

# ABB BALDOR RELIANCE III

---

## Customer information packet

### CEWDM4310T

60HP, 3560RPM, 3PH, 60HZ, 364TSC, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                               |                                           |
|-------------------------------|-------------------------------------------|
| Enclosure                     | TEFC                                      |
| Frame                         | 364TSC                                    |
| 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            | 60.000 HP @ 60 HZ                         |
| Phase                         | 3                                         |
| Synchronous Speed @ Frequency | 3600 RPM @ 60 HZ                          |
| Voltage @ Frequency           | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ        |
| Agency Approvals              | CSA EEV<br>CCSA US                        |
| Ambient Temperature           | 40 °C                                     |
| Auxiliary Box                 | NO AUXILLARY BOX                          |
| Base Indicator                | Rigid                                     |
| Bearing Grease Type           | Polyrex EM (-20F +300F)                   |
| Current @ Voltage             | 66.100 A @ 460.0 V<br>132.000 A @ 230.0 V |
| Design Code                   | B                                         |
| Drip Cover                    | No Drip Cover                             |
| Duty Rating                   | CONT                                      |
| Efficiency @ 100% Load        | 93.6 %                                    |
| Enclosure Modification        | Severe Duty Features                      |
| Feedback Device               | NO FEEDBACK                               |
| Heater Indicator              | No Heater                                 |
| High Voltage Full Load Amps   | 66.1 a                                    |
| Insulation Class              | F                                         |
| Inverter Code                 | Inverter Ready                            |
| IP Rating                     | IP55                                      |
| KVA Code                      | G                                         |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | A          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | A36WG1558  |
| Layout       | 617428-135 |
| Eff. date    | 10-01-2021 |
| CD Diagram   | 416820-002 |
| Poles        | 02         |
| Leads        | 3#4,6#6    |
| Proprietary  | False      |
| Created date | 08-22-2019 |

| Lifting Lugs                  | Standard Lifting Lugs |
|-------------------------------|-----------------------|
| Motor Lead Quantity/Wire Size | 3 @ 4 AWG             |
| Motor Standards               | NEMA                  |
| Motor Type                    | A36056M               |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 2                     |
| Overall Length                | 31.35 IN              |
| Power Factor                  | 91                    |
| Product Family                | Washdown Features     |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | C-Face                |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 1.875 IN              |
| Shaft Ground Indicator        | No Shaft Grounding    |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | Shaft Slinger         |
| Speed                         | 3560 rpm              |
| Speed Code                    | Single Speed          |
| Starting Method               | Direct on line        |
| Thermal Device - Bearing      | None                  |
| Thermal Device - Winding      | None                  |

**Nameplate**

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

**NP2428L**

|                   |                                |       |          |              |             |                         |                     |    |                       |        |      |
|-------------------|--------------------------------|-------|----------|--------------|-------------|-------------------------|---------------------|----|-----------------------|--------|------|
| SPEC NO.          | A36-7816-1558                  |       |          | CAT.NO.      | CEWDM4310T  |                         |                     |    | FRAME                 | 364TSC |      |
| HP                | 60                             | VOLTS | 230/460  |              | PHASE       | 3                       | DESIGN              | B  | TYPE                  | P      |      |
| RPM               | 3560                           | AMPS  | 132/66.1 |              | HZ          | 60                      | AMB                 | 40 | SF                    | 1.15   |      |
| DRIVE END BEARING | 65BC03JGG30A                   |       | DUTY     | CONT         | INSUL.CLASS |                         | F                   |    |                       |        |      |
| OPP D.E. BEARING  | 65BC03JGG30A                   |       | ENCL     | TEFC         | CODE        | G                       |                     |    |                       |        |      |
| SER.NO.           |                                |       |          | POWER FACTOR |             | 91                      | NEMA-NOM-EFFICIENCY |    |                       | 93.6   |      |
|                   |                                |       |          |              |             | MAX CORR KVAR           |                     | 5  | GUARANTEED EFFICIENCY |        | 92.4 |
|                   | IP55                           |       |          |              |             | NEMA NOM/CSA QUOTED EFF |                     |    |                       |        |      |
|                   | 10:1CT AND 10:1VT ON VPWM INVE |       |          |              |             | RTER, 1.00SF            |                     |    | MOTOR WEIGHT          |        | 918  |

**Parts List**

| Part number | Description                              | Quantity |
|-------------|------------------------------------------|----------|
| SA373335    | SA A36-7816-1558                         | 1.000 ea |
| RA363127    | RA A36-7816-1558                         | 1.000 ea |
| 421948032   | 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 |
| 000692000CY | N/P                                      | 1.000 ea |
| 000692000VD | LABEL WARNING                            | 1.000 ea |
| NP2428L     | WASHDOWN DUTY MOTOR, SS, CC, CSA-C       | 1.000 ea |
| 085922073B  | BRKT 360 085922072WCC KB                 | 1.000 ea |
| 415072001B  | CLAMP                                    | 1.000 ea |
| 078559075   | FAN CVR E360 TEFC W/ NO LUBE ENTRY       | 1.000 ea |
| 034180012DA | KEY 1X4X1/4X1-1/2 L                      | 1.000 ea |
| 412118006A  | DRAIN                                    | 1.000 ea |
| 702676001C  | FAN 360                                  | 1.000 ea |
| 004824015A  | GREASE POLYREX EM                        | 0.540 lb |
| 032018012DN | HHCS 1/2-131-1/2 304S.S.                 | 4.000 ea |
| 032018008AN | HHCS 1/4-20X1 304 S.S.                   | 4.000 ea |
| 032018024CN | HHCS 3/8-16X3 304 S.S.                   | 3.000 ea |
| 415045002E  | SLGR                                     | 1.000 ea |
| 410700004F  | WSHR                                     | 1.000 ea |
| 423709011C  | WASHER                                   | 3.000 ea |
| 034690001AB | 1/8" NPT SQHDPLG                         | 1.000 ea |
| 034690002AB | PPLG 1/4" PLTD.                          | 1.000 ea |
| 034690001AB | 1/8" NPT SQHDPLG                         | 1.000 ea |
| 034690002AB | PPLG 1/4" PLTD.                          | 1.000 ea |
| 085922070HF | E360 C FACE BRACKET 6313 BRG TEFC- 4.640 | 1.000 ea |
| 032018012DN | HHCS 1/2-131-1/2 304S.S.                 | 4.000 ea |
| 032018024CN | HHCS 3/8-16X3 304 S.S.                   | 3.000 ea |
| 415045002E  | SLGR                                     | 1.000 ea |
| 415028001AL | SEAL                                     | 1.000 ea |
| 412118006A  | DRAIN                                    | 1.000 ea |

|              |                                      |          |
|--------------|--------------------------------------|----------|
| 423709011C   | WASHER                               | 3.000 ea |
| 076708141    | CAST IRON 3" LEAD OUTLET             | 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 |
| 032018006AN  | HHCS1/4-20X3/4304S.S.-360            | 4.000 ea |
| 032018010CN  | HHCS 3/8-16X1-1/4 304S.              | 4.000 ea |
| 415000115H   | T/LUG #2AWG-4/0AWG                   | 1.000 ea |
| 406099000A   | PLUG - FAN COVER 320-440             | 1.000 ea |
| 032018005DL  | 1/2-13 X 5/8 SILICON BRONZE HHCS     | 1.000 ea |
| 034000014AF  | WSHR 3/8 304 S.S.                    | 4.000 ea |
| 004824003AJF | WILKO781.01 WHITE2 COATS - MG1025W01 | 0.250 ga |
| 033775004EA  | DRSCR #6-1/4 304 S.S.                | 2.000 ea |
| 033775004EA  | DRSCR #6-1/4 304 S.S.                | 4.000 ea |
| 034180016GA  | KEY 1/2X1/2X2 L                      | 1.000 ea |
| 14PA1000     | PACKAGING 314 GROUP COMBINED PRINT   | 1.000 ea |
| HW1000A32    | 5/16 FL WASHER WIDE,ID=.344,OD=1.125 | 3.000 ea |
| 032509020C   | CARRIAGE BOLT - 360                  | 3.000 ea |

|                                                                                                                                               |             |                       |                       |                                                                     |                 |         |
|-----------------------------------------------------------------------------------------------------------------------------------------------|-------------|-----------------------|-----------------------|---------------------------------------------------------------------|-----------------|---------|
| REL.<br>S.O.                                                                                                                                  | FRAME       | HP                    | TYPE                  | PHASE/<br>HERTZ                                                     | RPM             | VOLTS   |
|                                                                                                                                               | 364TS       | 60                    | P                     | 3/60                                                                | 3560            | 230/460 |
|                                                                                                                                               |             |                       |                       |                                                                     |                 |         |
| AMPS                                                                                                                                          | DUTY        | AMB °C/<br>INSUL.     | S.F.                  | NEMA<br>DESIGN                                                      | CODE<br>LETTER  | ENCL.   |
| 132/66.1                                                                                                                                      | 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)                           |                 |         |
| 491281                                                                                                                                        | 418141005XE | ---                   | ---                   | .0254/.101                                                          |                 |         |
| PERFORMANCE                                                                                                                                   |             |                       |                       |                                                                     |                 |         |
| LOAD                                                                                                                                          | HP          | AMPERES               | RPM                   | %<br>POWER FACTOR                                                   | %<br>EFFICIENCY |         |
| NO LOAD                                                                                                                                       | 0           | 14.0                  | 3600                  | 13.0                                                                | 0               |         |
| 1/4                                                                                                                                           | 15.0        | 21.3                  | 3590                  | 74.9                                                                | 87.8            |         |
| 2/4                                                                                                                                           | 30.0        | 34.5                  | 3580                  | 88.3                                                                | 92.4            |         |
| 3/4                                                                                                                                           | 45.0        | 49.7                  | 3569                  | 90.8                                                                | 93.5            |         |
| 4/4                                                                                                                                           | 60.0        | 66.1                  | 3558                  | 90.8                                                                | 93.6            |         |
| 5/4                                                                                                                                           | 75.0        | 83.0                  | 3546                  | 90.7                                                                | 93.3            |         |
|                                                                                                                                               |             |                       |                       |                                                                     |                 |         |
| SPEED TORQUE                                                                                                                                  |             |                       |                       |                                                                     |                 |         |
|                                                                                                                                               |             | RPM                   | TORQUE<br>% FULL LOAD | TORQUE<br>LB.-FT.                                                   | AMPERES         |         |
| LOCKED ROTOR                                                                                                                                  |             | 0                     | 203                   | 180                                                                 | 435             |         |
| PULL UP                                                                                                                                       |             | 1565                  | 175                   | 155                                                                 | 355             |         |
| BREAKDOWN                                                                                                                                     |             | 3397                  | 231                   | 205                                                                 | 212             |         |
| FULL LOAD                                                                                                                                     |             | 3558                  | 100                   | 88.6                                                                | 66.1            |         |
| 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<br>XE MOTOR-NEMA NOM. EFF. 93.6 %<br>GUARANTEED MIN. EFF. 92.4%                                                         |             |                       |                       |                                                                     |                 |         |
|                                                            |             | DR. BY W. L. SMITH    |                       | A-C MOTOR<br>PERFORMANCE A36WG1558-R007<br>DATA ISSUE DATE 08/30/19 |                 |         |
|                                                                                                                                               |             | CK. BY G. R. WEBB     |                       |                                                                     |                 |         |
|                                                                                                                                               |             | APP. BY E.J.CHRISTIAN |                       |                                                                     |                 |         |
|                                                                                                                                               |             | DATE 03/11/02         |                       |                                                                     |                 |         |

REL S.O.

 RPM **3560**

 S.F. **1.15**

 ROTOR **418141005XE**

 FRAME **364TS**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **60**

 AMPS **132/66.1**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

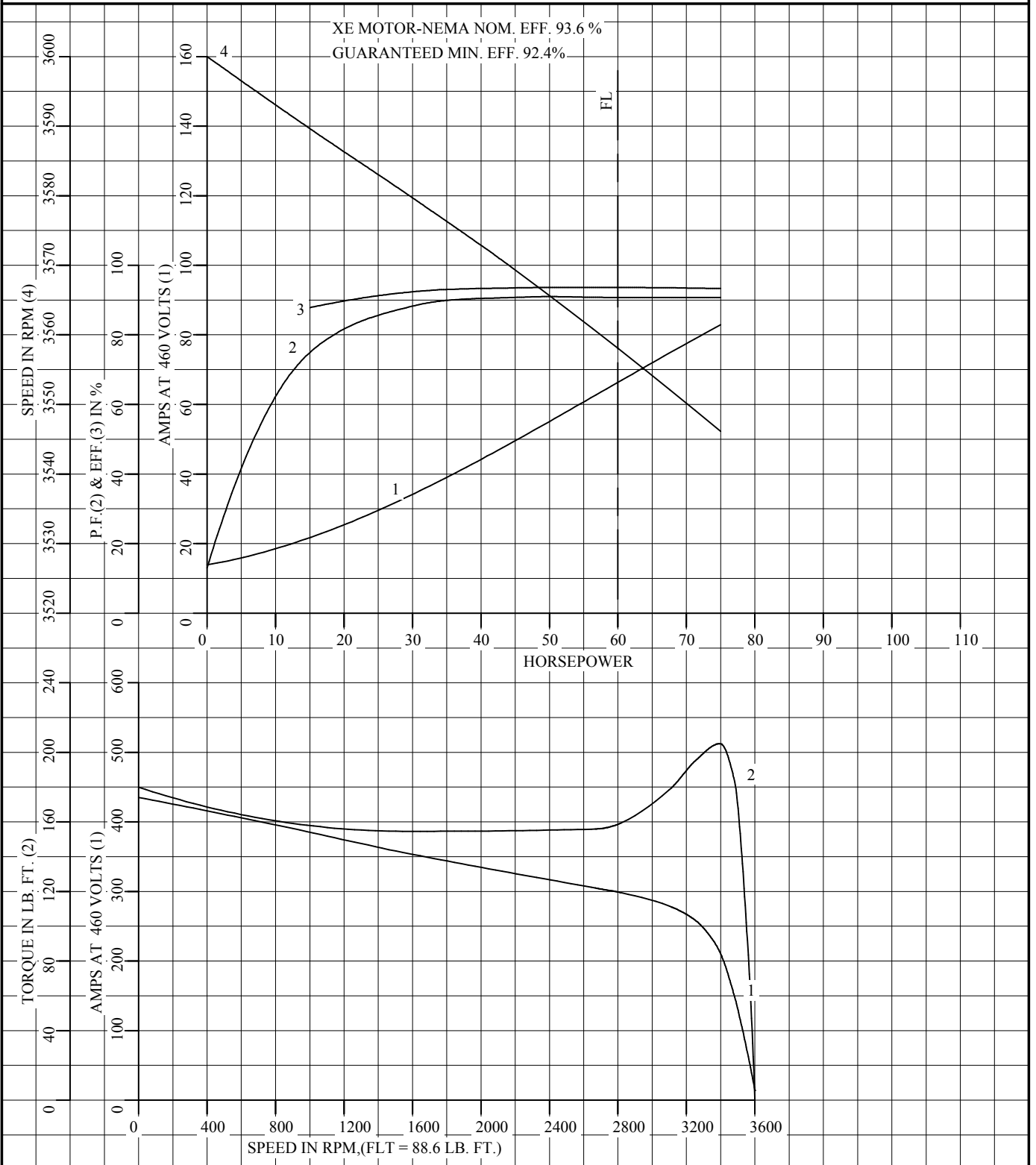
 STATOR RES. @ 25 °C **.0254/.101**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **491281**

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 G. R. WEBB  
 APP. BY E. J. CHRISTIAN  
 DATE 03/11/02

**A-C MOTOR  
PERFORMANCE  
CURVES**

**A36WG1558-R007**

ISSUE DATE **08/30/19**

Page 9 of 13

REL. S.O.

 RPM **3560**

 S.F. **1.15**

 ROTOR **418141005XE**

 FRAME **364TS**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **60**

 AMPS **132/66.1**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

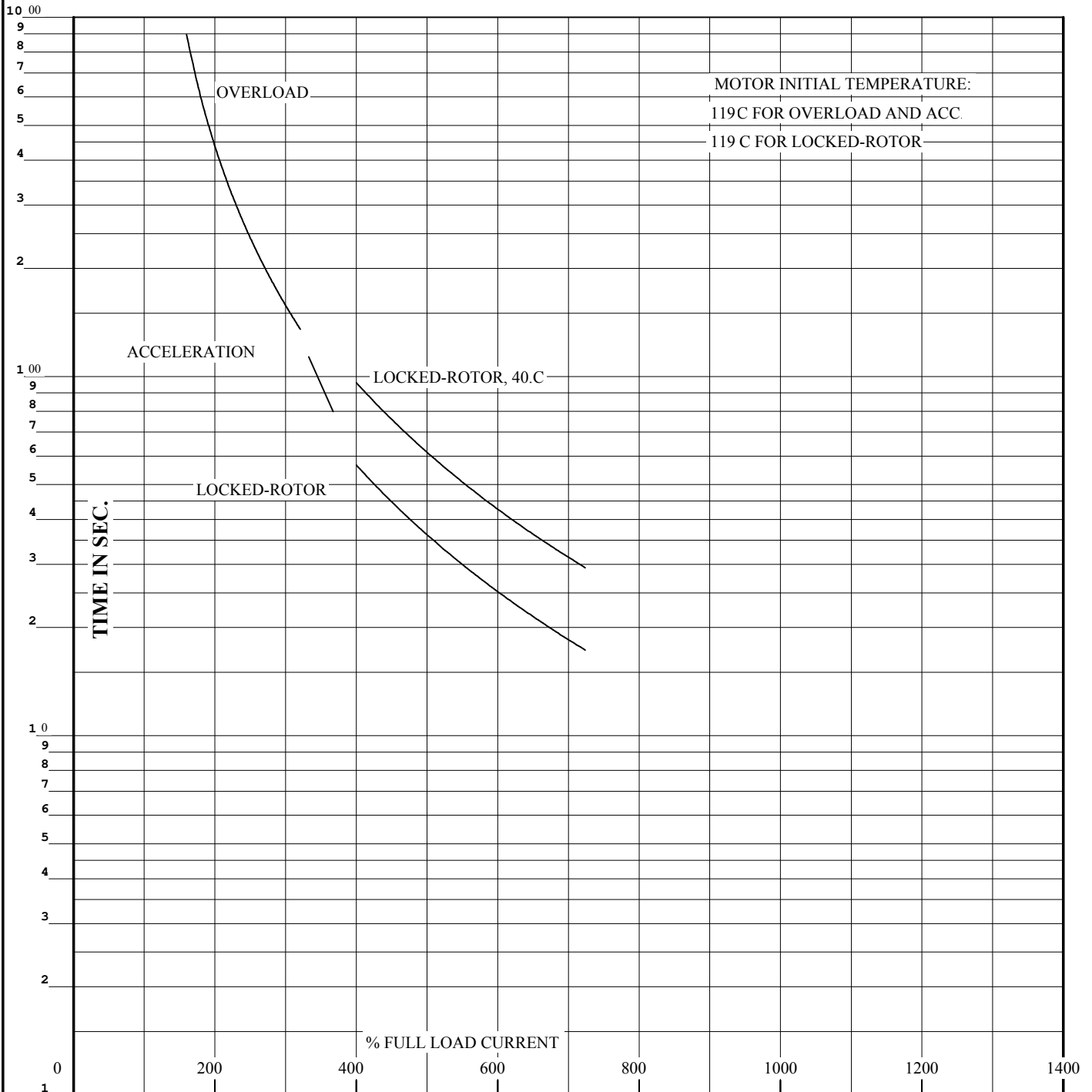
 STATOR RES. @ 25 °C **.0254/.101**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **491281**

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-NEMA NOM. EFF. 93.6 %

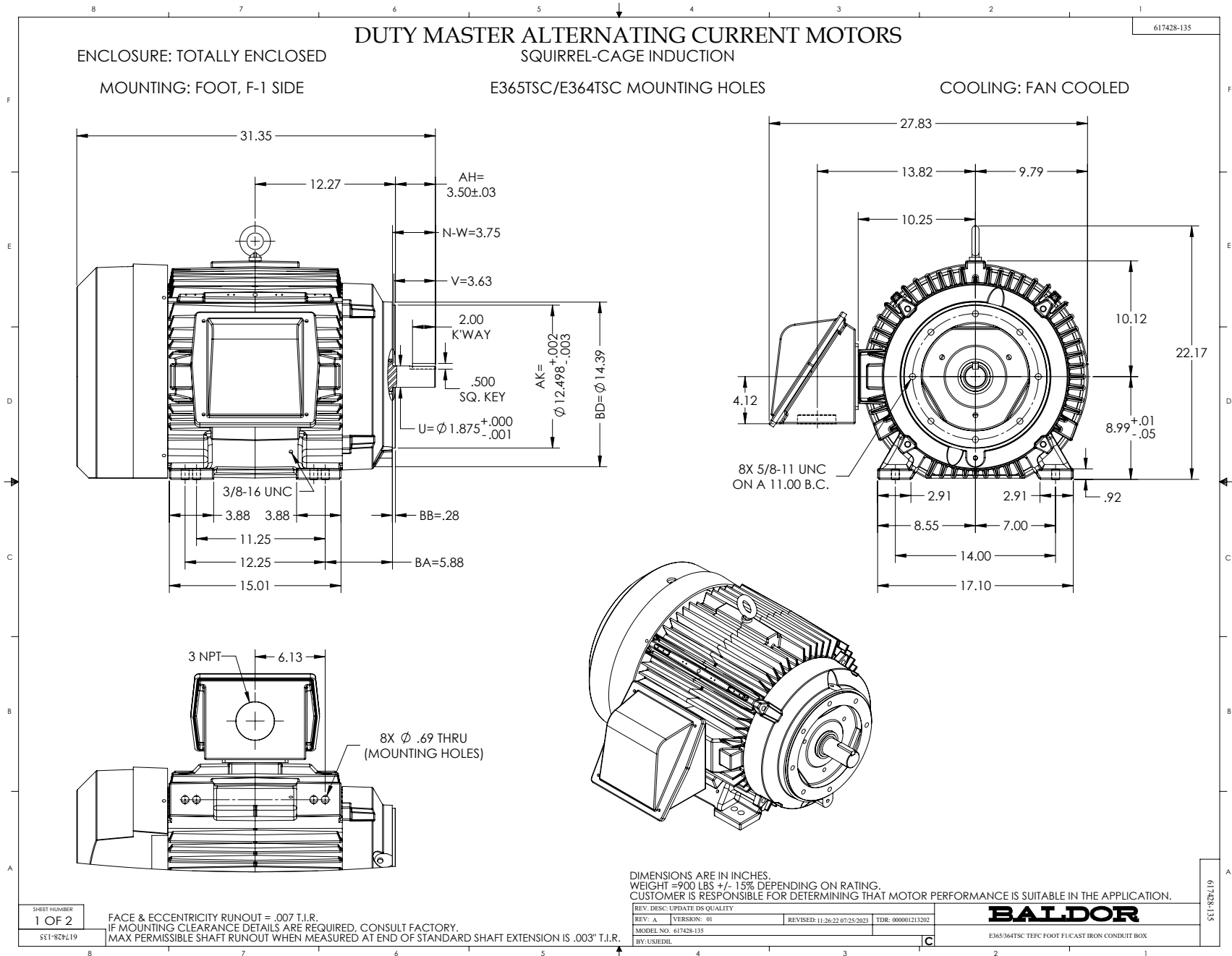
GUARANTEED MIN. EFF. 92.4%

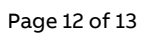
 AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

**BALDOR**  
A MEMBER OF THE ABB GROUP

 DR. BY W. L. SMITH  
CK. BY G. R. WEBB  
APP. BY E.J. CHRISTIAN  
DATE 03/11/02
**A-C MOTOR  
PERFORMANCE  
CURVES**
**A36WG1558-R007**

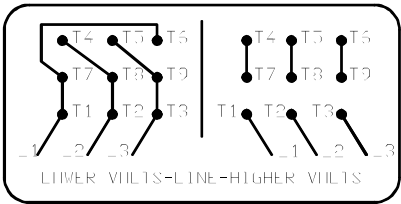
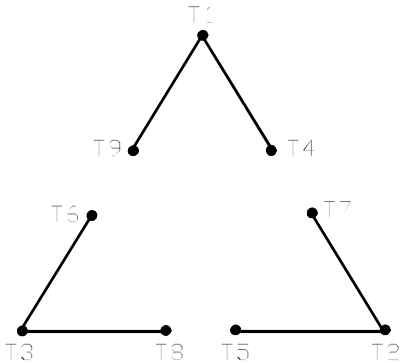
 ISSUE DATE 08/30/19 Page 10 of 13





416820-002

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



(N.P. 1575-B)

|                                           |                              |                   |
|-------------------------------------------|------------------------------|-------------------|
| REV. DESC: FONT CHANGE FOR PDF SEARCHABLE |                              |                   |
| REV. LTR: A                               | VERSION: 01                  | TDR: 000001009382 |
| FILE: \MGA\00000\661                      | REVISED: 02:46:19 02/13/2020 | BY: MGHMTT        |
| MTL: —                                    |                              |                   |

**BALDOR - RELIANCE®**

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

416820-002