

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECP4407TS-4

200HP, 1785RPM, 3PH, 60HZ, 447TS, A44120M, TEF

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                               |                         |
|-------------------------------|-------------------------|
| Enclosure                     | TEFC                    |
| Frame                         | 447TS                   |
| Frame Material                | Iron                    |
| Frequency                     | 60.00 Hz                |
| Haz Area Class and Group      | CLI GP A,B,C,D          |
| Haz Area Division             | Division II             |
| Motor Letter Type             | Three Phase             |
| Output @ Frequency            | 200.000 HP @ 60 HZ      |
| Phase                         | 3                       |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ        |
| Voltage @ Frequency           | 460.0 V @ 60 HZ         |
| Agency Approvals              | CCSAUSEEV               |
| Ambient Temperature           | 40 °C                   |
| Auxiliary Box                 | NO AUXILLARY BOX        |
| Base Indicator                | Rigid                   |
| Bearing Grease Type           | Polyrex EM (-20F +300F) |
| Constant Torque Speed Range   | 30-60                   |
| Current @ Voltage             | 222.000 A @ 460.0 V     |
| Design Code                   | B                       |
| Drip Cover                    | No Drip Cover           |
| Duty Rating                   | CONT                    |
| Efficiency @ 100% Load        | 96.2 %                  |
| Feedback Device               | NO FEEDBACK             |
| Haz Area Temp Code            | T3                      |
| Heater Indicator              | No Heater               |
| High Voltage Full Load Amps   | 222.0 a                 |
| Insulation Class              | F                       |
| Inverter Code                 | Inverter Ready          |
| KVA Code                      | G                       |
| Lifting Lugs                  | No Lifting Lugs         |
| Motor Lead Quantity/Wire Size | 6 @ 1/0 AWG             |
| Motor Standards               | NEMA                    |

**Part Detail**

|              |                      |
|--------------|----------------------|
| Revision     | R                    |
| Type         | AC                   |
| Mech. spec.  |                      |
| Base         |                      |
| Status       | PRD/A                |
| Elec. spec.  | A44WG0690            |
| Layout       | 617435-836           |
| Eff. date    | 11-04-2025           |
| CD Diagram   | 416820-036           |
| Poles        | 04                   |
| Leads        | 3#1/0 (02 per group) |
| Proprietary  | False                |
| Created date | 08-15-2012           |

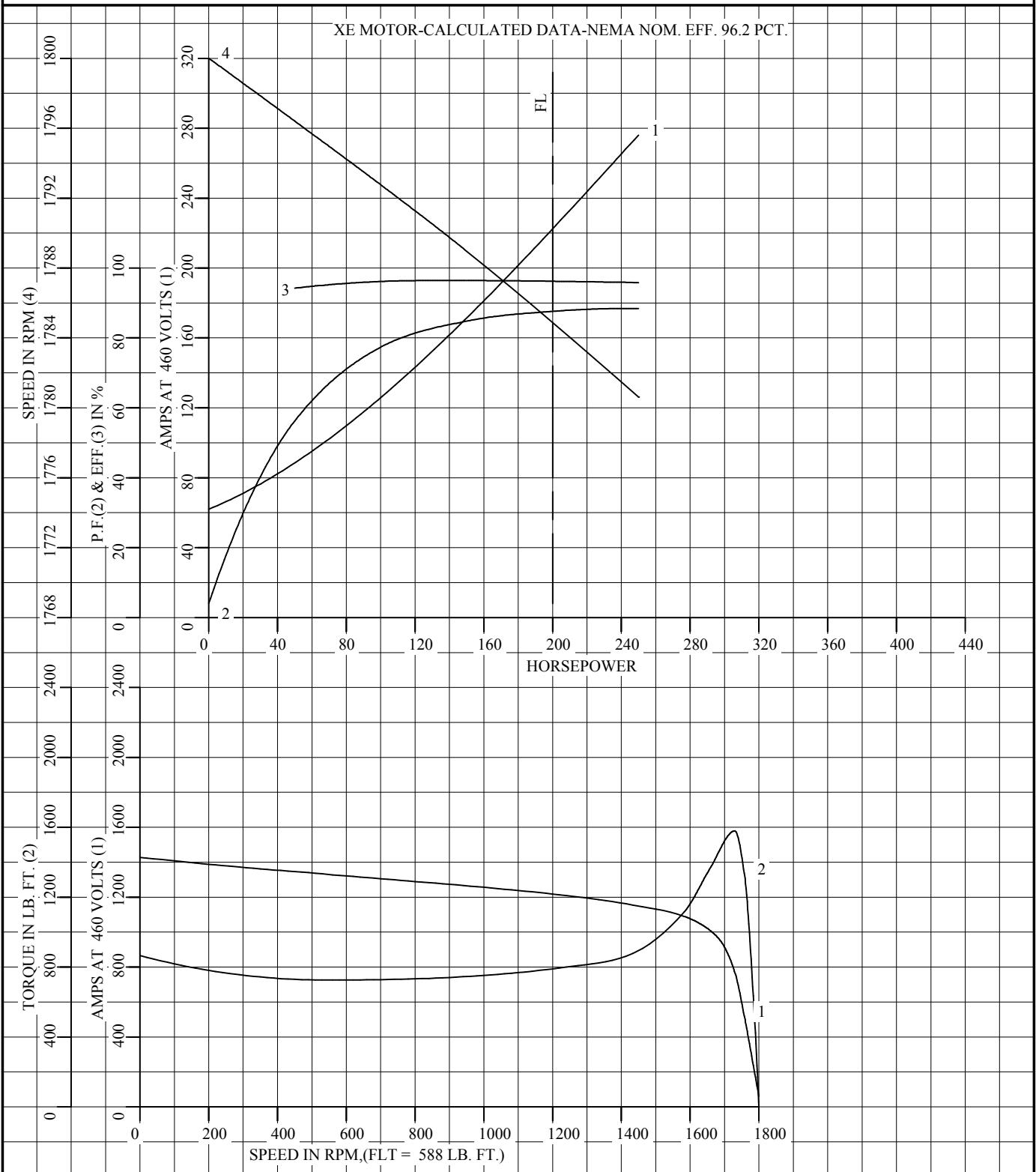
|                                 |                    |
|---------------------------------|--------------------|
| <b>Motor Type</b>               | A44120M            |
| <b>Mounting Arrangement</b>     | F1                 |
| <b>Number of Poles</b>          | 4                  |
| <b>Overall Length</b>           | 44.48 IN           |
| <b>Power Factor</b>             | 87                 |
| <b>Pulley End Bearing Type</b>  | Ball               |
| <b>Pulley Face Code</b>         | Standard           |
| <b>Service Factor</b>           | 1.15               |
| <b>Shaft Diameter</b>           | 2.375 IN           |
| <b>Shaft Ground Indicator</b>   | No Shaft Grounding |
| <b>Shaft Rotation</b>           | Reversible         |
| <b>Shaft Slinger Indicator</b>  | Shaft Slinger      |
| <b>Speed</b>                    | 1785 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> | None               |

**Nameplate**

| NP3238             |             |      |               |                 |              |          |       |      |                       |      |                     |      |      |      |             |   |
|--------------------|-------------|------|---------------|-----------------|--------------|----------|-------|------|-----------------------|------|---------------------|------|------|------|-------------|---|
| CAT NO             | ECP4407TS-4 |      |               | SPEC NO.        |              | P44G3935 |       |      |                       |      |                     |      |      |      |             |   |
| HP                 | 200         | AMPS |               | 222             | VOLTS        |          | 460   |      | DESIGN                |      | B                   |      |      |      |             |   |
| FRAME              | 447TS       | RPM  |               | 1785            | HZ           | 60       | AMB   |      | 40                    | SF   |                     | 1.15 |      |      |             |   |
| D.E. BRG.DATA      | 6318        |      |               | O.D.E. BRG.DATA |              |          | 6318  |      | PH                    |      | 3                   | DUTY |      | CONT | INSUL.CLASS | F |
| D.E. BRG.          | 90BC03J30X  |      |               |                 | TYPE         |          | P     | ENCL |                       | TEFC | CODE                |      | G    |      |             |   |
| O.D.E. BRG.        | 90BC03J30X  |      |               |                 | POWER FACTOR |          |       |      | 87                    |      | NEMA NOM EFFICIENCY |      |      |      | 96.2        |   |
| 3/4 LOAD EFF.      | 96.5        |      | MAX CORR KVAR |                 |              |          | 32.0  |      | GUARANTEED EFFICIENCY |      |                     |      | 95.4 |      |             |   |
| TEMP CODE          | T3          |      | TEMP =        |                 | 200          |          |       |      |                       |      |                     |      |      |      |             |   |
| CHP HZ             | 60-90       |      | CT HZ         |                 | 30-60        |          | VT HZ |      | 0-60                  |      |                     |      |      |      |             |   |
| INVERTER-TEMP-CODE | T3          |      |               |                 |              |          |       |      |                       |      |                     |      |      |      |             |   |
| SER.NO.            |             |      |               |                 | MOTOR WEIGHT |          |       |      |                       |      |                     |      |      |      |             |   |

|                                                                                                                                                                                                                                 |             |                   |                       |                                                                                       |                 |       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|-----------------------|---------------------------------------------------------------------------------------|-----------------|-------|
| REL.<br>S.O.                                                                                                                                                                                                                    | FRAME       | HP                | TYPE                  | PHASE/<br>HERTZ                                                                       | RPM             | VOLTS |
|                                                                                                                                                                                                                                 | 447TD       | 200               | P                     | 3/60                                                                                  | 1785            | 460   |
| AMPS                                                                                                                                                                                                                            | DUTY        | AMB °C/<br>INSUL. | S.F.                  | NEMA<br>DESIGN                                                                        | CODE<br>LETTER  | ENCL. |
| 222                                                                                                                                                                                                                             | 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)                                            |                 |       |
| ---                                                                                                                                                                                                                             | 418143052CE | ---               | ---                   | .0169                                                                                 |                 |       |
| PERFORMANCE                                                                                                                                                                                                                     |             |                   |                       |                                                                                       |                 |       |
| LOAD                                                                                                                                                                                                                            | HP          | AMPERES           | RPM                   | %<br>POWER FACTOR                                                                     | %<br>EFFICIENCY |       |
| NO LOAD                                                                                                                                                                                                                         | 0           | 62.0              | 1800                  | 4.07                                                                                  | 0               |       |
| 1/4                                                                                                                                                                                                                             | 50.0        | 88.3              | 1796                  | 56.3                                                                                  | 94.3            |       |
| 2/4                                                                                                                                                                                                                             | 100         | 126               | 1793                  | 77.4                                                                                  | 96.2            |       |
| 3/4                                                                                                                                                                                                                             | 150         | 172               | 1789                  | 84.8                                                                                  | 96.4            |       |
| 4/4                                                                                                                                                                                                                             | 200         | 222               | 1785                  | 87.6                                                                                  | 96.2            |       |
| 5/4                                                                                                                                                                                                                             | 250         | 276               | 1781                  | 88.4                                                                                  | 95.8            |       |
|                                                                                                                                                                                                                                 |             |                   |                       |                                                                                       |                 |       |
| SPEED TORQUE                                                                                                                                                                                                                    |             |                   |                       |                                                                                       |                 |       |
|                                                                                                                                                                                                                                 |             | RPM               | TORQUE<br>% FULL LOAD | TORQUE<br>LB.-FT.                                                                     | AMPERES         |       |
| LOCKED ROTOR                                                                                                                                                                                                                    |             | 0                 | 147                   | 865                                                                                   | 1428            |       |
| PULL UP                                                                                                                                                                                                                         |             | 540               | 123                   | 726                                                                                   | 1332            |       |
| BREAKDOWN                                                                                                                                                                                                                       |             | 1730              | 268                   | 1579                                                                                  | 770             |       |
| FULL LOAD                                                                                                                                                                                                                       |             | 1785              | 100                   | 588                                                                                   | 222             |       |
| 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>XE MOTOR-CALCULATED DATA-NEMA NOM. EFF. 96.2 PCT. |             |                   |                       |                                                                                       |                 |       |
|                                                                                                                                              |             | DR. BY            | T.G.KELATI            | <b>A-C MOTOR<br/>PERFORMANCE DATA</b><br><b>A44WG0690-R001</b><br>ISSUE DATE 05/03/21 |                 |       |
|                                                                                                                                                                                                                                 |             | CK. BY            | E.J.CHRISTIAN         |                                                                                       |                 |       |
|                                                                                                                                                                                                                                 |             | APP. BY           | E.J.CHRISTIAN         |                                                                                       |                 |       |
|                                                                                                                                                                                                                                 |             | DATE              | 07/06/17              |                                                                                       |                 |       |

|                         |                          |                       |                                  |
|-------------------------|--------------------------|-----------------------|----------------------------------|
| REL S.O.                | RPM <b>1785</b>          | S.F. <b>1.15</b>      | ROTOR <b>418143052CE</b>         |
| FRAME <b>447TD</b>      | VOLTS <b>460</b>         | NEMA DESIGN <b>B</b>  | TEST S.O. <b>TYPICAL DATA</b>    |
| HP <b>200</b>           | AMPS <b>222</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>.0169</b> |
| PHASE/HERTZ <b>3/60</b> | AMB °C/INSUL <b>40/F</b> | E/S <b>---</b>        | OHMS (BETWEEN LINES)             |



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

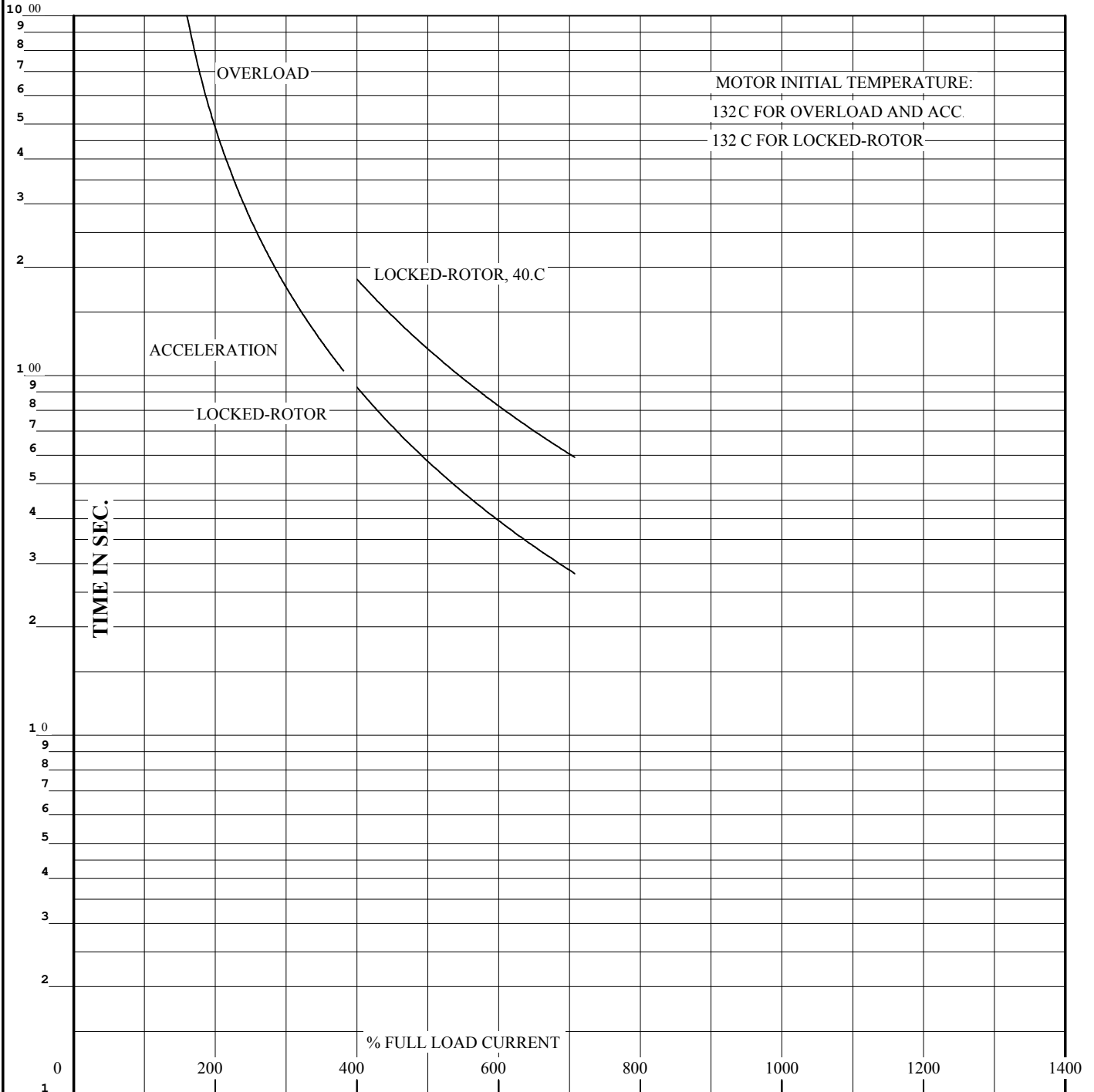
**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY T.G.KELATI  
CK. BY E.J.CHRISTIAN  
APP. BY E.J.CHRISTIAN  
DATE 07/06/17

**A-C MOTOR  
PERFORMANCE  
CURVES**

A44WG0690-R001  
ISSUE DATE 05/03/21

|                         |                          |                       |                                  |
|-------------------------|--------------------------|-----------------------|----------------------------------|
| REL. S.O.               | RPM <b>1785</b>          | S.F. <b>1.15</b>      | ROTOR <b>418143052CE</b>         |
| FRAME <b>447TD</b>      | VOLTS <b>460</b>         | NEMA DESIGN <b>B</b>  | TEST S.O. <b>TYPICAL DATA</b>    |
| HP <b>200</b>           | AMPS <b>222</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>.0169</b> |
| PHASE/HERTZ <b>3/60</b> | AMB °C/INSUL <b>40/F</b> | E/S <b>---</b>        | OHMS (BETWEEN LINES)             |



**THERMAL LIMIT CURVE**

REMARKS: XE MOTOR-CALCULATED DATA-NEMA NOM. EFF. 96.2 PCT.

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



|         |               |
|---------|---------------|
| DR. BY  | T.G.KELATI    |
| CK. BY  | E.J.CHRISTIAN |
| APP. BY | E.J.CHRISTIAN |
| DATE    | 07/06/17      |

**A-C MOTOR  
PERFORMANCE  
CURVES**

**A44WG0690-R001**  
ISSUE DATE 05/03/21 Page 7 of 10

## DUTY MASTER ALTERNATING CURRENT MOTORS

### SQUIRREL-CAGE INDUCTION

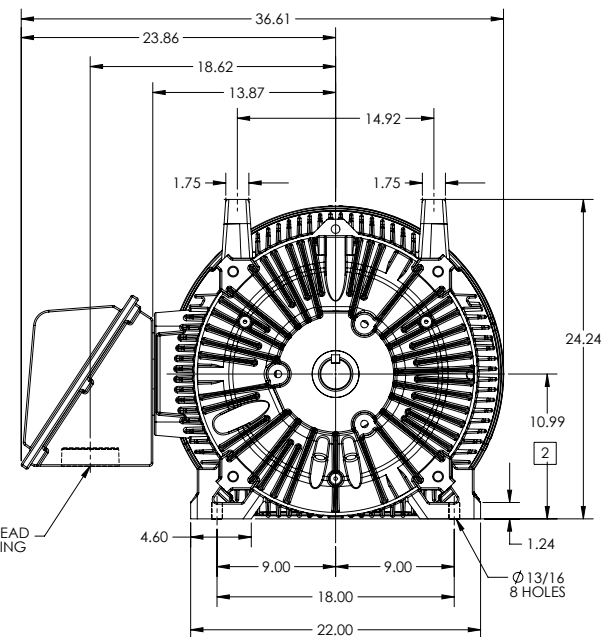
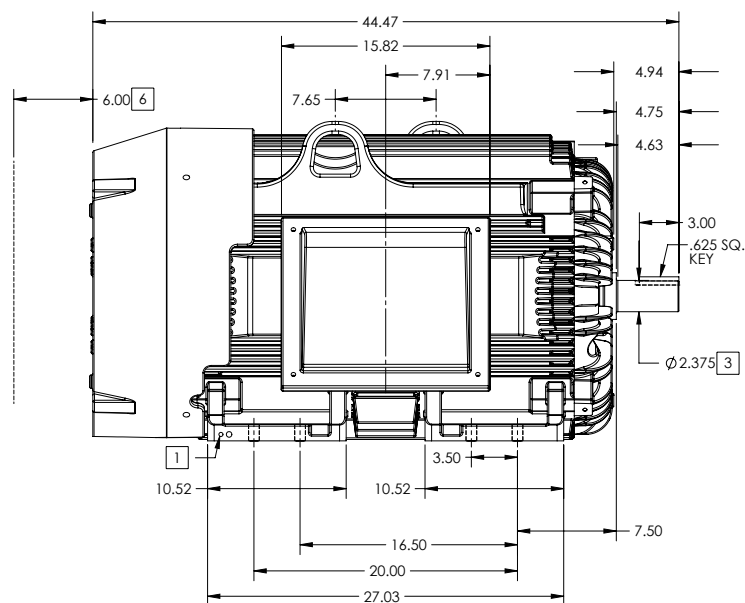
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445TS FRAME MOUNTING HOLES



- GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
- VARIABLES +.00, -.06
- VARIABLES +.000, -.001
- ON STANDARD MOTORS THIS IS CONDUIT SIZE. ON XT AND CORROSION PROOF MOTOR THIS IS PIPE TAP.
- MOTOR WEIGHTS MAY VARY BY 1.5% DEPENDING ON RATING.
- 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): 2480

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

9E8-5E7L19

| REV.                 | DESC.             | NEW DRAWING                  |
|----------------------|-------------------|------------------------------|
| REV: -               | VERSION: 00       | REVISED: 03/28/59 11/01/2017 |
| MODEL NO. 617435-836 | TDR: 000001049412 | REF:                         |
| BY: RAGEC            | Material:         |                              |

**BALDOR**

G447TS-445TS STD - FOOTED - S/C C1 C/B

617435-836

## DUTY MASTER ALTERNATING CURRENT MOTORS

### SQUIRREL-CAGE INDUCTION

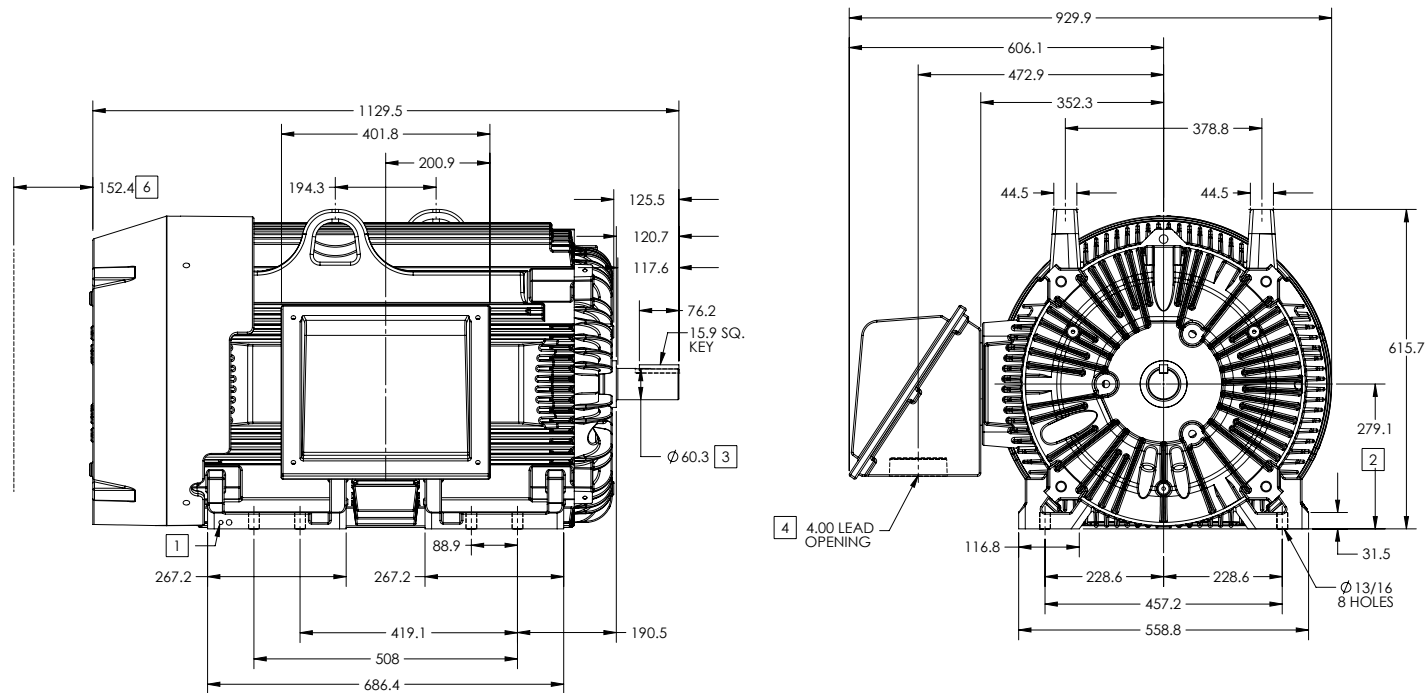
ENCLOSURE: TOTALLY ENCLOSED

FRAME G447TS ABOVE NEMA RATINGS

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 445TS 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 1.5% DEPENDING ON RATING.
6. OBSTRUCTION MUST NO 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): 1125

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

9E8-SEP119

| REV.                 | DESC              | NEW DRAWING                  |
|----------------------|-------------------|------------------------------|
| REV: -               | VERSION: 00       | REVISED: 03/28/59 11/01/2017 |
| MODEL NO. 617435-836 | TDR: 000001048412 | REF:                         |
| BY: RAGEC            | Material:         |                              |

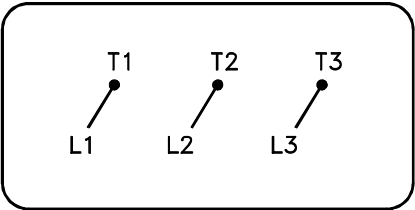
**BALDOR**

G447TS-445TS STD - FOOTED - S/C C1 C/B

617435-836

416820-036

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

416820-036

|                                      |             |                                |
|--------------------------------------|-------------|--------------------------------|
| REV. DESC: LOADED TO BUS, C/R 335225 |             |                                |
| REV. LTR: -                          | VERSION: 00 | TDR: 000000538207              |
| FILE: \MGA\00000\682                 |             | REVISED: 11: 54: 06 04/30/2010 |
| MTL: -                               |             | BY: RAGRA                      |

**BALDOR**

CONN DIAG - STANDARD 3 LEAD  
SH 1 of 1