

# ABB BALDOR RELIANCE III

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## Customer information packet

### ECP4315T-4

40HP, 890RPM, 3PH, 60HZ, 365T, A36062M, TEFC, F

Class - CLI GP A,B,C,D

Division - Division II

**Specifications**

|                               |                         |
|-------------------------------|-------------------------|
| Enclosure                     | TEFC                    |
| Frame                         | 365T                    |
| 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            | 40.000 HP @ 60 HZ       |
| Phase                         | 3                       |
| Synchronous Speed @ Frequency | 900 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   | 6-60                    |
| Current @ Voltage             | 52.000 A @ 460.0 V      |
| Design Code                   | B                       |
| Drip Cover                    | No Drip Cover           |
| Duty Rating                   | CONT                    |
| Efficiency @ 100% Load        | 93.0 %                  |
| Feedback Device               | NO FEEDBACK             |
| Haz Area Temp Code            | T3C                     |
| Heater Indicator              | No Heater               |
| High Voltage Full Load Amps   | 52.0 a                  |
| Insulation Class              | F                       |
| Inverter Code                 | Inverter Ready          |
| KVA Code                      | G                       |
| Lifting Lugs                  | Standard Lifting Lugs   |
| Motor Lead Quantity/Wire Size | 3 @ 6 AWG               |
| Motor Standards               | NEMA                    |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | P          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | A36WG1042  |
| Layout       | 617428-034 |
| Eff. date    | 10-24-2024 |
| CD Diagram   | 416820-036 |
| Poles        | 08         |
| Leads        | 3#6        |
| Proprietary  | False      |
| Created date | 12-13-2013 |

|                                 |                    |
|---------------------------------|--------------------|
| <b>Motor Type</b>               | A36062M            |
| <b>Mounting Arrangement</b>     | F1                 |
| <b>Number of Poles</b>          | 8                  |
| <b>Overall Length</b>           | 33.44 IN           |
| <b>Power Factor</b>             | 77                 |
| <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>           | 2.375 IN           |
| <b>Shaft Rotation</b>           | Reversible         |
| <b>Shaft Slinger Indicator</b>  | Shaft Slinger      |
| <b>Speed</b>                    | 890 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**

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

**NP3238**

|                    |            |                 |      |              |      |               |                       |                     |      |      |             |   |
|--------------------|------------|-----------------|------|--------------|------|---------------|-----------------------|---------------------|------|------|-------------|---|
| CAT NO             | ECP4315T-4 |                 |      | SPEC NO.     |      | A36-5084-1042 |                       |                     |      |      |             |   |
| HP                 | 40         | AMPS            | 52   | VOLTS        |      | 460           |                       | DESIGN              | B    |      |             |   |
| FRAME              | 365T       | RPM             | 890  | HZ           | 60   | AMB           | 40                    | SF                  | 1.15 |      |             |   |
| D.E. BRG.DATA      | 6313       | O.D.E. BRG.DATA |      |              | 6313 |               | PH                    | 3                   | DUTY | CONT | INSUL.CLASS | F |
| D.E. BRG.          | 65BC03J30X |                 |      | TYPE         | P    | ENCL          | TEFC                  | CODE                | G    |      |             |   |
| O.D.E. BRG.        | 65BC03J30X |                 |      | POWER FACTOR |      |               | 77                    | NEMA NOM EFFICIENCY |      |      | 93          |   |
| 3/4 LOAD EFF.      | 93.4       | MAX CORR KVAR   |      |              | 15.0 |               | GUARANTEED EFFICIENCY |                     |      | 91.7 |             |   |
| TEMP CODE          | T3C        | TEMP =          |      | 160          |      |               |                       |                     |      |      |             |   |
| CHP HZ             | 60-90      | CT HZ           | 6-60 | VT HZ        |      | 0-60          |                       |                     |      |      |             |   |
| INVERTER-TEMP-CODE | T3A        |                 |      |              |      |               |                       |                     |      |      |             |   |
| SER.NO.            |            |                 |      | MOTOR WEIGHT |      |               |                       |                     |      |      |             |   |

**Parts List**

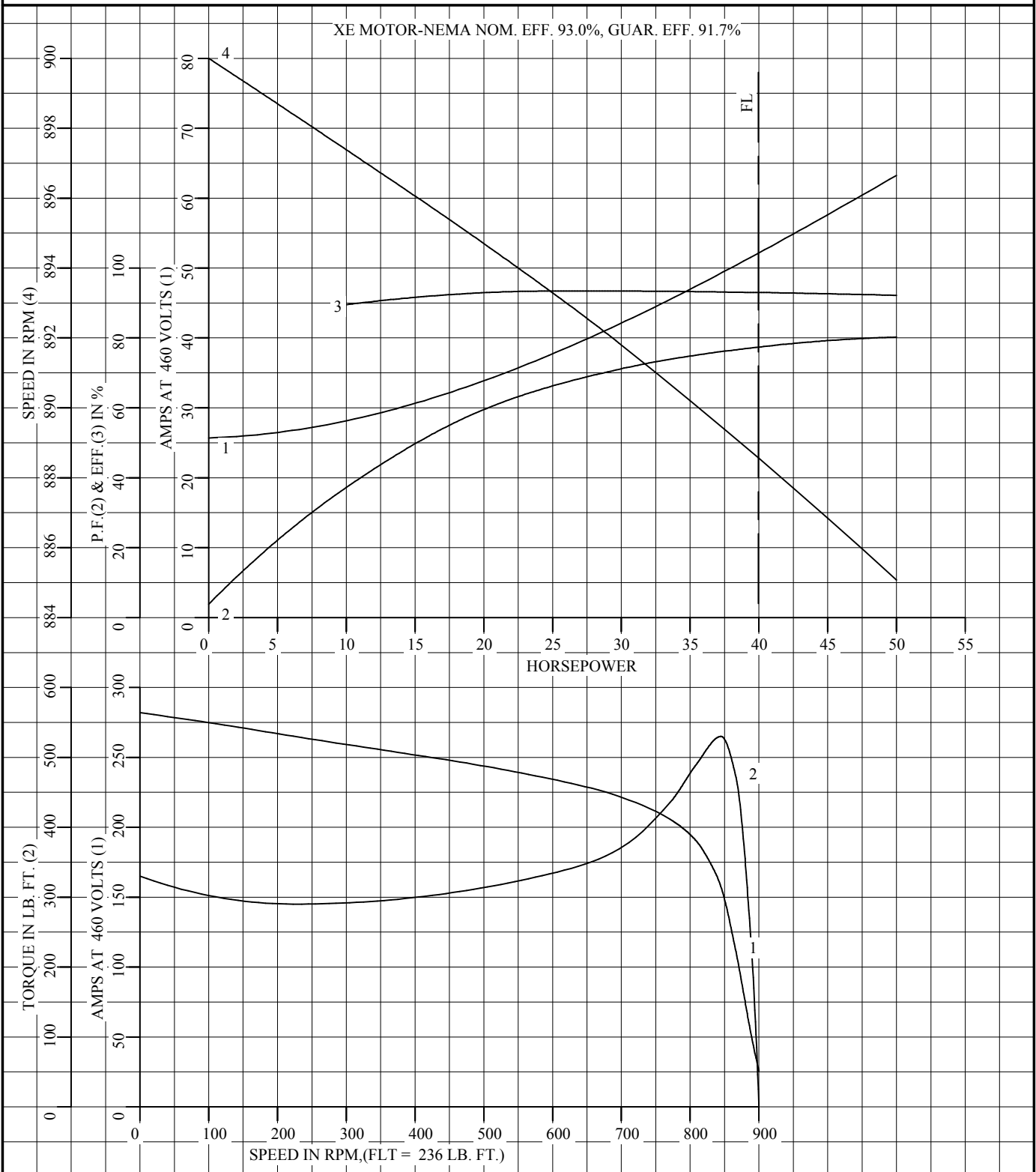
| Part number | Description                             | Quantity |
|-------------|-----------------------------------------|----------|
| SA273559    | SA A36-5084-1042                        | 1.000 ea |
| RA260152    | RA A36-5084-1042                        | 1.000 ea |
| 421948051   | LABEL, MYLAR                            | 1.000 ea |
| NP2496L     | MOTOR LUBE NAMEPLATE                    | 1.000 ea |
| 000613006PU | N/P (RELEASE QTY 10,000) UL CSA LABEL   | 1.000 ea |
| 000692000VD | LABEL WARNING                           | 1.000 ea |
| NP3238      | SS CP XEX SEVERE DUTY MAIN NP,CURUS EEV | 1.000 ea |
| 085922073B  | BRKT 360 085922072WCC KB                | 1.000 ea |
| 415072001B  | CLAMP                                   | 1.000 ea |
| 078559034A  | +F/C A 078559001A - 360                 | 1.000 ea |
| 034180012DA | KEY 1X4X1/4X1-1/2 L                     | 1.000 ea |
| 412118006A  | DRAIN                                   | 1.000 ea |
| 078557001F  | FAN KB 110/50 (60) 360                  | 1.000 ea |
| 004824015A  | GREASE POLYREX EM                       | 0.540 lb |
| 032018012DK | HHCS 1/2-13X1-1/2 PLTD. 032018012DR     | 4.000 ea |
| 032018008AK | HHCS 1/4-20X1 PLATED                    | 4.000 ea |
| 032018024CK | HHCS 3/8-16X3 PLTD.                     | 3.000 ea |
| 415096002A  | CPLG 1/8 HEX TYPE                       | 1.000 ea |
| 415045002E  | SLGR                                    | 1.000 ea |
| 410700004F  | WSHR                                    | 1.000 ea |
| 034530052AB | P/NIP 1/8X6-1/2 Zinc                    | 1.000 ea |
| 085922073B  | BRKT 360 085922072WCC KB                | 1.000 ea |
| 032018012DK | HHCS 1/2-13X1-1/2 PLTD. 032018012DR     | 4.000 ea |
| 032018024CK | HHCS 3/8-16X3 PLTD.                     | 3.000 ea |
| 415045002E  | SLGR                                    | 1.000 ea |
| 412118006A  | DRAIN                                   | 1.000 ea |
| 034530020AB | P/NIP 1/8X2-1/2 PLTD                    | 1.000 ea |
| 415096002A  | CPLG 1/8 HEX TYPE                       | 1.000 ea |
| 076708000BB | CONDUIT BOX-360                         | 1.000 ea |
| 065776000C  | GASKET,MAIN CBOX, 320-400               | 1.000 ea |
| 076709000A  | C/B Cover - 360                         | 1.000 ea |

|             |                                        |          |
|-------------|----------------------------------------|----------|
| 067053000B  | GASK 320-400                           | 1.000 ea |
| 418150003A  | GREASE FITTING CAP                     | 1.000 ea |
| 032018010CK | HHCS 3/8-16X1-1/4 PLTD. 032018010CR    | 4.000 ea |
| 035000001A  | ALFTG 1/8" 1610-BL                     | 1.000 ea |
| 415000115H  | T/LUG #2AWG-4/0AWG                     | 1.000 ea |
| 033512008LB | HHTTS 1/4-20X1 PLATED                  | 4.000 ea |
| 406099000A  | PLUG - FAN COVER 320-440               | 1.000 ea |
| 034000014AB | WSH ID.406 OD.812 TH.065               | 4.000 ea |
| 035000001A  | ALFTG 1/8" 1610-BL                     | 1.000 ea |
| 418150003A  | GREASE FITTING CAP                     | 1.000 ea |
| MG1025N19   | WILKO 778.50 BLUE GREEN - 55 GAL DRUMS | 0.250 ga |
| 033775004EA | DRSCR #6-1/4 304 S.S.                  | 4.000 ea |
| 034180034HA | KEY 5/8X5/8X4-1/4 L                    | 1.000 ea |
| HW1000A32   | 5/16 FL WASHER WIDE,ID=.344,OD=1.125   | 3.000 ea |
| 032509020C  | CARRIAGE BOLT - 360                    | 3.000 ea |
| LB1449      | DIV-2/NEC WARNING LABEL                | 1.000 ea |
| 034530032BB | P/NIP 1/4X4" SCHED 40                  | 1.000 ea |
| 034631002AB | BUSH 1/4 TO 1/8 PLTD.                  | 1.000 ea |
| 035000001G  | GREASE RELIEF FITTING, ALEMITE 317400  | 1.000 ea |
| 034631002AB | BUSH 1/4 TO 1/8 PLTD.                  | 1.000 ea |
| 034530020BB | P/NIP 1/4X2-1/2 PLATED                 | 1.000 ea |
| 035000001G  | GREASE RELIEF FITTING, ALEMITE 317400  | 1.000 ea |
| 14PA1000    | PACKAGING 314 GROUP COMBINED PRINT     | 1.000 ea |
| 032018005DL | 1/2-13 X 5/8 SILICON BRONZE HHCS       | 1.000 ea |

|                                                                                                                                                                                                                               |             |                                                                                    |                       |                                                                     |                 |       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------------------------------------------------------------------------------|-----------------------|---------------------------------------------------------------------|-----------------|-------|
| REL.<br>S.O.                                                                                                                                                                                                                  | FRAME       | HP                                                                                 | TYPE                  | PHASE/<br>HERTZ                                                     | RPM             | VOLTS |
|                                                                                                                                                                                                                               | 365T        | 40                                                                                 | P                     | 3/60                                                                | 890             | 460   |
| AMPS                                                                                                                                                                                                                          | DUTY        | AMB °C/<br>INSUL.                                                                  | S.F.                  | NEMA<br>DESIGN                                                      | CODE<br>LETTER  | ENCL. |
| 52                                                                                                                                                                                                                            | 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)                          |                 |       |
| 492107                                                                                                                                                                                                                        | 418141073EE | ---                                                                                | ---                   | .194                                                                |                 |       |
| PERFORMANCE                                                                                                                                                                                                                   |             |                                                                                    |                       |                                                                     |                 |       |
| LOAD                                                                                                                                                                                                                          | HP          | AMPERES                                                                            | RPM                   | %<br>POWER FACTOR                                                   | %<br>EFFICIENCY |       |
| NO LOAD                                                                                                                                                                                                                       | 0           | 25.7                                                                               | 900                   | 3.85                                                                | 0               |       |
| 1/4                                                                                                                                                                                                                           | 10.0        | 28.1                                                                               | 897                   | 37.3                                                                | 89.5            |       |
| 2/4                                                                                                                                                                                                                           | 20.0        | 33.9                                                                               | 895                   | 59.5                                                                | 93.0            |       |
| 3/4                                                                                                                                                                                                                           | 30.0        | 42.2                                                                               | 892                   | 71.2                                                                | 93.4            |       |
| 4/4                                                                                                                                                                                                                           | 40.0        | 52.0                                                                               | 889                   | 77.4                                                                | 93.0            |       |
| 5/4                                                                                                                                                                                                                           | 50.0        | 63.3                                                                               | 885                   | 80.2                                                                | 92.2            |       |
| SPEED TORQUE                                                                                                                                                                                                                  |             |                                                                                    |                       |                                                                     |                 |       |
|                                                                                                                                                                                                                               |             | RPM                                                                                | TORQUE<br>% FULL LOAD | TORQUE<br>LB.-FT.                                                   | AMPERES         |       |
| LOCKED ROTOR                                                                                                                                                                                                                  |             | 0                                                                                  | 140                   | 330                                                                 | 282             |       |
| PULL UP                                                                                                                                                                                                                       |             | 225                                                                                | 123                   | 290                                                                 | 265             |       |
| BREAKDOWN                                                                                                                                                                                                                     |             | 845                                                                                | 224                   | 530                                                                 | 157             |       |
| FULL LOAD                                                                                                                                                                                                                     |             | 889                                                                                | 100                   | 236                                                                 | 52.0            |       |
| 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-NEMA NOM. EFF. 93.0%, GUAR. EFF. 91.7% |             |                                                                                    |                       |                                                                     |                 |       |
|                                                                                                                                            |             | DR. BY B.R. PENDLEY<br>CK. BY R.K. BRIDGES<br>APP. BY W. L. SMITH<br>DATE 08/06/13 |                       | A-C MOTOR<br>PERFORMANCE DATA A36WG1042-R001<br>ISSUE DATE 08/31/16 |                 |       |



|                         |                          |                       |                                 |
|-------------------------|--------------------------|-----------------------|---------------------------------|
| REL S.O.                | RPM <b>890</b>           | S.F. <b>1.15</b>      | ROTOR <b>418141073EE</b>        |
| FRAME <b>365T</b>       | VOLTS <b>460</b>         | NEMA DESIGN <b>B</b>  | TEST S.O. <b>TYPICAL DATA</b>   |
| HP <b>40</b>            | AMPS <b>52</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>.194</b> |
| PHASE/HERTZ <b>3/60</b> | AMB °C/INSUL <b>40/F</b> | E/S <b>492107</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 B.R. PENDLEY  
CK. BY R.K. BRIDGES  
APP. BY W. L. SMITH  
DATE 08/06/13

**A-C MOTOR  
PERFORMANCE  
CURVES**

**A36WG1042-R001**

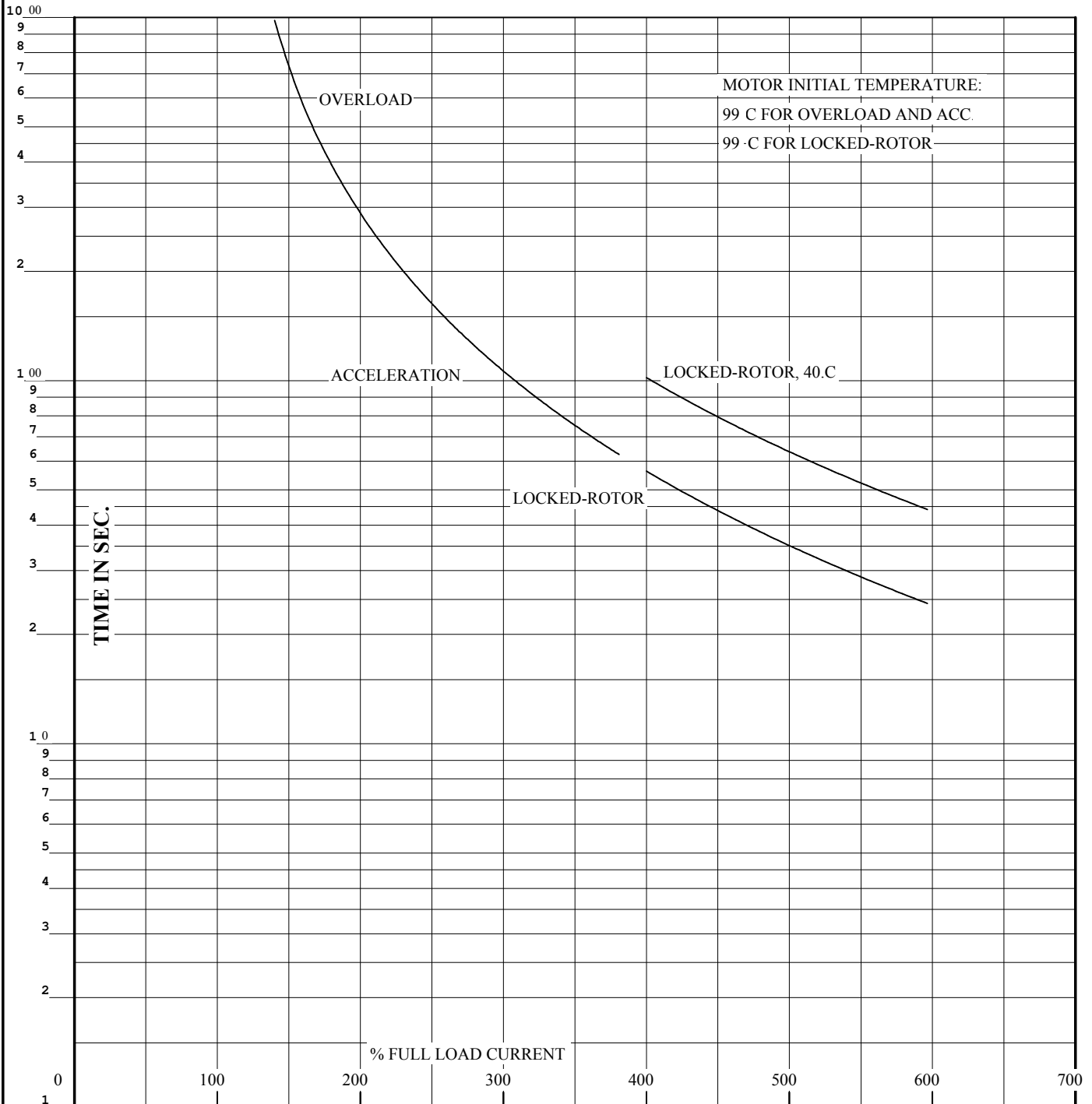
ISSUE DATE 08/31/16

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REL. S.O.  
FRAME 365T  
HP 40  
TYPE P  
PHASE/HERTZ 3/60

RPM 890  
VOLTS 460  
AMPS 52  
DUTY CONT  
AMB °C/INSUL 40/F

S.F. 1.15  
NEMA DESIGN B  
CODE LETTER G  
ENCLOSURE TEFC  
E/S 492107

ROTOR 418141073EE  
TEST S.O. TYPICAL DATA  
TEST DATE ---  
STATOR RES. @ 25 °C .194  
OHMS (BETWEEN LINES)


THERMAL LIMIT CURVE

REMARKS: XE MOTOR-NEMA NOM. EFF. 93.0%, GUAR. EFF. 91.7%

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

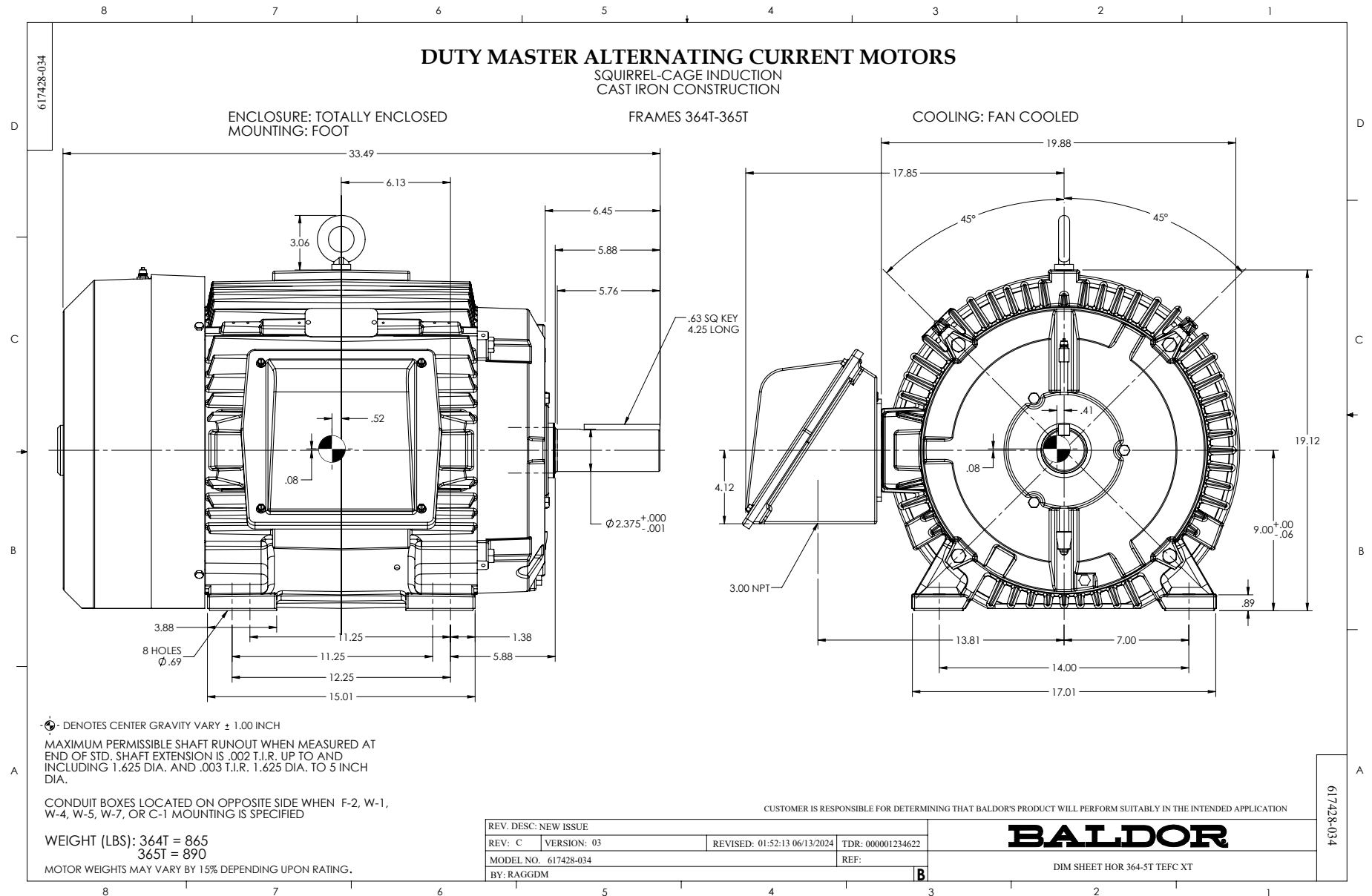
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APP. BY W.L. SMITH  
DATE 08/06/13

**A-C MOTOR  
PERFORMANCE  
CURVES**

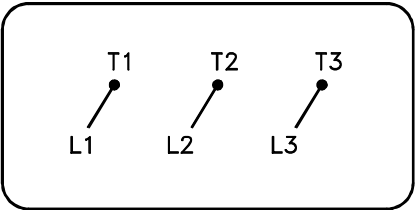
A36WG1042-R001

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416820-036

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 3 LEAD                      CONNECTED



(N.P. 1575-BA)

|                                      |             |                                |
|--------------------------------------|-------------|--------------------------------|
| 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

416820-036