

# ABB BALDOR RELIANCE III

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## Customer information packet

### CXT32504T-5

250HP, 1785RPM, 3PH, 60HZ, 449TC, A44160M, TEF

Class - None

Division - Division II

**Specifications**

|                               |                                                 |
|-------------------------------|-------------------------------------------------|
| Enclosure                     | TEFC                                            |
| Frame                         | 449TC                                           |
| Frame Material                | Iron                                            |
| Frequency                     | 60.00 Hz                                        |
| Haz Area Class and Group      | None                                            |
| Haz Area Division             | Division II                                     |
| Motor Letter Type             | Three Phase                                     |
| Output @ Frequency            | 250.000 HP @ 60 HZ                              |
| Phase                         | 3                                               |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ                                |
| Voltage @ Frequency           | 575.0 V @ 60 HZ                                 |
| Agency Approvals              | UR<br>NEMA_PREMIUM<br>NEMA PREMIUM<br>CCSAUSEEV |
| Ambient Temperature           | 40 °C                                           |
| Auxiliary Box                 | NO AUXILLARY BOX                                |
| Base Indicator                | Rigid                                           |
| Bearing Grease Type           | Polyrex EM (-20F +300F)                         |
| Current @ Voltage             | 219.000 A @ 575.0 V                             |
| Design Code                   | B                                               |
| 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   | 219.0 a                                         |
| Insulation Class              | F                                               |
| Inverter Code                 | Not Inverter                                    |
| IP Rating                     | NONE                                            |
| KVA Code                      | G                                               |
| Max Speed                     | 3600 rpm                                        |

**Part Detail**

|              |                    |
|--------------|--------------------|
| Revision     | C                  |
| Type         | AC                 |
| Mech. spec.  |                    |
| Base         |                    |
| Status       | NLA/A              |
| Elec. spec.  | A44WG5260          |
| Layout       | 617435-124         |
| Eff. date    | 09-29-2026         |
| CD Diagram   | 416820-036         |
| Poles        | 04                 |
| Leads        | 3#1 (02 per group) |
| Proprietary  | False              |
| Created date | 07-15-2021         |

|                                      |                    |
|--------------------------------------|--------------------|
| <b>Motor Lead Quantity/Wire Size</b> | 6 @ 1 AWG          |
| <b>Motor Standards</b>               | NEMA               |
| <b>Motor Type</b>                    | A44160M            |
| <b>Mounting Arrangement</b>          | F1                 |
| <b>Number of Poles</b>               | 4                  |
| <b>Overall Length</b>                | 53.22 IN           |
| <b>Power Factor</b>                  | 89                 |
| <b>Product Family</b>                | General Industrial |
| <b>Pulley End Bearing Type</b>       | Ball               |
| <b>Pulley Face Code</b>              | C-Face             |
| <b>Service Factor</b>                | 1.00               |
| <b>Shaft Diameter</b>                | 3.375 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**

| NP4152LUA               |               |      |           |                  |      |               |              |             |        |       |        |       |               |
|-------------------------|---------------|------|-----------|------------------|------|---------------|--------------|-------------|--------|-------|--------|-------|---------------|
| CAT #                   | CXT32504T-5   |      |           |                  |      | SER           |              |             |        | CC    | 010A   |       |               |
| SPEC                    | A44-0003-5260 |      |           |                  |      | RATING        | 40C AMB-CONT |             |        |       |        |       |               |
| HZ                      | VOLTS         |      |           | AMPS             |      |               | RPM          | HP          | CODE   | SF    | DES    | PF    | NEMA NOM. EFF |
| 60                      | 575           |      |           | 219              |      |               | 1785         | 250         | G      | 1.15  | B      | 89    | %             |
|                         |               |      |           |                  |      |               |              |             |        |       |        | %     | %             |
| PH                      | 3             | CL   | F         | MAX RPM          | 3600 | MAX CORR KVAR |              |             | 37     |       |        |       |               |
| BRG                     | DE            | 6318 |           | ODE              | 6318 | ENCL          | TEFC         | FR          | 449TC  | IP    | 54     |       |               |
| GREASE                  | POLYREX EM    |      |           |                  |      |               |              |             | MTR WT |       | LBS    |       |               |
| CL I DIV 2 GRPS A,B,C,D |               |      |           | CL I ZONE 2 GRPS |      |               |              | IIA,IIB,IIC |        |       | TEMP T | 200   | C             |
| INV READY               | CT            | 2:1  | HZ        | 30-60            | VT   | 1000:1        | HZ           | 0-60        | CHP    | 1:1.5 | HZ     | 60-90 |               |
| INV TEMP CL             | T3            | C    | USABLE AT |                  | N/A  |               |              |             |        |       |        |       |               |
|                         |               |      |           |                  |      |               |              |             |        |       |        |       |               |

|                                                                                                                                    |  |             |  |                                                                                                                               |  |                       |                                                                                          |                                            |  |                                            |              |           |  |
|------------------------------------------------------------------------------------------------------------------------------------|--|-------------|--|-------------------------------------------------------------------------------------------------------------------------------|--|-----------------------|------------------------------------------------------------------------------------------|--------------------------------------------|--|--------------------------------------------|--------------|-----------|--|
| ABB BALDOR<br>RELIANCE III                                                                                                         |  |             |  |                                                                                                                               |  |                       | CUSTOMER INFORMATION PACKET CXT32504T-5 - 250HP, 1785RPM, 3PH, 60HZ, 449TC, A44160M, TEF |                                            |  |                                            |              |           |  |
| S/O                                                                                                                                |  | FRAME       |  | HP                                                                                                                            |  | TYPE                  |                                                                                          | PHASE/<br>HERTZ                            |  | RPM                                        |              | VOLTS     |  |
|                                                                                                                                    |  | 449T        |  | 250                                                                                                                           |  | P                     |                                                                                          | 3/60                                       |  | 1785                                       |              | 575       |  |
| AMPS                                                                                                                               |  | DUTY        |  | AMB °C/<br>INSUL                                                                                                              |  | S.F.                  |                                                                                          | NEMA<br>DESIGN                             |  | CODE<br>LETTER                             |              | ENCLOSURE |  |
| 219                                                                                                                                |  | CONT        |  | 40/F                                                                                                                          |  | 1.00                  |                                                                                          | B                                          |  | G                                          |              | TEFC      |  |
| E/S                                                                                                                                |  | ROTOR       |  | TEST<br>S.O.                                                                                                                  |  | TEST<br>DATE          |                                                                                          | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES) |  |                                            |              |           |  |
| ---                                                                                                                                |  | 418143052ZE |  | ---                                                                                                                           |  | ---                   |                                                                                          | .0187                                      |  |                                            |              |           |  |
| PERFORMANCE                                                                                                                        |  |             |  |                                                                                                                               |  |                       |                                                                                          |                                            |  |                                            |              |           |  |
| LOAD                                                                                                                               |  | HP          |  | AMPERES                                                                                                                       |  | RPM                   |                                                                                          | % POWER FACTOR                             |  |                                            | % EFFICIENCY |           |  |
| NO LOAD                                                                                                                            |  | 0           |  | 63.6                                                                                                                          |  | 1800                  |                                                                                          | 4.01                                       |  |                                            | 0            |           |  |
| 1/4                                                                                                                                |  | 62.5        |  | 82.5                                                                                                                          |  | 1796                  |                                                                                          | 60.2                                       |  |                                            | 94.3         |           |  |
| 2/4                                                                                                                                |  | 125         |  | 121                                                                                                                           |  | 1793                  |                                                                                          | 80.7                                       |  |                                            | 96.2         |           |  |
| 3/4                                                                                                                                |  | 187         |  | 168                                                                                                                           |  | 1789                  |                                                                                          | 86.8                                       |  |                                            | 96.5         |           |  |
| 4/4                                                                                                                                |  | 250         |  | 219                                                                                                                           |  | 1785                  |                                                                                          | 88.6                                       |  |                                            | 96.3         |           |  |
| 5/4                                                                                                                                |  | 313         |  | 273                                                                                                                           |  | 1781                  |                                                                                          | 89.2                                       |  |                                            | 95.9         |           |  |
|                                                                                                                                    |  |             |  |                                                                                                                               |  |                       |                                                                                          |                                            |  |                                            |              |           |  |
| SPEED TORQUE                                                                                                                       |  |             |  |                                                                                                                               |  |                       |                                                                                          |                                            |  |                                            |              |           |  |
|                                                                                                                                    |  |             |  | RPM                                                                                                                           |  | TORQUE<br>% FULL LOAD |                                                                                          | TORQUE LB.-FT.                             |  |                                            | AMPERES      |           |  |
| LOCKED ROTOR                                                                                                                       |  |             |  | 0                                                                                                                             |  | 163                   |                                                                                          | 1195                                       |  |                                            | 1460         |           |  |
| PULL UP                                                                                                                            |  |             |  | 1200                                                                                                                          |  | 134                   |                                                                                          | 987                                        |  |                                            | 1228         |           |  |
| BREAKDOWN                                                                                                                          |  |             |  | 1726                                                                                                                          |  | 276                   |                                                                                          | 2027                                       |  |                                            | 761          |           |  |
| FULL LOAD                                                                                                                          |  |             |  | 1785                                                                                                                          |  | 100                   |                                                                                          | 735                                        |  |                                            | 219          |           |  |
| AMPERES SHOWN FOR 575 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE. |  |             |  |                                                                                                                               |  |                       |                                                                                          |                                            |  |                                            |              |           |  |
| TYPICAL DATA<br>XE MOTOR-NEMA NOM. EFF. 96.2%                                                                                      |  |             |  |                                                                                                                               |  |                       |                                                                                          |                                            |  |                                            |              |           |  |
|                                                 |  |             |  | DRAWN BY: <u>C.E. JAMISON</u><br>CHECKED BY: <u>W.L. SMITH</u><br>APPROVED BY: <u>E.J. CHRISTIAN</u><br>DATE: <u>08/07/15</u> |  |                       |                                                                                          | AC MOTOR<br>PERFORMANCE<br>DATA            |  | A44WG5260-R003<br><br>DATE ISSUED 01/13/21 |              |           |  |

FRAME 449T

VOLTS 575

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 250

AMPS 219

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

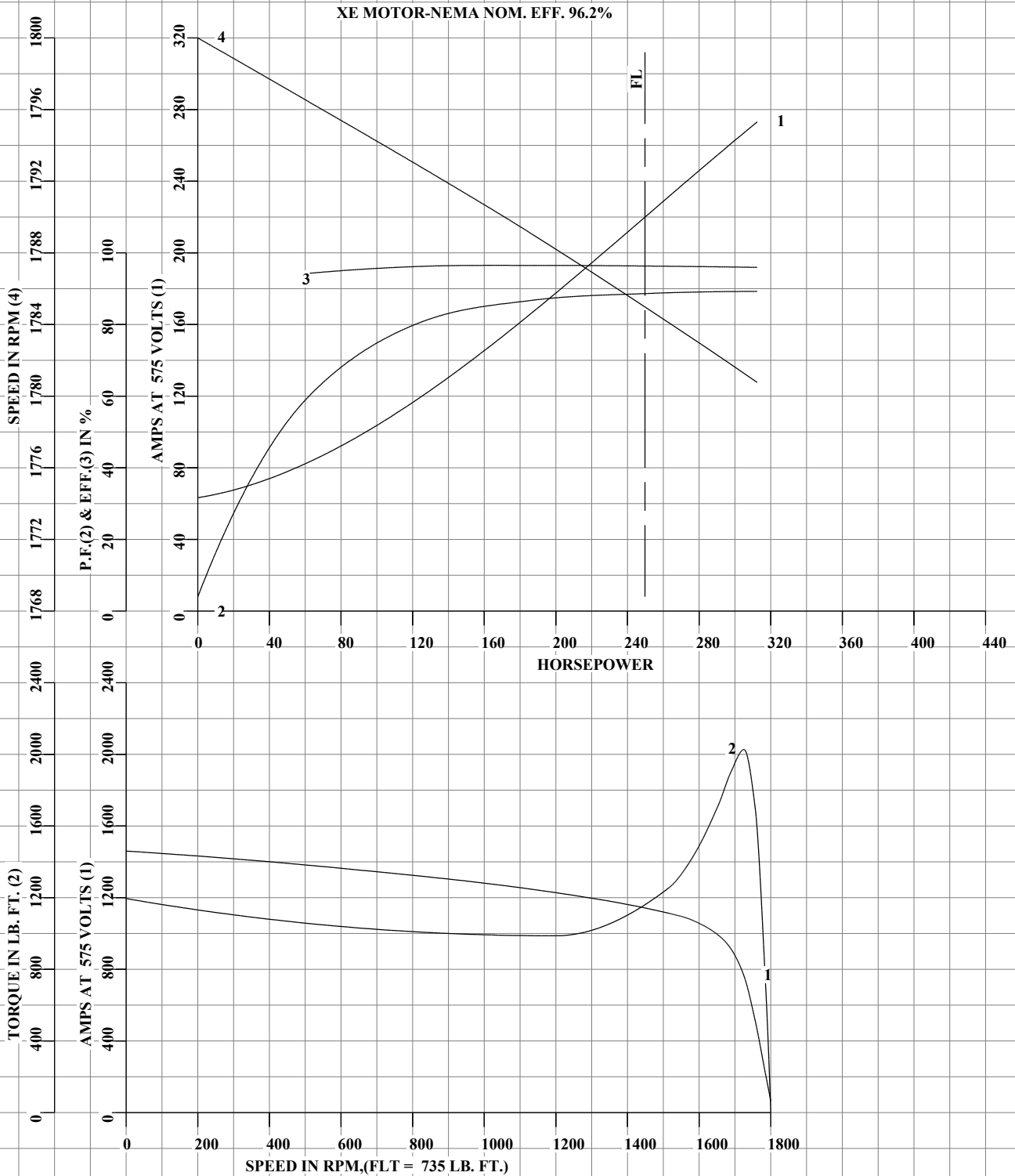
STATOR RES. @ 25°C .0187

PHASE / HERTZ 3/60

AMB °C / INSUL 40/F

E/S ---

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 575 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



DRAWN BY: C.E. JAMISON  
CHECKED BY: W.L. SMITH  
APPROVED BY: E.J. CHRISTIAN  
DATE: 08/07/15

AC MOTOR  
PERFORMANCE  
DATA

A44WG5260-R003

ISSUE DATE 01/13/21

FRAME 449T

VOLTS 575

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TEST S.O. TYPICAL DATA

HP 250

AMPS 219

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DUTY CONT

ENCLOSURE TEFC

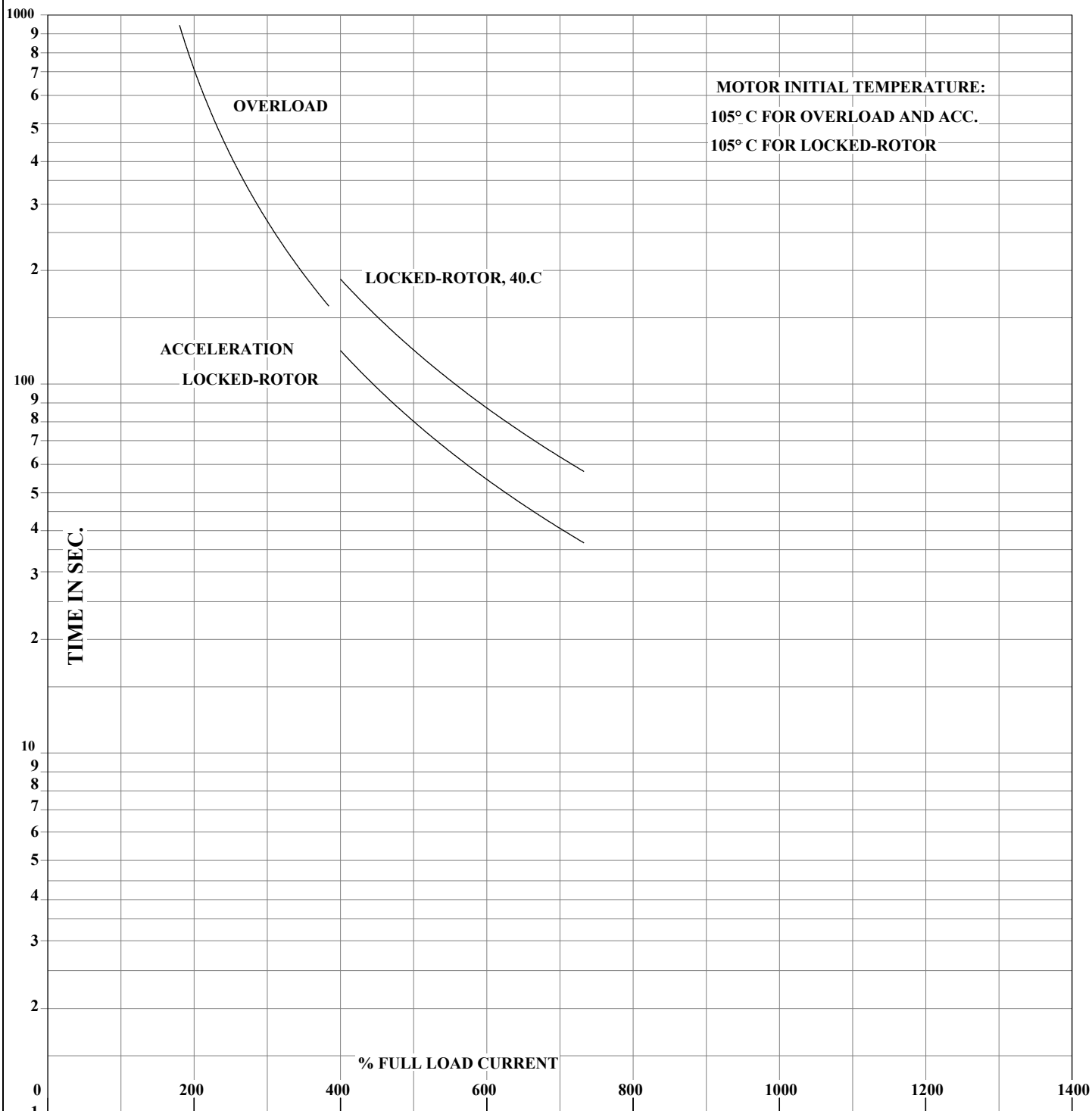
STATOR RES. @ 25°C .0187

PHASE / HERTZ 3/60

AMB °C / INSUL 40/F

E/S ---

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE  
XE MOTOR-NEMA NOM. EFF. 96.2%

AMPERES SHOWN FOR 575 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

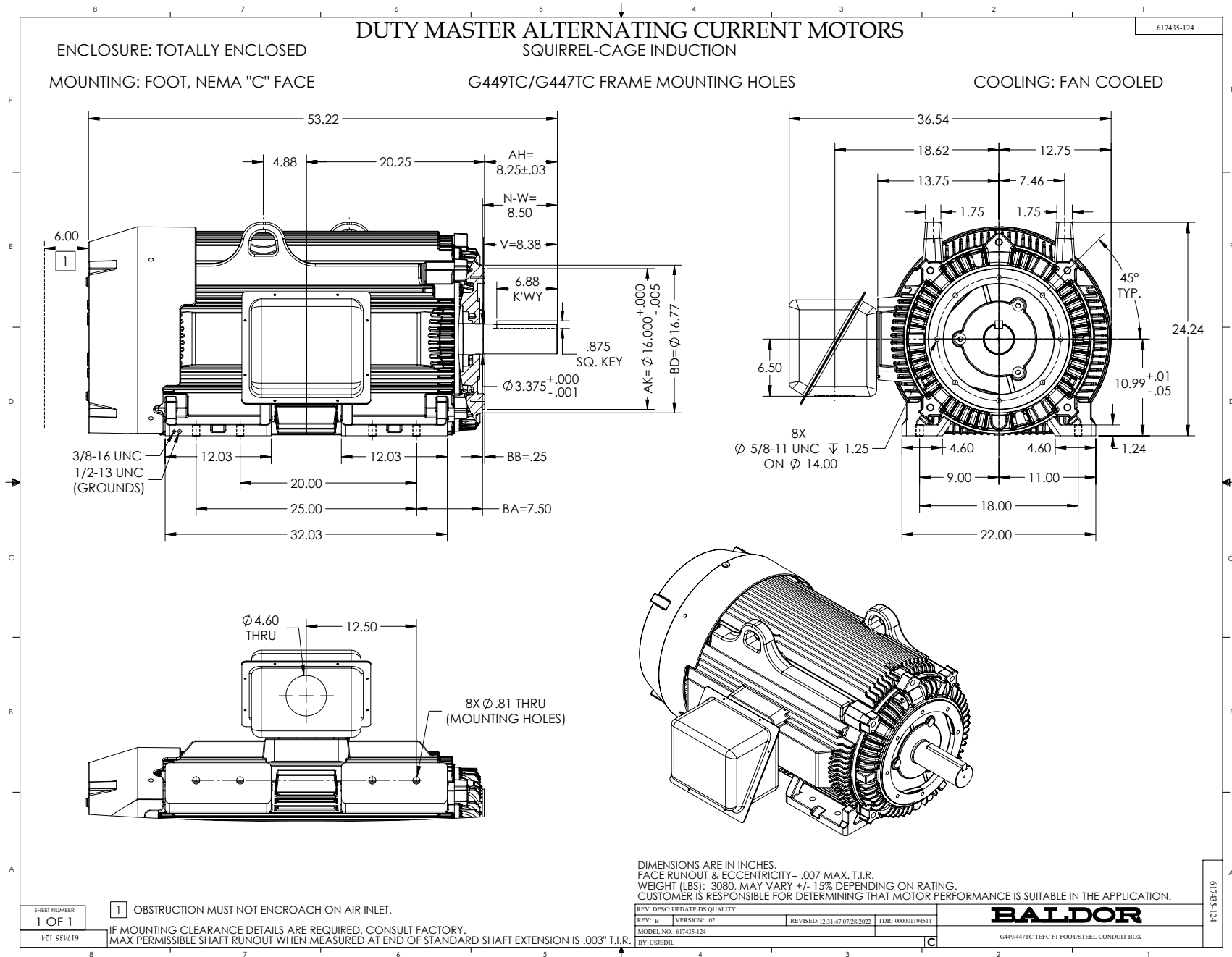


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 CHECKED BY: W.L. SMITH  
 APPROVED BY: E.J. CHRISTIAN  
 DATE: 08/07/15

AC MOTOR  
PERFORMANCE  
DATA

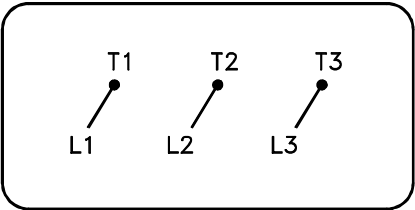
**A44WG5260-R003**

ISSUE DATE 01/13/21



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