

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECR4407TR-4

200HP, 1785RPM, 3PH, 60HZ, 447T, A44128M, TEFC

Class - None

Division - Not Applicable

**Specifications**

|                               |                         |
|-------------------------------|-------------------------|
| Enclosure                     | TEFC                    |
| Frame                         | 447T                    |
| Frame Material                | Iron                    |
| Frequency                     | 60.00 Hz                |
| Haz Area Class and Group      | None                    |
| Haz Area Division             | Not Applicable          |
| 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              | CSA EEV                 |
| Ambient Temperature           | 40 °C                   |
| Auxiliary Box                 | NO AUXILLARY BOX        |
| Base Indicator                | Rigid                   |
| Bearing Grease Type           | Polyrex EM (-20F +300F) |
| Current @ Voltage             | 232.000 A @ 460.0 V     |
| Design Code                   | A                       |
| Drip Cover                    | No Drip Cover           |
| Duty Rating                   | CONT                    |
| Efficiency @ 100% Load        | 96.2 %                  |
| Feedback Device               | NO FEEDBACK             |
| Heater Indicator              | No Heater               |
| High Voltage Full Load Amps   | 232.0 a                 |
| Insulation Class              | F                       |
| Inverter Code                 | Inverter Ready          |
| KVA Code                      | H                       |
| Lifting Lugs                  | No Lifting Lugs         |
| Motor Lead Quantity/Wire Size | 6 @ 1/0 AWG             |
| Motor Standards               | NEMA                    |
| Motor Type                    | A44128M                 |
| Mounting Arrangement          | F1                      |

**Part Detail**

|              |                      |
|--------------|----------------------|
| Revision     | H                    |
| Type         | AC                   |
| Mech. spec.  |                      |
| Base         |                      |
| Status       | PRD/A                |
| Elec. spec.  | A44WG1490            |
| Layout       | 617427-003           |
| Eff. date    | 11-01-2021           |
| CD Diagram   | 416820-036           |
| Poles        | 04                   |
| Leads        | 3#1/0 (02 per group) |
| Proprietary  | False                |
| Created date | 08-22-2012           |

|                                 |                           |
|---------------------------------|---------------------------|
| <b>Number of Poles</b>          | <b>4</b>                  |
| <b>Overall Length</b>           | <b>53.24 IN</b>           |
| <b>Power Factor</b>             | <b>84</b>                 |
| <b>Pulley End Bearing Type</b>  | <b>Ball</b>               |
| <b>Pulley Face Code</b>         | <b>Standard</b>           |
| <b>Service Factor</b>           | <b>1.15</b>               |
| <b>Shaft Diameter</b>           | <b>3.375 IN</b>           |
| <b>Shaft Ground Indicator</b>   | <b>No Shaft Grounding</b> |
| <b>Shaft Rotation</b>           | <b>Reversible</b>         |
| <b>Shaft Slinger Indicator</b>  | <b>Shaft Slinger</b>      |
| <b>Speed</b>                    | <b>1785 rpm</b>           |
| <b>Speed Code</b>               | <b>Single Speed</b>       |
| <b>Starting Method</b>          | <b>Direct on line</b>     |
| <b>Thermal Device - Bearing</b> | <b>None</b>               |
| <b>Thermal Device - Winding</b> | <b>None</b>               |

**Nameplate**

| 000613007EV    |             |      |      |                         |    |      |          |                       |        |      |      |  |
|----------------|-------------|------|------|-------------------------|----|------|----------|-----------------------|--------|------|------|--|
| CAT NO         |             |      |      | SPEC NO.                |    |      | P44G4002 |                       |        |      |      |  |
| HP             | 200         | AMPS | 232  |                         |    |      | VOLTS    | 460                   | DESIGN | A    |      |  |
| FRAME          | 447T        | RPM  | 1785 | HZ                      | 60 |      | C AMB    | 40                    | SF     | 1.15 |      |  |
| D.E. BRG.      | 110RU02M30X |      |      | PH                      | 3  | DUTY | CONT     | INSUL.CLASS           |        |      | F    |  |
| O.D.E. BRG.    | 90BC03J30X  |      |      | TYPE                    | P  |      | ENCL     | TEFC                  | CODE   | H    |      |  |
| D.E.BRG.DATA   | 222         |      |      | POWER FACTOR            |    |      | 84       | NEMA NOM EFFICIENCY   |        |      | 96.2 |  |
| O.D.E.BRG.DATA | 6318        |      |      | MAX CORR KVAR           |    |      | 49.0     | GUARANTEED EFFICIENCY |        |      | 95.8 |  |
| 3/4 LOAD EFF.  | 96.2        |      |      | NEMA NOM/CSA QUOTED EFF |    |      |          |                       |        |      |      |  |
| SER.NO.        |             |      |      | MOTOR WEIGHT            |    |      |          |                       |        |      |      |  |

| 000901002AAA          |  |
|-----------------------|--|
| GREASE: MOBIL SHC-220 |  |
| DESIGN C CHAR         |  |
|                       |  |
|                       |  |
|                       |  |

|                                                                                                                                               |             |                                                                                     |                                                                     |                                            |                 |       |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------------------------------------|-----------------|-------|
| REL.<br>S.O.                                                                                                                                  | FRAME       | HP                                                                                  | TYPE                                                                | PHASE/<br>HERTZ                            | RPM             | VOLTS |
|                                                                                                                                               | 447T        | 200                                                                                 | P                                                                   | 3/60                                       | 1785            | 460   |
| AMPS                                                                                                                                          | DUTY        | AMB °C/<br>INSUL.                                                                   | S.F.                                                                | NEMA<br>DESIGN                             | CODE<br>LETTER  | ENCL. |
| 232                                                                                                                                           | CONT        | 40/F                                                                                | 1.15                                                                | A                                          | H               | TEFC  |
| E/S                                                                                                                                           | ROTOR       | TEST<br>S.O.                                                                        | TEST<br>DATE                                                        | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES) |                 |       |
| 833211                                                                                                                                        | 418143052GE | ---                                                                                 | ---                                                                 | .0162                                      |                 |       |
| PERFORMANCE                                                                                                                                   |             |                                                                                     |                                                                     |                                            |                 |       |
| LOAD                                                                                                                                          | HP          | AMPERES                                                                             | RPM                                                                 | %<br>POWER FACTOR                          | %<br>EFFICIENCY |       |
| NO LOAD                                                                                                                                       | 0           | 73.1                                                                                | 1800                                                                | 3.50                                       | 0               |       |
| 1/4                                                                                                                                           | 50.0        | 104                                                                                 | 1797                                                                | 47.7                                       | 94.1            |       |
| 2/4                                                                                                                                           | 100         | 139                                                                                 | 1794                                                                | 70.3                                       | 96.1            |       |
| 3/4                                                                                                                                           | 150         | 183                                                                                 | 1790                                                                | 79.8                                       | 96.3            |       |
| 4/4                                                                                                                                           | 200         | 232                                                                                 | 1787                                                                | 84.0                                       | 96.2            |       |
| 5/4                                                                                                                                           | 250         | 285                                                                                 | 1783                                                                | 85.7                                       | 95.8            |       |
|                                                                                                                                               |             |                                                                                     |                                                                     |                                            |                 |       |
| SPEED TORQUE                                                                                                                                  |             |                                                                                     |                                                                     |                                            |                 |       |
|                                                                                                                                               |             | RPM                                                                                 | TORQUE<br>% FULL LOAD                                               | TORQUE<br>LB.-FT.                          | AMPERES         |       |
| LOCKED ROTOR                                                                                                                                  |             | 0                                                                                   | 266                                                                 | 1567                                       | 1668            |       |
| PULL UP                                                                                                                                       |             | 1440                                                                                | 188                                                                 | 1103                                       | 1198            |       |
| BREAKDOWN                                                                                                                                     |             | 1732                                                                                | 286                                                                 | 1683                                       | 839             |       |
| FULL LOAD                                                                                                                                     |             | 1787                                                                                | 100                                                                 | 588                                        | 232             |       |
| AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE<br>AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE |             |                                                                                     |                                                                     |                                            |                 |       |
| REMARKS: TYPICAL DATA                                                                                                                         |             |                                                                                     |                                                                     |                                            |                 |       |
|                                                            |             | DR. BY W. L. SMITH<br>CK. BY J. J. HARRISON<br>APP. BY W. L. SMITH<br>DATE 06/16/10 | A-C MOTOR<br>PERFORMANCE A44WG1490-R001<br>DATA ISSUE DATE 12/18/10 |                                            |                 |       |

FRAME 447T

RPM 1785 VOLTS 460

NEMA DESIGN A

TEST S.O. TYPICAL DATA

HP 200

AMPS 232

CODE LETTER H

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

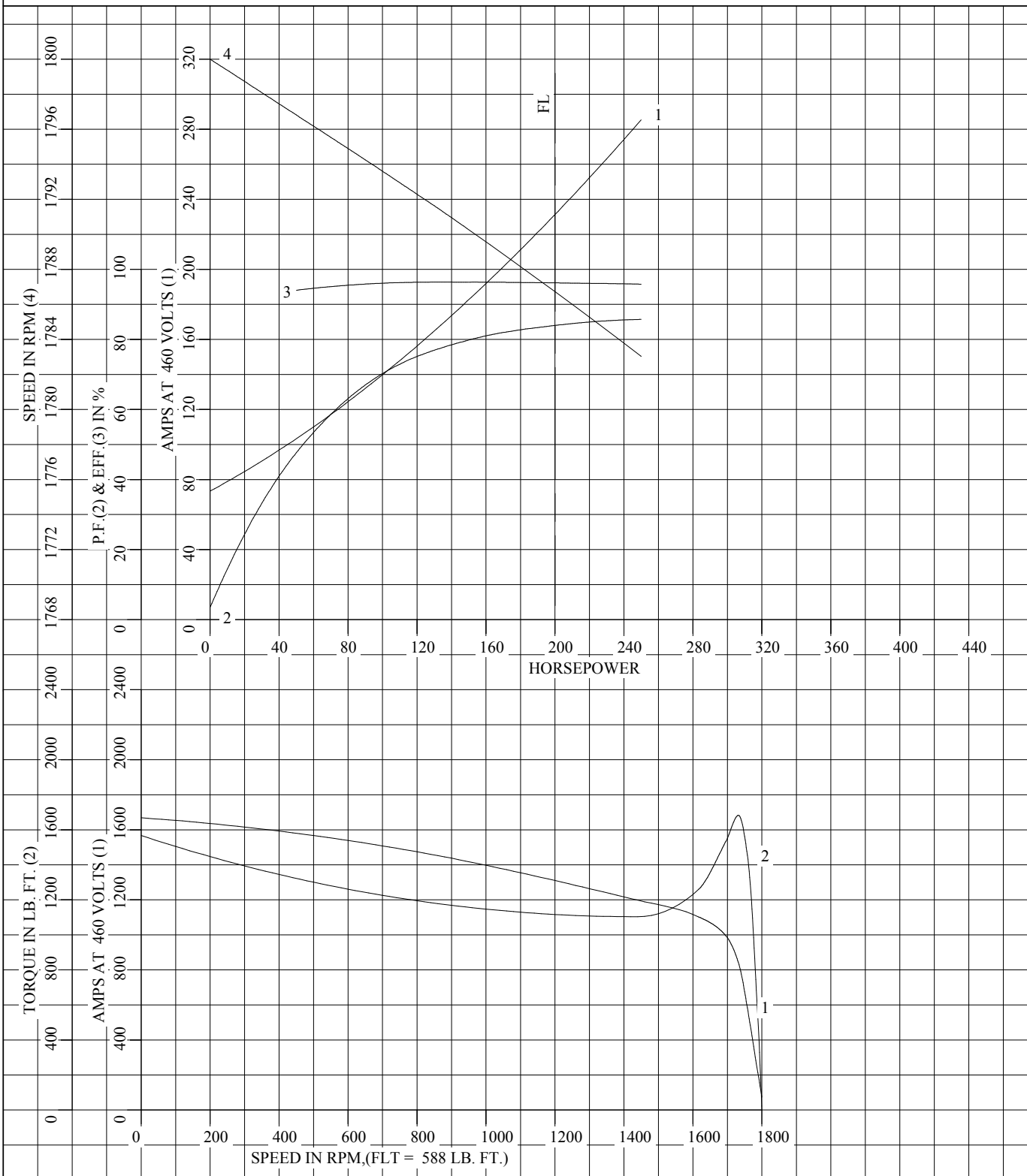
STATOR RES. @ 25 °C .0162

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 833211

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 W. L. SMITH  
CK. BY J.J. HARRISON  
APP. BY W. L. SMITH  
DATE 06/16/10

**A-C MOTOR  
PERFORMANCE CURVES** A44WG1490-R001  
ISSUE DATE 12/18/10

REL. S.O.

RPM 1785

S.F. 1.15

ROTOR 418143052GE

FRAME 447T

VOLTS 460

NEMA DESIGN A

TEST S.O. TYPICAL DATA

HP 200

AMPS 232

CODE LETTER H

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

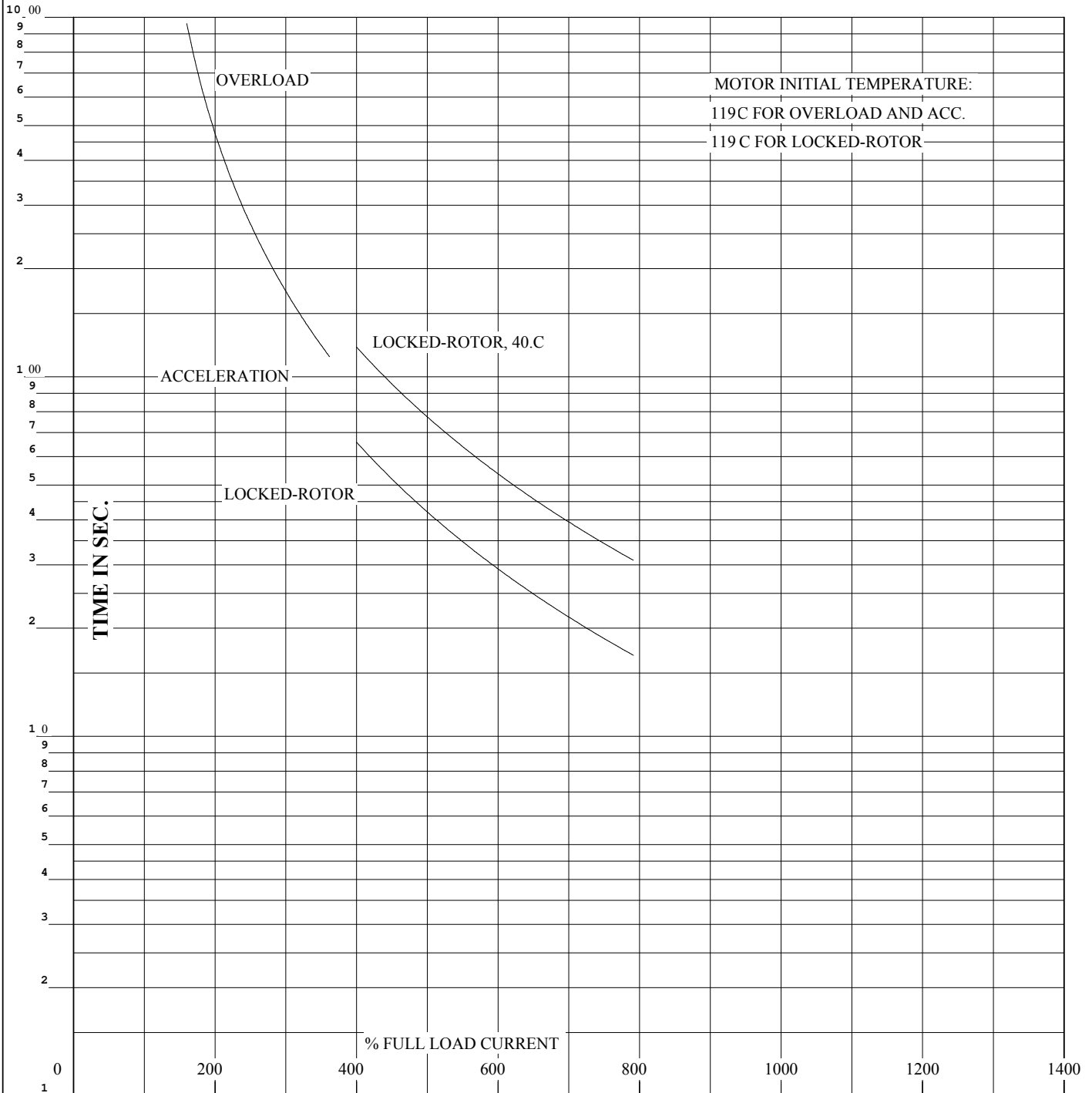
STATOR RES. @ 25 °C .0162

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 833211

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

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

**BALDOR**

DR. BY W. L. SMITH  
CK. BY J.J.HARRISON  
APP. BY W. L. SMITH  
DATE 06/16/10

**A-C MOTOR  
PERFORMANCE A44WG1490-R001  
CURVES** ISSUE DATE 12/18/10

## SQUIRREL-CAGE INDUCTION

INCLUDES 447T FRAME MOUNTING HOLES



# DUTY MASTER ALTERNATING CURRENT MOTORS

## SQUIRREL-CAGE INDUCTION

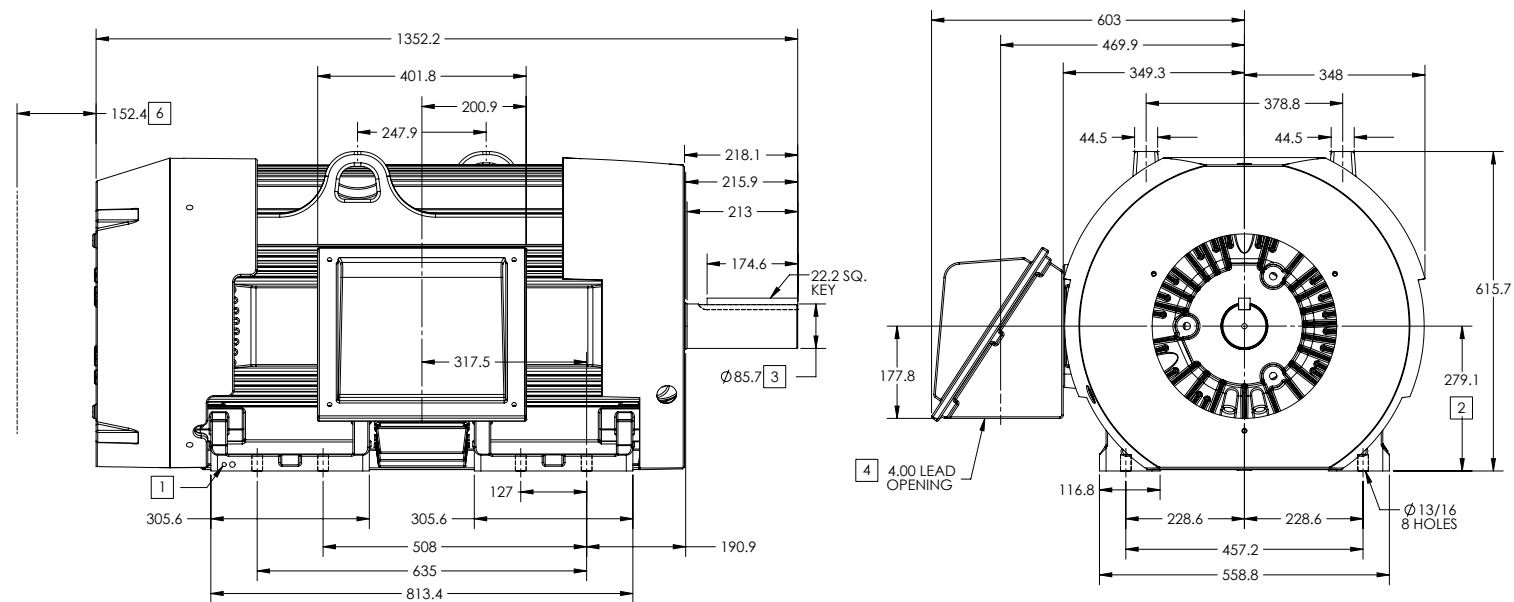
ENCLOSURE: TOTALLY ENCLOSED

FRAME 449T ABOVE NEMA RATINGS (1800 RPM MAX)

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 447T FRAME MOUNTING HOLES



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 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): 1400**

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

500P-LCP-119

|                        |             |                              |                   |
|------------------------|-------------|------------------------------|-------------------|
| REV. DESC. NEW DRAWING |             |                              |                   |
| REV. B                 | VERSION: 02 | REVISED: 11/32/36 10/23/2017 | TDR: 000001048162 |
| MODEL NO. 617427-003   |             |                              |                   |
| BY: RAGRA              |             |                              |                   |

**BALDOR**

G449T/447T STD - FOOTED - SIDE/CENTER C/B

617427-003

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