

# ABB BALDOR RELIANCE III

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## Customer information packet

### CPX44166T

100//75HP, 1188//990RPM, 3PH, 60//50HZ, 444T

Class - CLI GP C,D; CLII GP E,F,G

Division - Division I

**Specifications**

|                               |                                            |
|-------------------------------|--------------------------------------------|
| Enclosure                     | TEFC                                       |
| Frame                         | 444T                                       |
| Frame Material                | Iron                                       |
| Frequency                     | 60.00 Hz                                   |
| Haz Area Class and Group      | CLI GP C,D; CLII GP E,F,G                  |
| Haz Area Division             | Division I                                 |
| Motor Letter Type             | Three Phase                                |
| Output @ Frequency            | 100.000 HP @ 60 HZ                         |
| Phase                         | 3                                          |
| Synchronous Speed @ Frequency | 1200 RPM @ 60 HZ                           |
| Voltage @ Frequency           | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ         |
| Agency Approvals              | CCSAUSEEV<br>CSA<br>UL                     |
| Ambient Temperature           | 40 °C                                      |
| Auxiliary Box                 | NO AUXILLARY BOX                           |
| Base Indicator                | Rigid                                      |
| Bearing Grease Type           | Polyrex EM (-20F +300F)                    |
| Constant Torque Speed Range   | 6-60                                       |
| Current @ Voltage             | 232.000 A @ 230.0 V<br>116.000 A @ 460.0 V |
| Design Code                   | B                                          |
| Drip Cover                    | No Drip Cover                              |
| Duty Rating                   | CONT                                       |
| Efficiency @ 100% Load        | 95.0 %                                     |
| Enclosure Modification        | Severe Duty Features                       |
| Feedback Device               | NO FEEDBACK                                |
| Haz Area Temp Code            | T3C                                        |
| Heater Indicator              | No Heater                                  |
| High Voltage Full Load Amps   | 116.0 a                                    |
| Insulation Class              | F                                          |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | D          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | A44WG2115  |
| Layout       | 617426-350 |
| Eff. date    | 05-06-2024 |
| CD Diagram   | 416820-002 |
| Poles        | 06         |
| Leads        | 3#2,6#4    |
| Proprietary  | False      |
| Created date | 02-13-2019 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Inverter Code</b>                 | Inverter Ready             |
| <b>IP Rating</b>                     | IP55                       |
| <b>KVA Code</b>                      | G                          |
| <b>Max Speed</b>                     | 3000 rpm                   |
| <b>Motor Lead Quantity/Wire Size</b> | 3 @ 2 AWG                  |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | A44062M                    |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 6                          |
| <b>Overall Length</b>                | 44.97 IN                   |
| <b>Power Factor</b>                  | 85                         |
| <b>Product Family</b>                | General Industrial         |
| <b>Pulley End Bearing Type</b>       | Ball                       |
| <b>Pulley Face Code</b>              | Standard                   |
| <b>Service Factor</b>                | 1.15                       |
| <b>Shaft Diameter</b>                | 3.375 IN                   |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger              |
| <b>Speed</b>                         | 1188 rpm                   |
| <b>Speed Code</b>                    | Single Speed               |
| <b>Starting Method</b>               | Direct on line             |
| <b>Thermal Device - Bearing</b>      | None                       |
| <b>Thermal Device - Winding</b>      | Normally Closed Thermostat |

**Nameplate**

|                  |  |
|------------------|--|
| NP2496L          |  |
| MOBIL POLYREX EM |  |

|                     |       |     |
|---------------------|-------|-----|
| 000613006PC         |       |     |
| CLASS I GROUP       | C D X | NO. |
| CLASS II GROUP      | E F G |     |
| OPERATING TEMP CODE | T3C   |     |

| 000901002AAA                   |         |
|--------------------------------|---------|
| SUIT @ 55C AMB AT 1.00 SF AT S | INEWAVE |
|                                |         |
|                                |         |
|                                |         |

**NP3140L**

|                   |               |       |         |              |             |              |        |      |      |       |      |
|-------------------|---------------|-------|---------|--------------|-------------|--------------|--------|------|------|-------|------|
| SPEC NO.          | A44-8611-2115 |       |         | CAT.NO.      | CPX44166T   |              |        |      |      | FRAME | 444T |
| HP                | 100           | VOLTS | 230/460 |              | PHASE       | 3            | DESIGN | B    | TYPE | P     |      |
| RPM               | 1188          | AMPS  | 232/116 |              | HZ          | 60           | AMB    | 40   | SF   | 1.00  |      |
| DRIVE END BEARING | 90BC03J30X    |       | DUTY    | CONT         | INSUL.CLASS |              |        | F    |      |       |      |
| OPP D.E. BEARING  | 90BC03J30X    |       | ENCL    | TEFC         | CODE        | G            |        |      |      |       |      |
| SF                | 1.15          | WK2   | 56.4    | MAG CUR      | 34.9        | RPM MAX      |        | 3000 |      |       |      |
| CT HZ             | 6-60          | VT HZ | 0-60    | CHP HZ       | 60-90       | NEMA-NOM-EFF |        |      | 95   |       |      |
|                   | IP66          |       |         |              |             |              |        |      |      |       |      |
| SER.NO.           |               |       |         | MOTOR WEIGHT |             |              |        |      |      |       |      |

**Parts List**

| <b>Part number</b> | <b>Description</b>                        | <b>Quantity</b> |
|--------------------|-------------------------------------------|-----------------|
| SA366134           | SA A44-8611-2115                          | 1.000 ea        |
| RA355540           | RA A44-8611-2115                          | 1.000 ea        |
| 421948032          | LABEL, MYLAR                              | 1.000 ea        |
| NP2496L            | MOTOR LUBE NAMEPLATE                      | 1.000 ea        |
| 000692000FF        | N/P                                       | 1.000 ea        |
| 000692000VD        | LABEL WARNING                             | 1.000 ea        |
| LB1073             | ALUM XP CAUTION LABEL                     | 1.000 ea        |
| 000613006PC        | N/P U/L (REL QTY 500)                     | 1.000 ea        |
| 000901002AAA       | N/P BLANK (RELEASE QTY 1,500)             | 1.000 ea        |
| NP3140L            | INVERTER DUTY, SS, CC, CSA-C US, CSA EEV  | 1.000 ea        |
| HW4505A02          | BREATHING/DRAIN-EXP PROOF-.250-18 PTF AIS | 2.000 ea        |
| 609158001D         | SLGR - 440                                | 1.000 ea        |
| 603284001W         | SLGN - 449                                | 1.000 ea        |
| 089448117E         | G28 XP FT MT DE BRKT GRP E 0894480116WCB  | 1.000 ea        |
| 415072001B         | CLAMP                                     | 1.000 ea        |
| 083199082A         | G28 FAN COVER MACHINING SHORT VERSION     | 1.000 ea        |
| 034180014DA        | KEY 1/4X1/4X1-3/4 L                       | 1.000 ea        |
| 078557001E         | FAN 440 078557001F                        | 1.000 ea        |
| 004824015A         | GREASE POLYREX EM                         | 1.160 lb        |
| 032130024HB        | HSHCS 1-8X3" PLATED                       | 4.000 ea        |
| 032018008CK        | HHCS 3/8-16X1L PLATED                     | 4.000 ea        |
| 032018028DK        | HHCS 1/2-13X3-1/2 PLTD.                   | 3.000 ea        |
| 415096002A         | CPLG 1/8 HEX TYPE                         | 1.000 ea        |
| 034630002AB        | CPLG 1/4" PLATED                          | 1.000 ea        |
| 415044053AX        | SLINGER,DE 6318 G440                      | 1.000 ea        |
| 410700004A         | WSHR                                      | 1.000 ea        |
| 034017014AB        | LCKW 3/8 STD. PLATED                      | 4.000 ea        |
| 034017016AB        | LCKW 1/2" PLATED                          | 1.000 ea        |
| 034530064BB        | P/NIP 1/4X8 PLATED                        | 1.000 ea        |
| 034530064AB        | P/NIP 1/8 X 8" L Pipe Nipple              | 1.000 ea        |
| 032620016KB        | HSRSS; 1/4X1/2                            | 2.000 ea        |

|             |                                          |           |
|-------------|------------------------------------------|-----------|
| 034690002AB | PPLG 1/4" PLTD.                          | 1.000 ea  |
| 032620016LA | SOCKET SET SCREW-449                     | 3.000 ea  |
| 034690002AB | PPLG 1/4" PLTD.                          | 1.000 ea  |
| 089448117E  | G28 XP FT MT DE BRKT GRP E 0894480116WCB | 1.000 ea  |
| 032018028DK | HHCS 1/2-13X3-1/2 PLTD.                  | 3.000 ea  |
| 415044053AX | SLINGER,DE 6318 G440                     | 1.000 ea  |
| 034017016AB | LCKW 1/2" PLATED                         | 3.000 ea  |
| 032620016KB | HSRSS; 1/4X1/2                           | 2.000 ea  |
| 034530044AB | P/NIP 1/8X5-1/2L GALV.                   | 1.000 ea  |
| 415096002A  | CPLG 1/8 HEX TYPE                        | 1.000 ea  |
| 032130024HB | HSHCS 1-8X3" PLATED                      | 4.000 ea  |
| 18CB1004A01 | STD CONDUIT BOX 444-449T 318 EXPL PROOF  | 1.000 ea  |
| 18CB1504A01 | STD CONDUIT BOX LID 444-449T 318 EXPL PR | 1.000 ea  |
| 418150003A  | GREASE FITTING CAP                       | 1.000 ea  |
| 406055001C  | GRFTG                                    | 1.000 ea  |
| 034017018AB | 5/8 MED LOCK WASHER ZP (034017018AF)     | 10.000 ea |
| 034017018AB | 5/8 MED LOCK WASHER ZP (034017018AF)     | 4.000 ea  |
| 035000001A  | ALFTG 1/8" 1610-BL                       | 1.000 ea  |
| 032130016EB | HSHCS 5/8-11X2 PLTD.                     | 10.000 ea |
| 415000115H  | T/LUG #2AWG-4/0AWG                       | 1.000 ea  |
| 406099000A  | PLUG - FAN COVER 320-440                 | 1.000 ea  |
| 032018008DK | HHCS 1/2-13X1 PLATED                     | 1.000 ea  |
| 034017016AB | LCKW 1/2" PLATED                         | 1.000 ea  |
| 032130020EB | HSHCS 5/8-11X2-1/2PLTD.                  | 4.000 ea  |
| 406055001D  | GRFTG                                    | 1.000 ea  |
| 035000001A  | ALFTG 1/8" 1610-BL                       | 1.000 ea  |
| 418150003A  | GREASE FITTING CAP                       | 1.000 ea  |
| MG1025G29   | WILKOFAS, 789.229, DARK CHARCOAL GRAY    | 0.440 ga  |
| 033775004EA | DRSCR #6-1/4 304 S.S.                    | 2.000 ea  |
| 034180055KA | KEY;DE                                   | 1.000 ea  |
| 604797045   | STD. 400 FRAME SKID                      | 1.000 ea  |
| 032510024D  | CARRIAGE BOLT - 444                      | 2.000 ea  |
| 034001016AB | WSHR .562ID 1.375OD .109                 | 2.000 ea  |
| 034001014AB | FLAT WASHER 3/8"PLATED                   | 2.000 ea  |

|             |                         |          |
|-------------|-------------------------|----------|
| 033300014AC | HEX NUT, SHIPPING - 400 | 2.000 ea |
| 604799003C  | PLASTIC BAG 42X32X46    | 1.000 ea |

|                                                                                                                                                                                                        |             |                   |                                              |                                            |                 |         |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|----------------------------------------------|--------------------------------------------|-----------------|---------|--|--|
| REL.<br>S.O.                                                                                                                                                                                           | FRAME       | HP                | TYPE                                         | PHASE/<br>HERTZ                            | RPM             | VOLTS   |  |  |
|                                                                                                                                                                                                        | 444T        | 100               | P                                            | 3/60                                       | 1188            | 230/460 |  |  |
| AMPS                                                                                                                                                                                                   | DUTY        | AMB °C/<br>INSUL. | S.F.                                         | NEMA<br>DESIGN                             | CODE<br>LETTER  | ENCL.   |  |  |
| 232/116                                                                                                                                                                                                | CONT        | 40/F              | 1.15                                         | B                                          | G               | TEFC    |  |  |
| E/S                                                                                                                                                                                                    | ROTOR       | TEST<br>S.O.      | TEST<br>DATE                                 | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES) |                 |         |  |  |
| 497223                                                                                                                                                                                                 | 418143080FE | ---               | ---                                          | .0139/.0557                                |                 |         |  |  |
| PERFORMANCE                                                                                                                                                                                            |             |                   |                                              |                                            |                 |         |  |  |
| LOAD                                                                                                                                                                                                   | HP          | AMPERES           | RPM                                          | %<br>POWER FACTOR                          | %<br>EFFICIENCY |         |  |  |
| NO LOAD                                                                                                                                                                                                | 0           | 34.9              | 1200                                         | 5.84                                       | 0               |         |  |  |
| 1/4                                                                                                                                                                                                    | 25.0        | 45.1              | 1197                                         | 56.9                                       | 91.4            |         |  |  |
| 2/4                                                                                                                                                                                                    | 50.0        | 64.6              | 1194                                         | 76.7                                       | 94.5            |         |  |  |
| 3/4                                                                                                                                                                                                    | 75.0        | 89.0              | 1191                                         | 83.0                                       | 95.1            |         |  |  |
| 4/4                                                                                                                                                                                                    | 100         | 116               | 1188                                         | 85.0                                       | 95.0            |         |  |  |
| 5/4                                                                                                                                                                                                    | 125         | 144               | 1185                                         | 86.0                                       | 94.6            |         |  |  |
|                                                                                                                                                                                                        |             |                   |                                              |                                            |                 |         |  |  |
| SPEED TORQUE                                                                                                                                                                                           |             |                   |                                              |                                            |                 |         |  |  |
|                                                                                                                                                                                                        |             | RPM               | TORQUE<br>% FULL LOAD                        | TORQUE<br>LB.-FT.                          | AMPERES         |         |  |  |
| LOCKED ROTOR                                                                                                                                                                                           |             | 0                 | 160                                          | 705                                        | 725             |         |  |  |
| PULL UP                                                                                                                                                                                                |             | 240               | 140                                          | 620                                        | 700             |         |  |  |
| BREAKDOWN                                                                                                                                                                                              |             | 1138              | 250                                          | 1106                                       | 390             |         |  |  |
| FULL LOAD                                                                                                                                                                                              |             | 1188              | 100                                          | 442                                        | 116             |         |  |  |
| 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. 95.0 PCT. |             |                   |                                              |                                            |                 |         |  |  |
|                                                                                                                     |             | DR. BY            | W. L. SMITH                                  | <b>A-C MOTOR<br/>PERFORMANCE DATA</b>      |                 |         |  |  |
|                                                                                                                                                                                                        |             | CK. BY            | C. E. JAMISON                                |                                            |                 |         |  |  |
|                                                                                                                                                                                                        |             | APP. BY           | E. J. CHRISTIAN                              |                                            |                 |         |  |  |
|                                                                                                                                                                                                        |             | DATE              | 10/08/18                                     |                                            |                 |         |  |  |
|                                                                                                                                                                                                        |             |                   | <b>A44WG2115-R007</b><br>ISSUE DATE 03/11/19 |                                            |                 |         |  |  |

REL S.O.

 RPM **1188**

 S.F. **1.15**

 ROTOR **418143080FE**

 FRAME **444T**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **100**

 AMPS **232/116**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

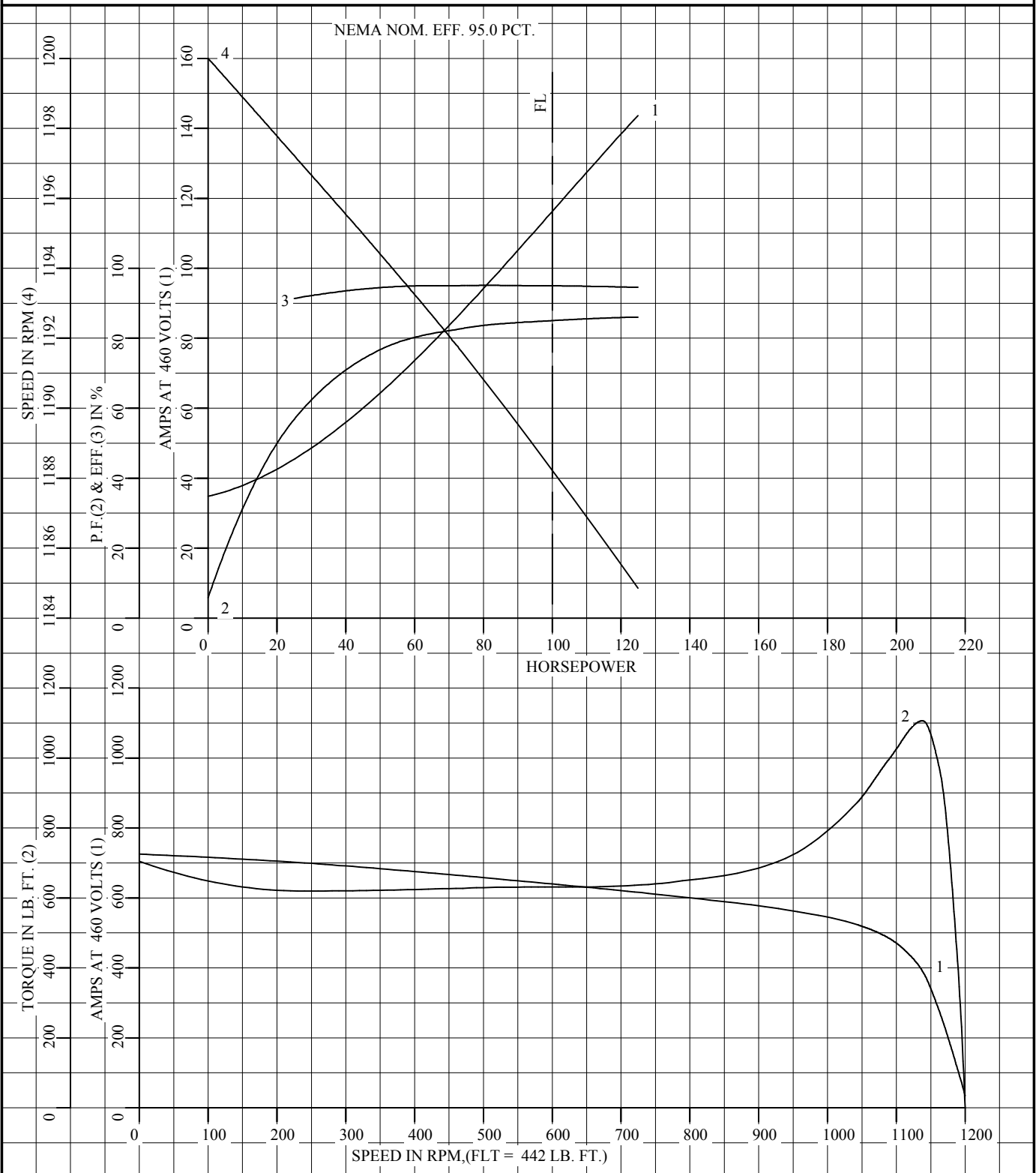
 STATOR RES. @ 25 °C **.0139/.0557**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **497223**

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**  
A MEMBER OF THE ABB GROUP

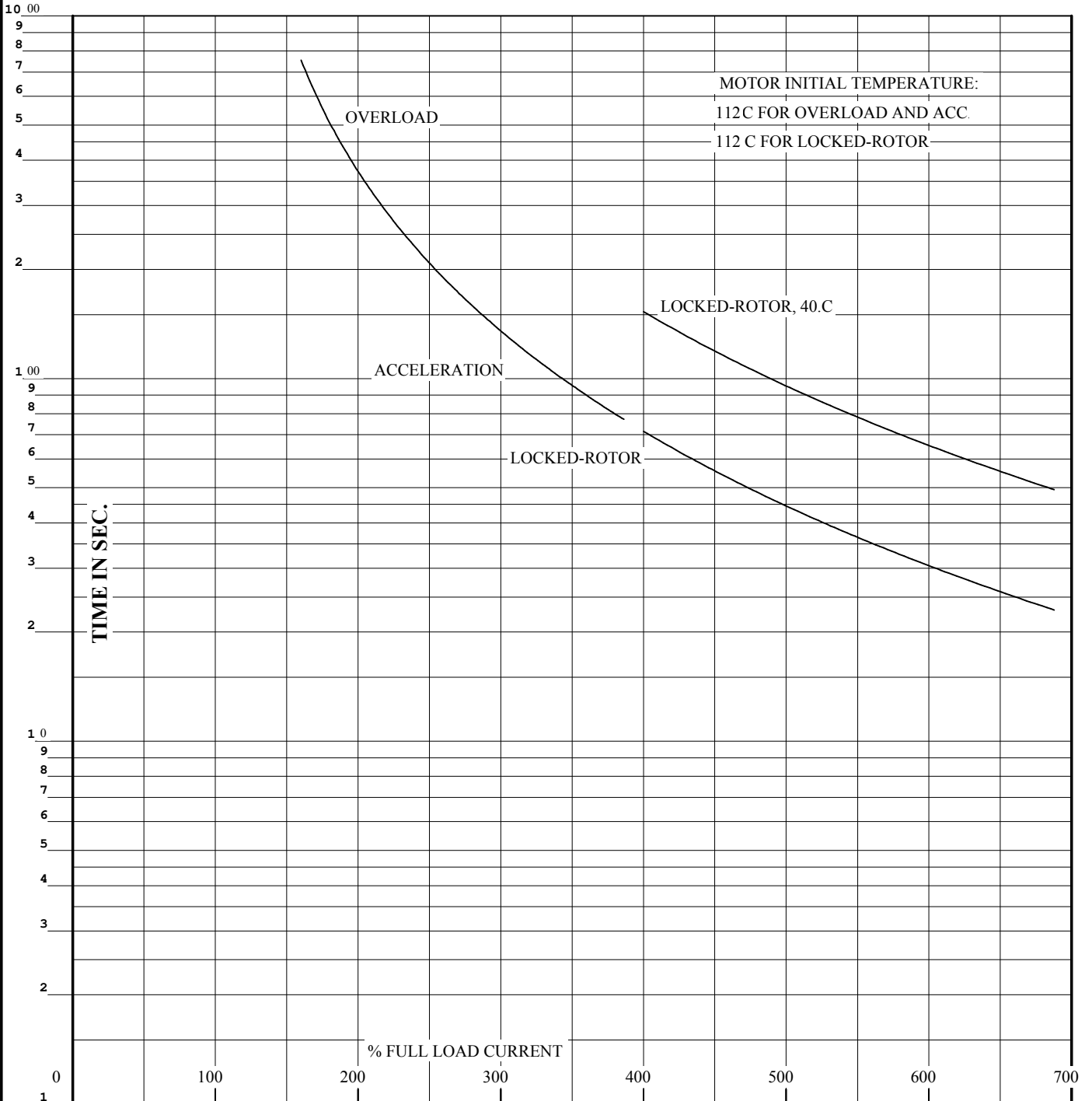
DR. BY W. L. SMITH  
CK. BY C. E. JAMISON  
APP. BY E. J. CHRISTIAN  
DATE 10/08/18

**A-C MOTOR  
PERFORMANCE  
CURVES**

**A44WG2115-R007**

ISSUE DATE **03/11/19**

|                         |                          |                       |                                        |
|-------------------------|--------------------------|-----------------------|----------------------------------------|
| REL. S.O.               | RPM <b>1188</b>          | S.F. <b>1.15</b>      | ROTOR <b>418143080FE</b>               |
| FRAME <b>444T</b>       | VOLTS <b>230/460</b>     | NEMA DESIGN <b>B</b>  | TEST S.O. <b>TYPICAL DATA</b>          |
| HP <b>100</b>           | AMPS <b>232/116</b>      | CODE LETTER <b>G</b>  | TEST DATE <b>---</b>                   |
| TYPE <b>P</b>           | DUTY <b>CONT</b>         | ENCLOSURE <b>TEFC</b> | STATOR RES. @ 25 °C <b>.0139/.0557</b> |
| PHASE/HERTZ <b>3/60</b> | AMB °C/INSUL <b>40/F</b> | E/S <b>497223</b>     | OHMS (BETWEEN LINES)                   |



**THERMAL LIMIT CURVE**

**REMARKS:** NEMA NOM. EFF. 95.0 PCT.

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



|         |                |
|---------|----------------|
| DR. BY  | W.L. SMITH     |
| CK. BY  | C.E. JAMISON   |
| APP. BY | E.J. CHRISTIAN |
| DATE    | 10/08/18       |

**A-C MOTOR  
PERFORMANCE  
CURVES**

**A44WG2115-R007**  
ISSUE DATE 03/11/19 Page 13 of 16

**DUTY MASTER ALTERNATING CURRENT MOTORS**  
SQUIRREL-CAGE INDUCTION

617426-350

ENCLOSURE: UL LISTED MOTOR

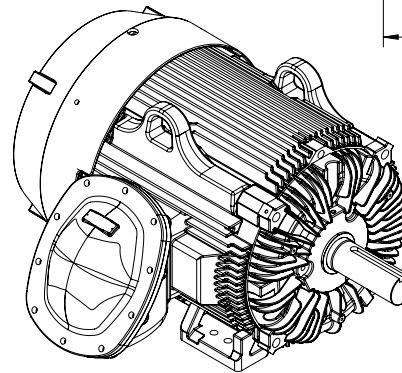
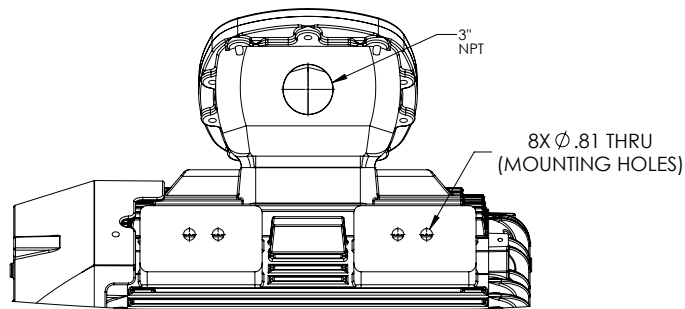
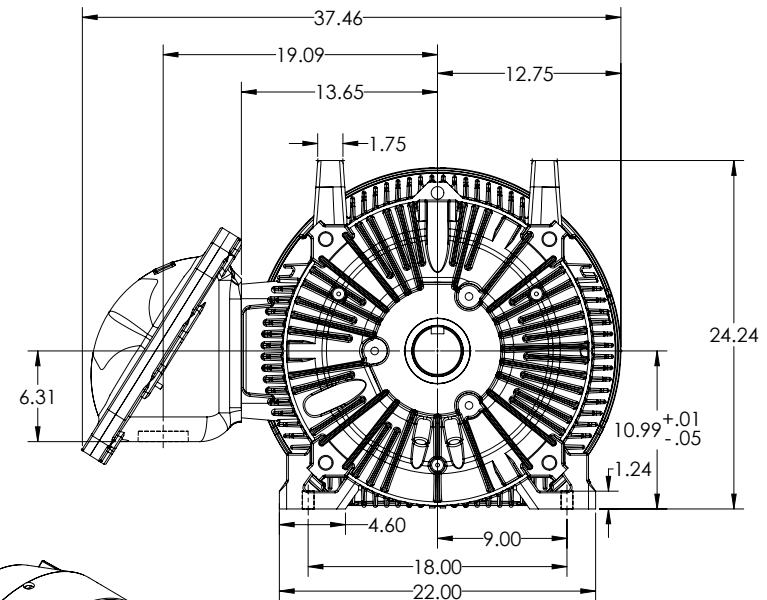
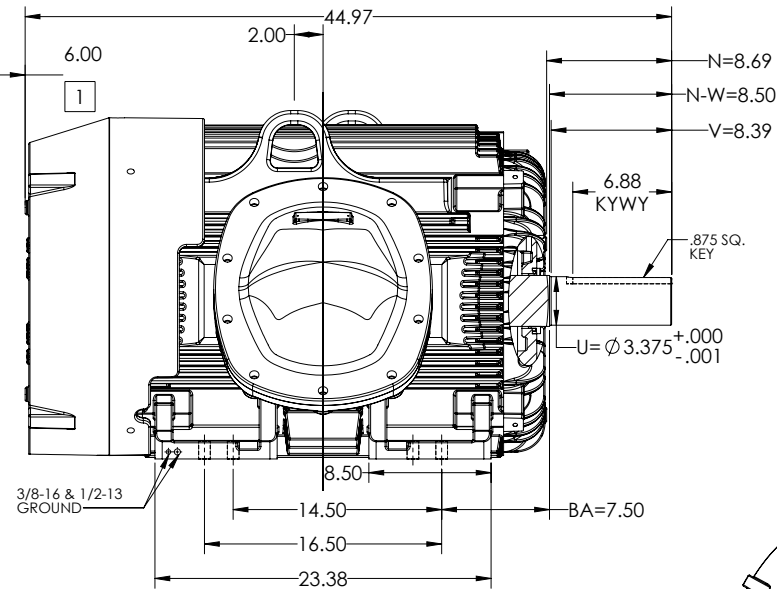
G444T/G445T FRAME MOUNTING HOLES

ENCLOSURE ENHANCEMENT: SEVERE DUTY

MOUNTING: F-1 FOOT

CLASS 1: GR. C&D, CLASS 2: GR. E,F,&G

COOLING: FAN COOLED



DIMENSIONS ARE IN INCHES.  
WEIGHT (LBS): 2150. WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.  
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER  
1 OF 1

1 OBSTRUCTION MUST NO ENCROACH ON AIR INLET MOTOR.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R.

|                      |             |                              |                   |
|----------------------|-------------|------------------------------|-------------------|
| REV. DESC: NEW       | VERSION: 00 | REVISED: 02/20/28 02/12/2019 | TDR: 000001098250 |
| MODEL NO. 617426-350 | REF:        | BY: RAGRS1                   | Material:         |

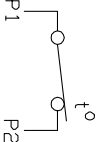
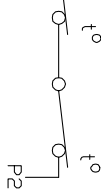
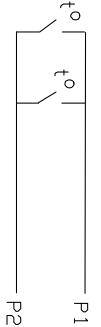
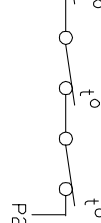
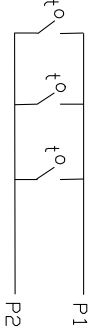
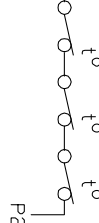
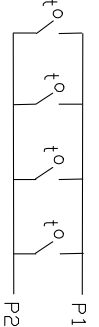
**BALDOR**

G445/444T TEFC XP F1 FT-CL-CB - CL.1 GR.C&D CL.2 GR.E,F&G

617426-350

CONNECTION DIAGRAM  
ACCESSORIES

|                           |                       |                   |
|---------------------------|-----------------------|-------------------|
| MOTOR WINDING THERMOSTATS |                       |                   |
| CONTACTS _____ @ _____ °C |                       |                   |
| FIGURE NUMBER _____       |                       |                   |
| CONTACT RATING            |                       |                   |
| VOLTS                     | CONTINUOUS<br>AMPERES | INRUSH<br>AMPERES |
| 110-120                   | 3.0                   | 30                |
| 220-240                   | 1.5                   | 15                |
| 440-480                   | 0.75                  | 7.5               |
| 550-600                   | 0.60                  | 6.0               |

| THERMOSTATS                                                                                    |                                                                                                 |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| NORMALLY CLOSED                                                                                | NORMALLY OPEN                                                                                   |
| FIGURE 1<br> | FIGURE 4<br> |
| FIGURE 2<br>  | FIGURE 5<br>  |
| FIGURE 3<br>  | FIGURE 6<br>  |
| FIGURE 7<br>  | FIGURE 8<br>  |

CUSTOMER \_\_\_\_\_ CUSTOMER ORDER NO. \_\_\_\_\_ S.O. NO. \_\_\_\_\_

418174-006

418174-006

|                          |                              |                   |
|--------------------------|------------------------------|-------------------|
| REV. DESC: LOADED TO BUS |                              |                   |
| REV. LTR: A              | VERSION: 01                  | TDR: 000000570390 |
| FILE: \RAG\00013\849     | REVISED: 10:16:21 12/07/2010 | BY: RAGDRF        |
| MTL: -                   |                              |                   |

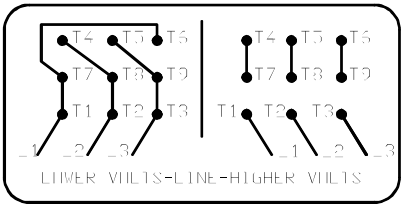
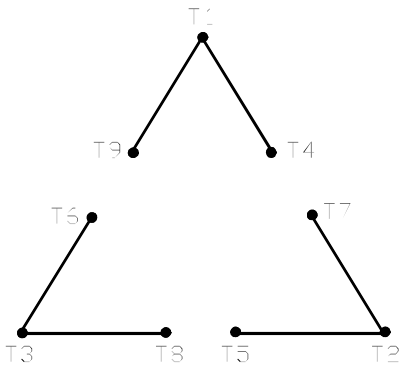
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A-C MOTOR CONNECTION ACCESSORIES

SH 1 of 1

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



(N.P. 1575-B)

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CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED  
SH 1 of 1

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