

# ABB BALDOR RELIANCE III

---

## 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**

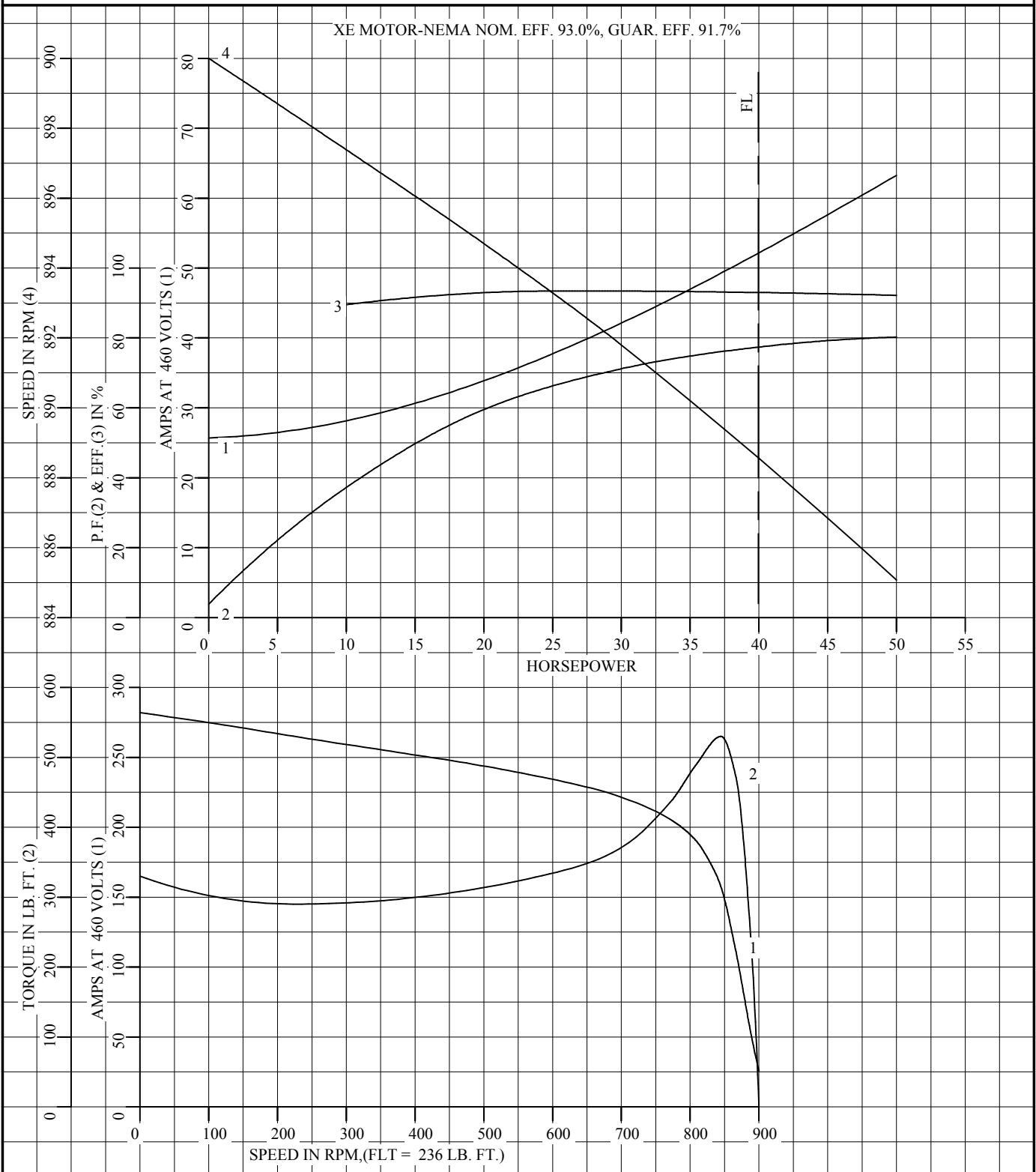
|                  |  |
|------------------|--|
| NP2496L          |  |
| MOBIL POLYREX EM |  |

**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 |      |                       |        |                     |      |             |    |

|                                                                                                                                                                                                                                    |             |                   |                                              |                                            |                 |       |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|----------------------------------------------|--------------------------------------------|-----------------|-------|--|--|
| 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            |       |  |  |
| <p>AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE</p> <p>REMARKS: TYPICAL DATA<br/>XE MOTOR-NEMA NOM. EFF. 93.0%, GUAR. EFF. 91.7%</p> |             |                   |                                              |                                            |                 |       |  |  |
|                                                                                                                                                 |             | DR. BY            | B.R. PENDLEY                                 | <b>A-C MOTOR<br/>PERFORMANCE DATA</b>      |                 |       |  |  |
|                                                                                                                                                                                                                                    |             | CK. BY            | R.K. BRIDGES                                 |                                            |                 |       |  |  |
|                                                                                                                                                                                                                                    |             | APP. BY           | W. L. SMITH                                  |                                            |                 |       |  |  |
|                                                                                                                                                                                                                                    |             | DATE              | 08/06/13                                     |                                            |                 |       |  |  |
|                                                                                                                                                                                                                                    |             |                   | <b>A36WG1042-R001</b><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**

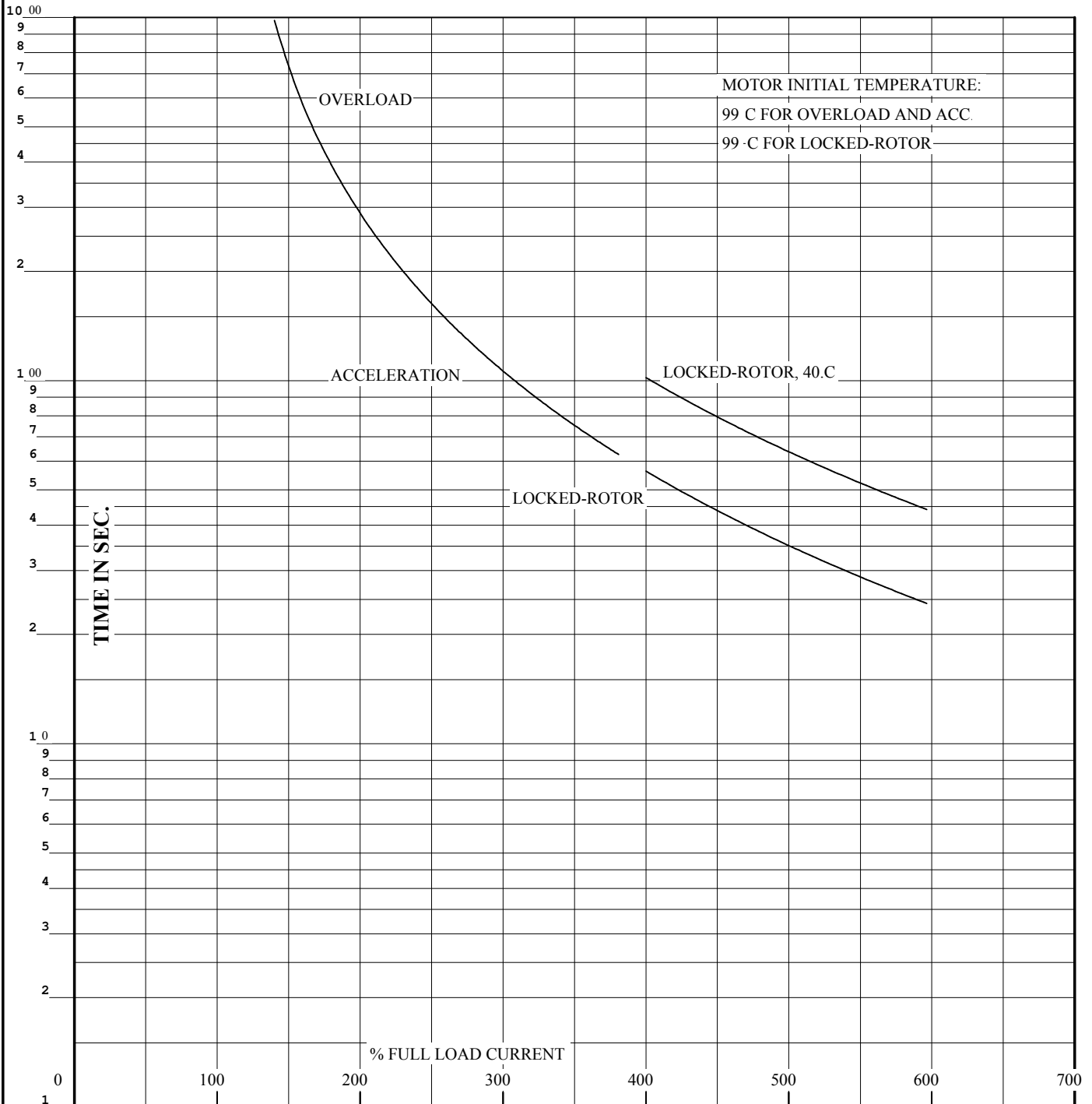
ISSUE DATE 08/31/16

Page 7 of 10

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

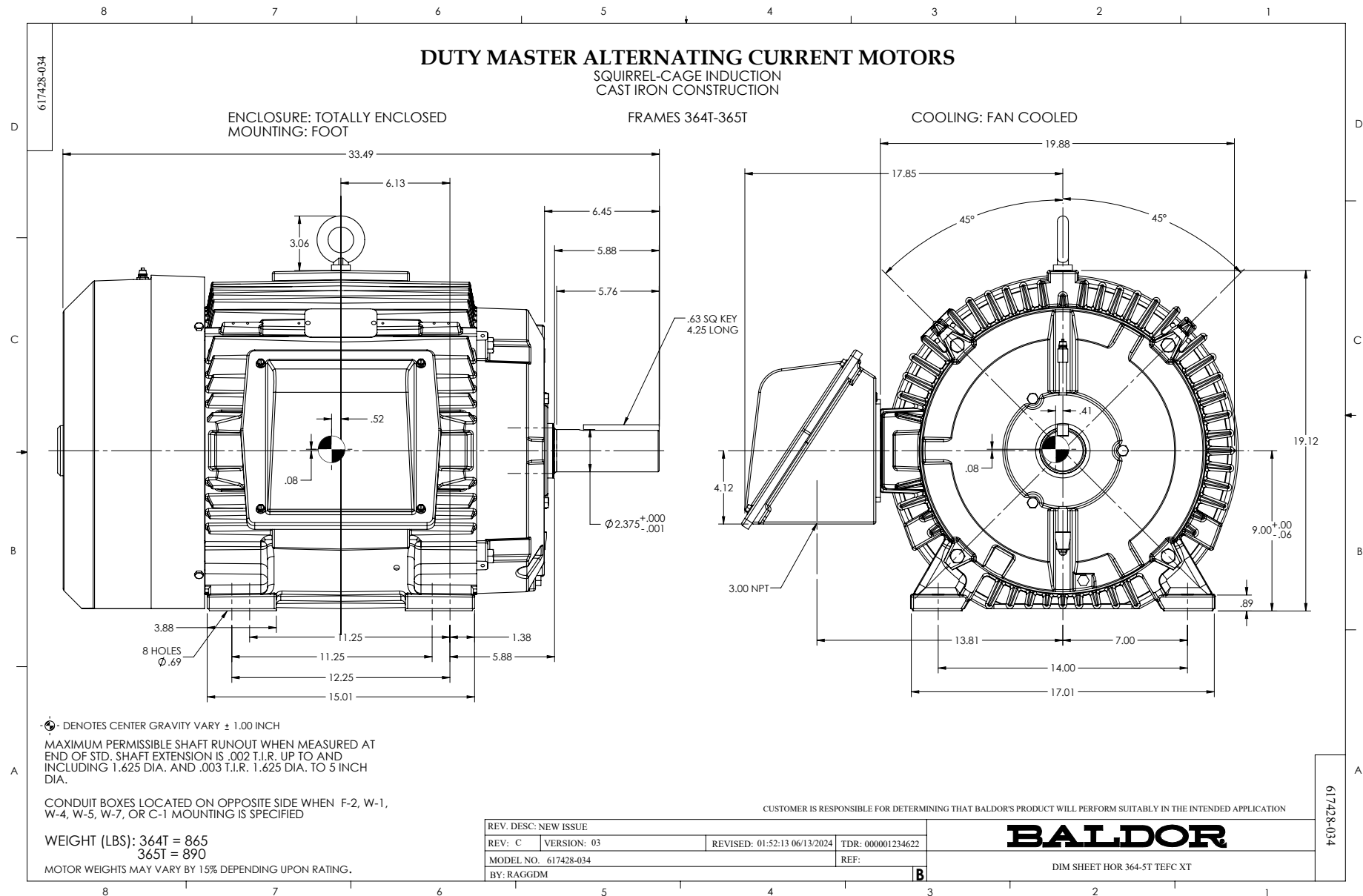
REMARKS: XE MOTOR-NEMA NOM. EFF. 93.0%, GUAR. EFF. 91.7%

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


DR. BY B.R. PENDLEY  
CK. BY R.K. BRIDGES  
APP. BY W.L. SMITH  
DATE 08/06/13

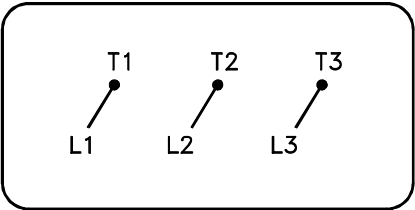
**A-C MOTOR  
PERFORMANCE  
CURVES**

A36WG1042-R001  
ISSUE DATE 08/31/16 Page 8 of 10



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