. 94.5 PCT



DR. BY R.K. BRIDGES
CK. BY W.L. SMITH
APP. BY W.L. SMITH
DATE 05/14/14

A-C MOTOR PERFORMANCE DATA
A40WG0692-R001
ISSUE DATE 01/04/18

| | | | | | | | |
|-------------|------|-------------|---------|-------------|-------|----------------------|---------------|
| REL S.O. | 405T | RPM | 1785 | S.F. | 1.15 | ROTOR | 418142-33-RE |
| FRAME | 100 | VOLTS | 230/460 | NEMA DESIGN | B | TEST S.O. | TYPICAL DATA |
| HP | 100 | AMPS | 224/112 | CODE LETTER | G | TEST DATE | --- |
| TYPE | P | DUTY | CONT | ENCLOSURE | TEFC | STATOR RES. @ 25 °C | .0123 / .0492 |
| PHASE/HERTZ | 3/60 | AMB °/INSUL | 40/F | E/S | 56956 | ORNS (BETWEEN LINES) | |

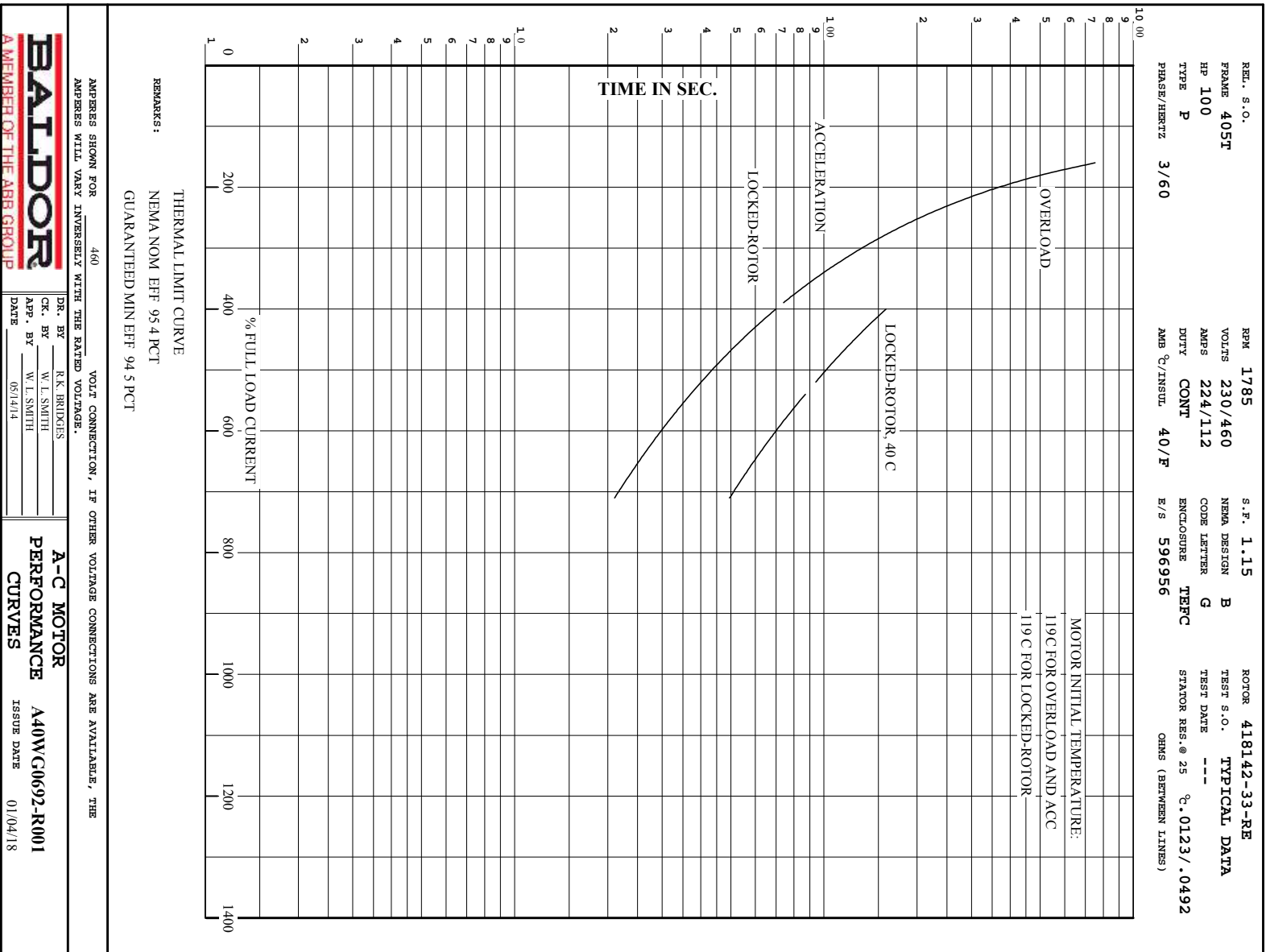


AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DR. BY R. K. BRIDGES
 CK. BY W. L. SMITH
 APP. BY W. L. SMITH
 DATE 05/14/18

A-C MOTOR PERFORMANCE CURVES
 A40WC0692-R001
 ISSUE DATE 01/04/18



DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

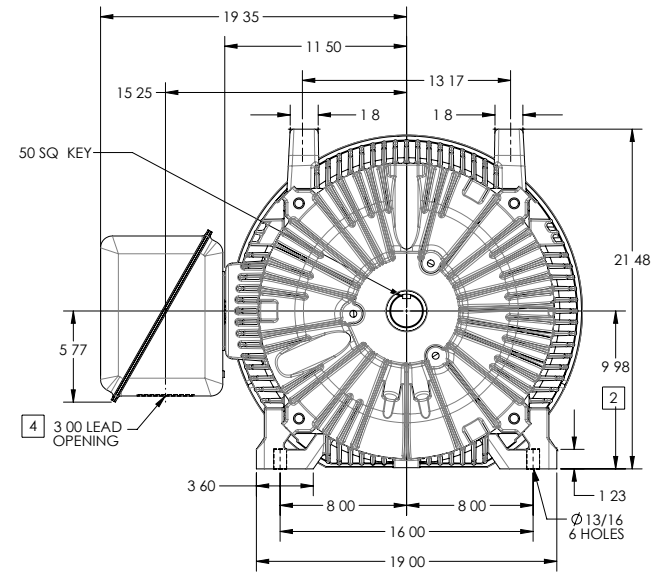
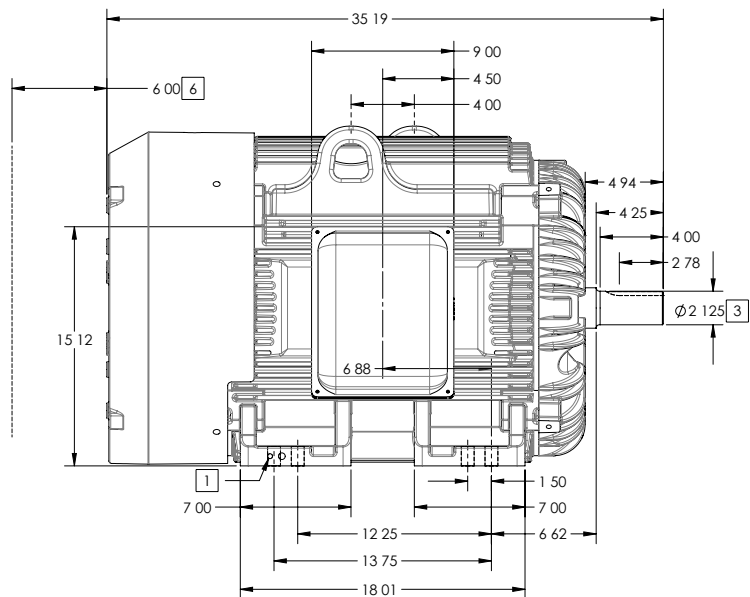
FRAME G405TS ABOVE NEMA RATINGS

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 + 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 15% DEPENDING ON RATING
- 6 OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

[5] WEIGHT (LBS): 1160

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

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

2007-6272119

| | | | |
|-----------|-----------------------------|--------------------------|------------------|
| REV. DESC | CHANGE BA FROM 6.76 TO 6.62 | | |
| REV B | VERSION 02 | REVISED 0 37 1 0 /1 /201 | TDR 0000008 8770 |
| MODEL NO. | 617 29-002 | | REF |
| BY | MGHMZ2 | Material | C |

BALDOR

G 05TS/ 0 TS STD - FOOTED - STANDARD ENCLOSURE

DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION

ENCLOSURE: TOTALLY ENCLOSED

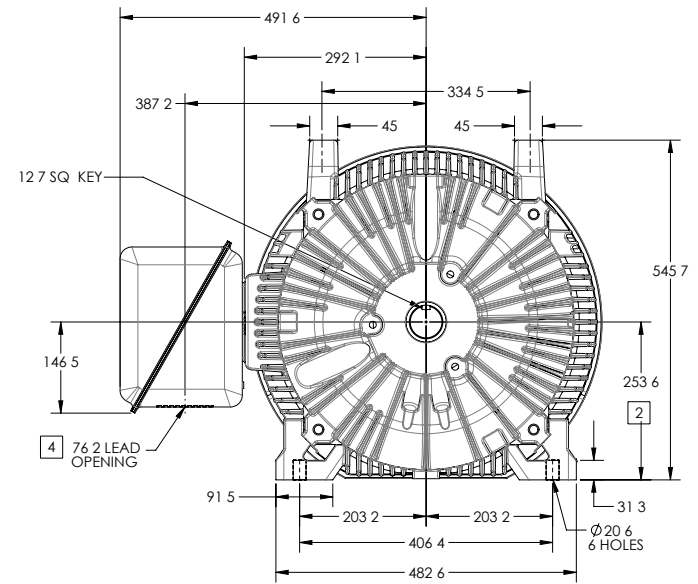
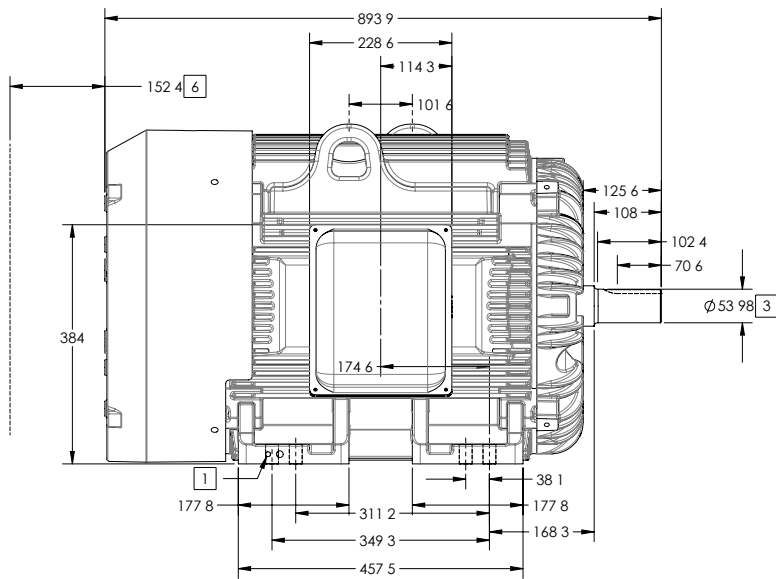
FRAME G405TS ABOVE NEMA RATINGS

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 -0.3
- 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

[5] WEIGHT (KGS): 530

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

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

200-627219

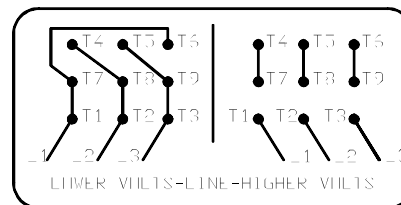
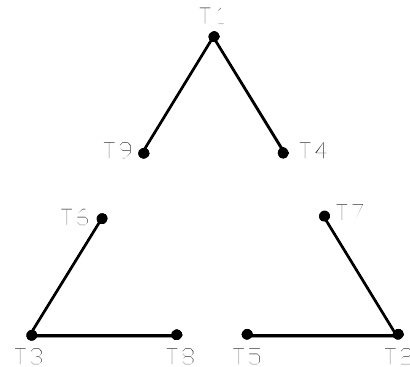
| | | | |
|---------------------------------------|------------|-------------------------|-----------------|
| REV. DESC CHANGE BA FROM 6.76 TO 6.62 | | | |
| REV B | VERSION 02 | REVISED 0 37 1 0 /1 201 | TDR 000008 8770 |
| MODEL NO. 617 29-002 | | REF | |
| BY MGHM22 | Material | C | |

BALDOR

G 05TS/ 0 TS STD - FOOTED - STANDARD ENCLOSURE

416820-002

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



(N.P. 1575-B)

416820-002

| | | |
|---|------------------------------|-------------------|
| REV. DESC: FONT CHANGE FOR PDF SEARCHABLE | | |
| REV. LTR: A | VERSION: 01 | TDR: 000001009382 |
| FILE: \MGA\00000\661 | REVISED: 02:46:19 02/13/2020 | BY: MGHMTT |
| MTL: - | ⊙ □ | |

BALDOR - RELIANCE®

CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH 1 of 1