

BALDOR® • RELIANCE 

Product Information Packet

EM4400T-12

100HP, 1785RPM, 3PH, 60HZ, 405T, A40064M, TEFC

| Part Detail | | | | | | | |
|-------------|----|-------------|------------|-------------|------------|---------------|------------|
| Revision: | H | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | A40WG0690 | CD Diagram: | 416820-020 | Mfg Plant: | |
| Mech. Spec: | | Layout: | 617429-001 | Poles: | 04 | Created Date: | 07-17-2013 |
| Base: | | Eff. Date: | 04-06-2018 | Leads: | 12#4 | | |

| Specs | | | |
|--------------------------------|-------------------------|--|--|
| Catalog Number: | EM4400T-12 | | |
| Enclosure: | TEFC | | |
| Frame: | 405T | | |
| Frame Material: | Iron | | |
| Output @ Frequency: | 100.000 HP @ 60 HZ | | |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | | |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | | |
| | 230.0 V @ 60 HZ | | |
| XP Class and Group: | None | | |
| XP Division: | Not Applicable | | |
| Agency Approvals: | CSA EEV | | |
| | CCSA US | | |
| Base Indicator: | Rigid | | |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | | |
| Current @ Voltage: | 112.000 A @ 460.0 V | | |
| | 224.000 A @ 230.0 V | | |
| Design Code: | B | | |
| Duty Rating: | CONT | | |

| | | | |
|---------------------------------------|-----------------------|--|--|
| Insulation Class: | F | | |
| Inverter Code: | Inverter Ready | | |
| KVA Code: | G | | |
| Lifting Lugs: | Standard Lifting Lugs | | |
| Motor Lead Quantity/Wire Size: | 12 @ 4 AWG | | |
| Motor Type: | A40064M | | |
| Mounting Arrangement: | F1 | | |
| Power Factor: | 87 | | |
| Product Family: | Other | | |
| Pulley End Bearing Type: | Ball | | |
| Pulley Face Code: | Standard | | |
| Shaft Ground Indicator: | No Shaft Grounding | | |
| Shaft Rotation: | Reversible | | |
| Speed Code: | Single Speed | | |
| Motor Standards: | NEMA | | |
| Starting Method: | Wye Start - Delta Run | | |

| Nameplate NP2383L | | | | | | | | | |
|-------------------------|------------|------|---------|---------------|----------|---------|-----------------------|-------------|------|
| CAT.NO. | EM4400T-12 | | | SPEC NO. | P40G3925 | | | | |
| HP | 100 | AMPS | 224/112 | | VOLTS | 230/460 | | DESIGN | B |
| FRAME | 405T | 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 |
| SA267714 | SA P40G3925 | 1.000 EA |
| RA254384 | RA P40G3925 | 1.000 EA |
| 421948038R | 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 |
| 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 |
| 034690001AB | 1/8" NPT SQHDPLG | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| 034631002AB | BUSH 1/4 TO 1/8 PLTD. | 1.000 EA |
| 034692005AA | P PLUG 3/4"BLK. | 1.000 EA |
| 034690001AB | 1/8" NPT SQHDPLG | 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 |
| 034690002AB | PPLG 1/4" PLTD. | 1.000 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 |
| 034180044JA | KEY 3/4X3/4X5-1/2 L | 1.000 EA |
| PK5004A02 | WOOD BASE 40X32 STACK 2X4 RUNNER | 1.000 EA |

| Accessories | | |
|--------------------|----------------------------------|-------------------|
| Part Number | Description | Multiplier |
| K40G2 | C-FACE KIT FR400T 4/6/8POLE ONLY | 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 | FOXE |
| E/S | ROTOR | TEST S.O. | TEST DATE | STATOR RES. @25 °C OHMS (BETWEEN LINES) | | |
| 496453 | 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

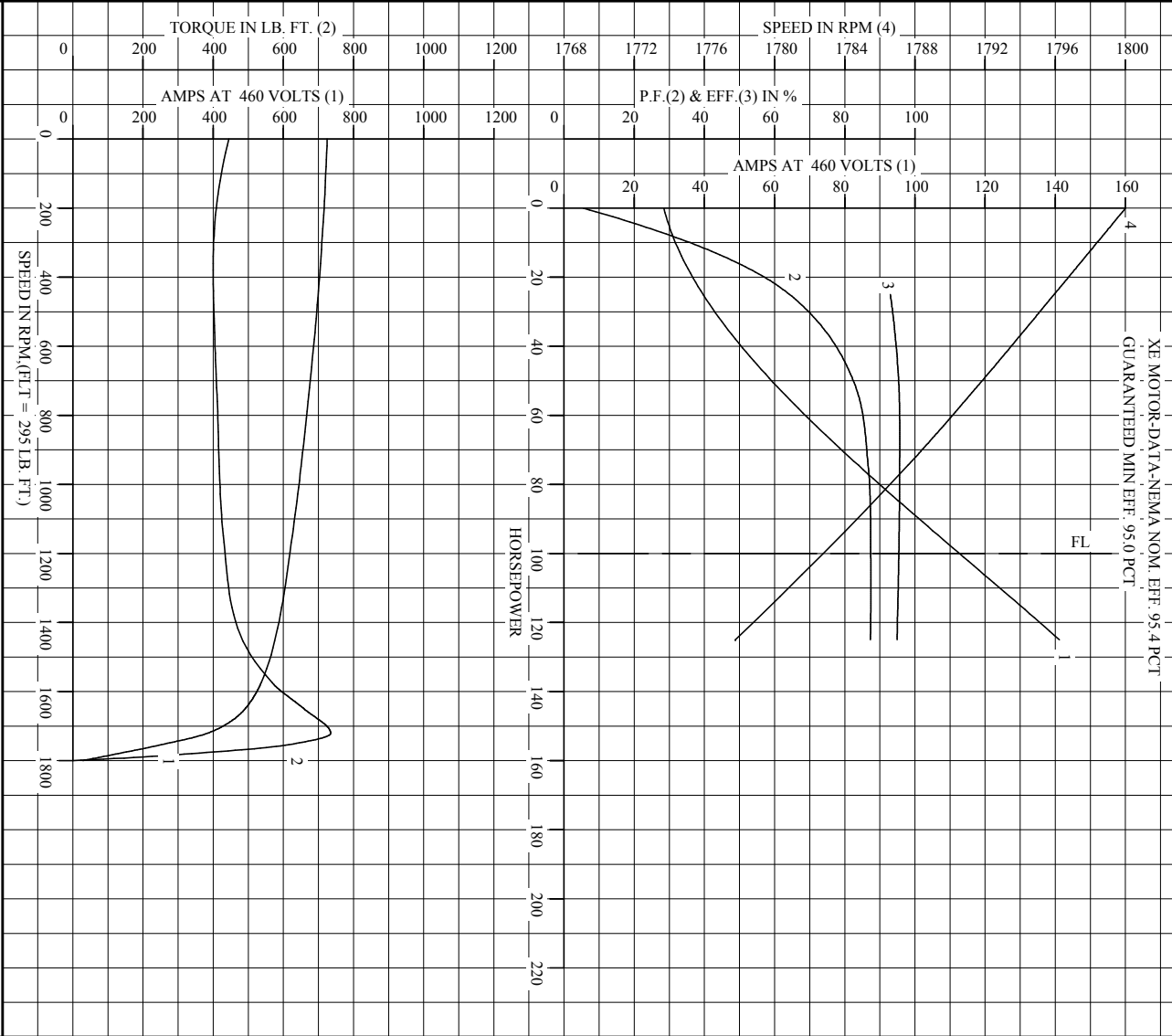
| | RPM | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|--------------|------|--------------------|----------------|---------|
| LOCKED ROTOR | 0 | 151 | 445 | 725 |
| PULL UP | 360 | 136 | 400 | 706 |
| BREAKDOWN | 1721 | 250 | 735 | 382 |
| FULL LOAD | 1783 | 100 | 295 | 112 |

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

REMARKS: TYPICAL DATA
 XE MOTOR-DATA-NEMA NOM. EFF. 95.4 PCT
 GUARANTEED MIN EFF. 95.0 PCT

| | | |
|---|--|--|
|  | DR. BY R.L. STEPHENS | A-C MOTOR PERFORMANCE DATA A40W0690-R001 ISSUE DATE 06/07/96 |
| | CK. BY K.W. KANOUFF APP. BY K.W. KANOUFF DATE 06/07/96 | |

REL. S.O. _____ RPM 1785 S.F. 1.15 ROTOR 418142-33-RE
 FRAME 405T 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 FCXE STATOR RES. @ 25 °C .0123/.0492
 PHASE/HERTZ 3/60 AMB °C/INSUL 40/F E/S 496453 OHMS (BETWEEN LINES)



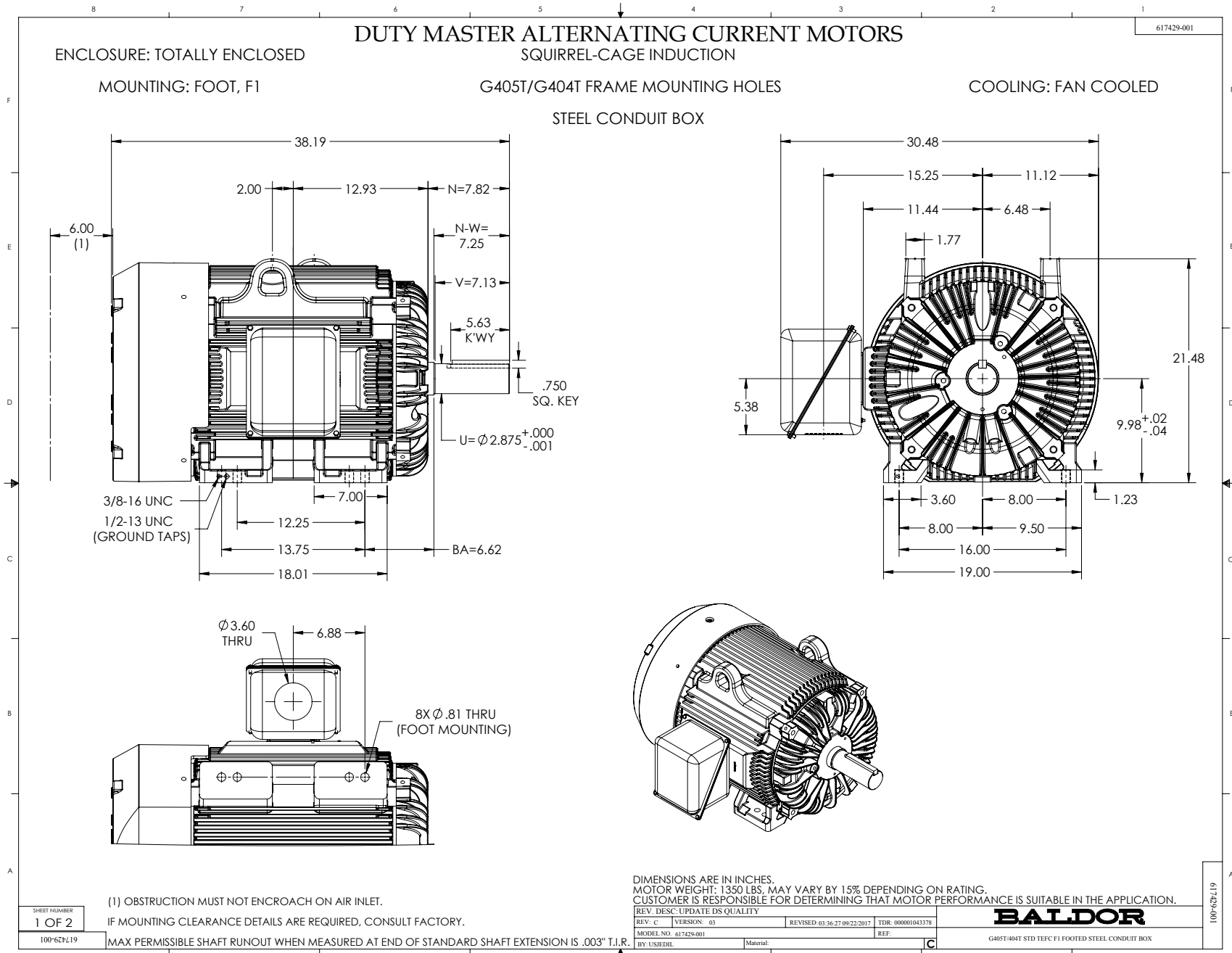
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

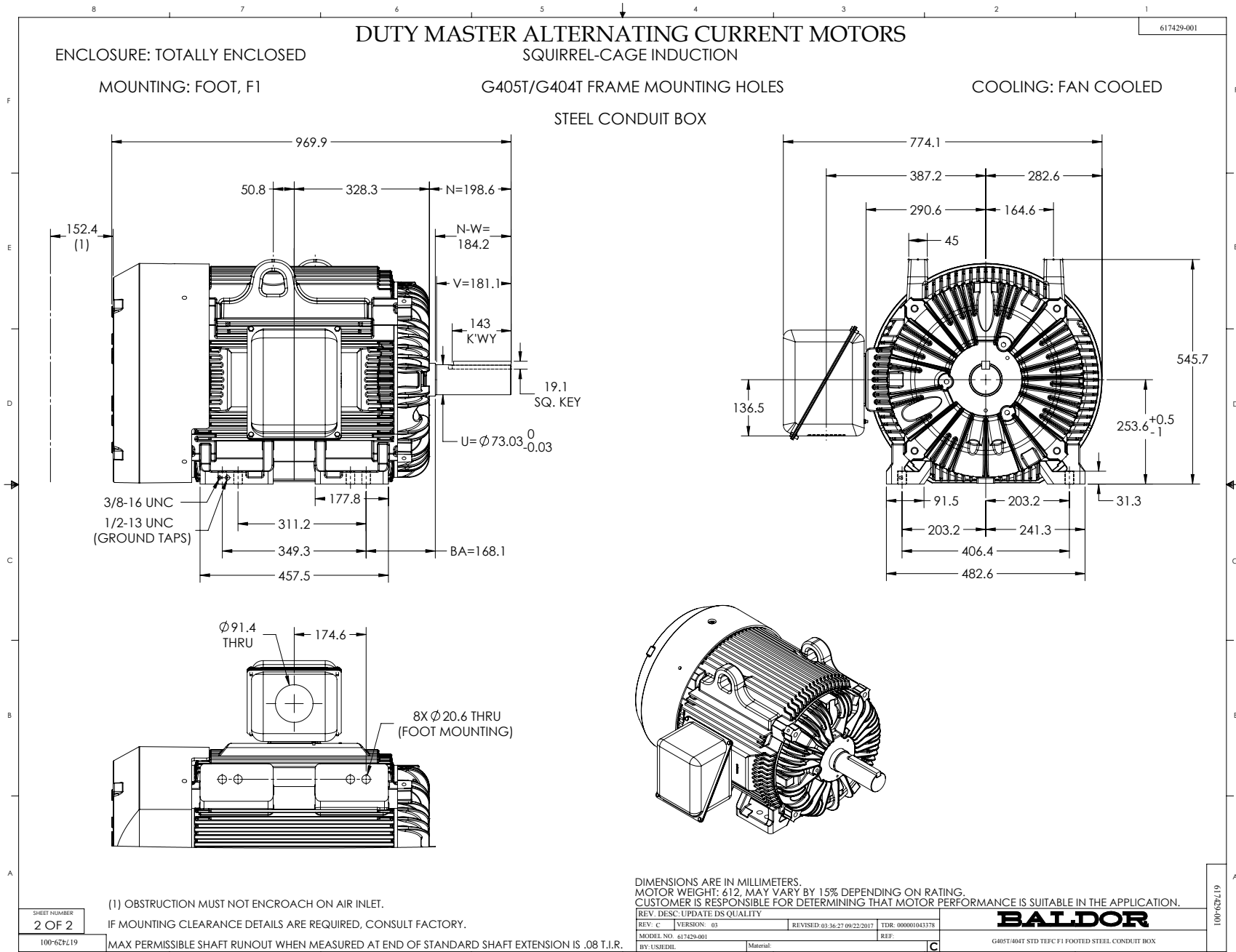
BALDOR

DR. BY R.L. STEPHENS
 CK. BY K.W. KANOUFF
 APP. BY K.W. KANOUFF
 DATE 06/07/96

A-C MOTOR PERFORMANCE CURVES A40W/G0690-R001
 ISSUE DATE 06/07/96

Printed on 2/2/11 11:22 @ usmghengdev1

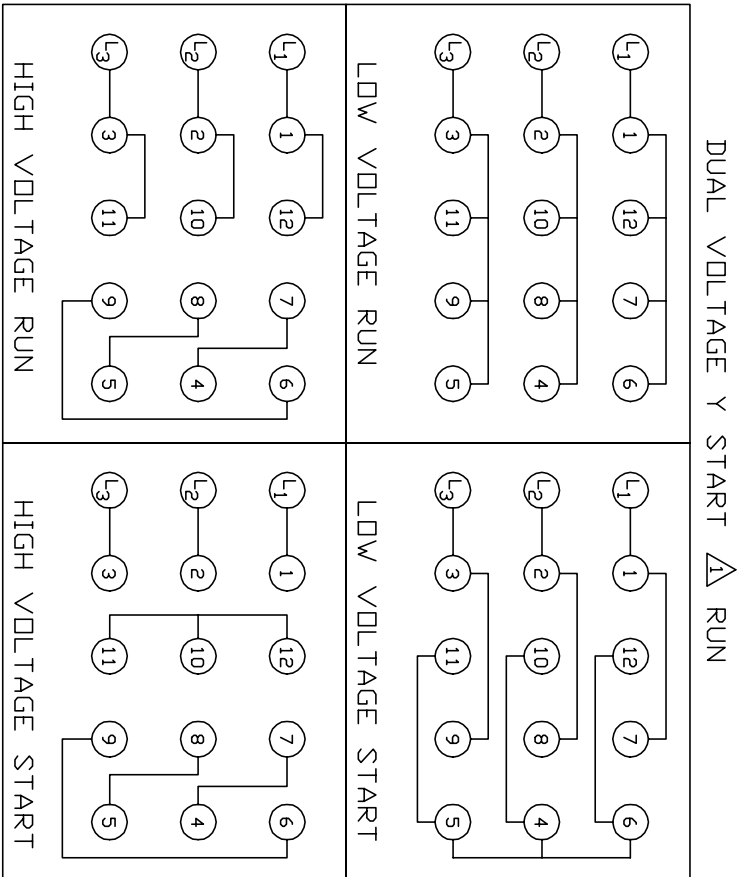




416820-020

A-C MOTOR
CONNECTION DIAGRAM

416820-020



<410961-39/ 1575-AC>

CUSTOMER _____ CUSTOMER ORDER NO. _____ S. D. NO. _____

| | | |
|--------------------------|------------------------------|-------------------|
| REV. DESC: LOADED TO BUS | | |
| REV. LTR: A | VERSION: 01 | TDR: 000000553773 |
| FILE: \RAG\00011\270 | REVISED: 01:15:19 08/12/2010 | |
| MTL: - | BY: RAGMTC | |

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A-C MOTOR CONNECTION DIAGRAM

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