

# ABB BALDOR RELIANCE III

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## Customer information packet

### EFM4308T

40HP, 1190RPM, 3PH, 60HZ, 364T, A36062M, TEFC

Class - None

Division - Not Applicable

**Specifications**

|                                      |                                                                 |
|--------------------------------------|-----------------------------------------------------------------|
| <b>Enclosure</b>                     | TEFC                                                            |
| <b>Frame</b>                         | 364T                                                            |
| <b>Frame Material</b>                | Iron                                                            |
| <b>Frequency</b>                     | 60.00 Hz                                                        |
| <b>Haz Area Class and Group</b>      | None                                                            |
| <b>Haz Area Division</b>             | Not Applicable                                                  |
| <b>Motor Letter Type</b>             | Three Phase                                                     |
| <b>Output @ Frequency</b>            | 40.000 HP @ 60 HZ                                               |
| <b>Phase</b>                         | 3                                                               |
| <b>Synchronous Speed @ Frequency</b> | 1200 RPM @ 60 HZ                                                |
| <b>Voltage @ Frequency</b>           | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                              |
| <b>Agency Approvals</b>              | NEMA PREMIUM (OLD LOGO)<br>NEMA PREMIUM<br>CURUSEEV             |
| <b>Ambient Temperature</b>           | 40 °C                                                           |
| <b>Auxiliary Box</b>                 | NO AUXILLARY BOX                                                |
| <b>Base Indicator</b>                | Rigid                                                           |
| <b>Bearing Grease Type</b>           | Polyrex EM (-20F +300F)                                         |
| <b>Current @ Voltage</b>             | 107.000 A @ 208.0 V<br>49.800 A @ 460.0 V<br>99.600 A @ 230.0 V |
| <b>Design Code</b>                   | B                                                               |
| <b>Drip Cover</b>                    | No Drip Cover                                                   |
| <b>Duty Rating</b>                   | CONT                                                            |
| <b>Efficiency @ 100% Load</b>        | 94.1 %                                                          |
| <b>Feedback Device</b>               | NO FEEDBACK                                                     |
| <b>Heater Indicator</b>              | No Heater                                                       |
| <b>High Voltage Full Load Amps</b>   | 49.8 a                                                          |
| <b>Insulation Class</b>              | F                                                               |
| <b>Inverter Code</b>                 | Inverter Ready                                                  |
| <b>IP Rating</b>                     | NONE                                                            |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | U          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | A36WG1194  |
| <b>Layout</b>       | 617428-078 |
| <b>Eff. date</b>    | 07-08-2024 |
| <b>CD Diagram</b>   | 416820-002 |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 3#4,6#6    |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 06-06-2014 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>KVA Code</b>                      | <b>G</b>                     |
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b> |
| <b>Max Speed</b>                     | <b>1800 rpm</b>              |
| <b>Motor Lead Quantity/Wire Size</b> | <b>3 @ 4 AWG</b>             |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>A36062M</b>               |
| <b>Mounting Arrangement</b>          | <b>F2</b>                    |
| <b>Number of Poles</b>               | <b>6</b>                     |
| <b>Overall Length</b>                | <b>33.48 IN</b>              |
| <b>Power Factor</b>                  | <b>80</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>2.375 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>No Slinger</b>            |
| <b>Speed</b>                         | <b>1190 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**
**NP3979LUA**

|               |   |                           |              |               |      |        |      |              |      |        |       |      |       |               |      |   |
|---------------|---|---------------------------|--------------|---------------|------|--------|------|--------------|------|--------|-------|------|-------|---------------|------|---|
| CAT #         |   | EFM4308T                  |              |               |      | SER    |      |              |      | CC     |       | 010A |       |               |      |   |
| SPEC          |   | A36-5525-1194             |              |               |      | RATING |      | 40C AMB-CONT |      |        |       |      |       |               |      |   |
| HZ            |   | VOLTS                     |              | AMPS          |      | RPM    |      | HP           | CODE | -      | SF    | DES  | PF    | NEMA NOM. EFF |      |   |
| 60            |   | 230/460                   |              | 99.6/49.8     |      | 1190   |      | 40           | G    |        | 1.15  | B    | 80    | %             | 94.1 | % |
|               |   | -                         |              |               |      |        |      |              |      |        |       |      |       | %             |      | % |
| PH            | 3 | CL                        | F            | MAX CORR KVAR |      | 12     |      |              |      |        |       |      |       |               |      |   |
| BRG           |   | DE                        | 6313         | ODE           | 6313 | ENCL   | TEFC | FR           | 364T |        |       |      | IP54  |               |      |   |
| GREASE        |   | POLYREX EM                |              |               |      |        |      |              |      | MTR WT |       | 855  | LBS   |               |      |   |
| USABLE AT     |   | 50HZ 30HP 190/380V 98/49A |              |               |      |        |      |              |      | SF1.0  |       |      |       |               |      |   |
| INVERTER DUTY |   | CT                        | 15-60        | HZ            | 4:1  | VT     | 3-60 | HZ           | 20:1 | CHP    | 60-90 | HZ   | 1.5:1 | 1.0 SF VPWM   |      |   |
| MAX RPM       |   | 1800                      | SFA 113/56.3 |               |      |        |      |              |      |        |       |      |       |               |      |   |
|               |   |                           |              |               |      |        |      |              |      |        |       |      |       |               |      |   |

**Parts List**

| Part number | Description                             | Quantity |
|-------------|-----------------------------------------|----------|
| SA282175    | SA A36-5525-1194                        | 1.000 ea |
| RA268484    | RA A36-5525-1194                        | 1.000 ea |
| 000692000VD | LABEL WARNING                           | 1.000 ea |
| NP3979LUA   | SS SUPER-E UR CSA-C-US-EEV NEMA PREM CC | 1.000 ea |
| 421948032   | LABEL, MYLAR                            | 1.000 ea |
| 004824015A  | GREASE POLYREX EM                       | 0.544 lb |
| 032018008AK | HHCS 1/4-20X1 PLATED                    | 4.000 ea |
| 032018012DK | HHCS 1/2-13X1-1/2 PLTD. 032018012DR     | 4.000 ea |
| 032018024CK | HHCS 3/8-16X3 PLTD.                     | 3.000 ea |
| 034180012DA | KEY 1X4X1/4X1-1/2 L                     | 1.000 ea |
| 034530052AB | P/NIP 1/8X6-1/2 Zinc                    | 1.000 ea |
| 035000001A  | ALFTG 1/8" 1610-BL                      | 1.000 ea |
| 034690002AB | PPLG 1/4" PLTD.                         | 1.000 ea |
| 078550001M  | FAN KB 60/30 (30) 360                   | 1.000 ea |
| 078559001A  | +FANCV - 360                            | 1.000 ea |
| 085922073B  | BRKT 360 085922072WCC KB                | 1.000 ea |
| 410700004F  | WSHR                                    | 1.000 ea |
| 415072001B  | CLAMP                                   | 1.000 ea |
| 415096002A  | CPLG 1/8 HEX TYPE                       | 1.000 ea |
| 412118006A  | DRAIN                                   | 1.000 ea |
| 412118006A  | DRAIN                                   | 1.000 ea |
| 032018012DK | HHCS 1/2-13X1-1/2 PLTD. 032018012DR     | 4.000 ea |
| 032018024CK | HHCS 3/8-16X3 PLTD.                     | 3.000 ea |
| 035000001A  | ALFTG 1/8" 1610-BL                      | 1.000 ea |
| 034690002AB | PPLG 1/4" PLTD.                         | 1.000 ea |
| 415045002E  | SLGR                                    | 1.000 ea |
| 085922073B  | BRKT 360 085922072WCC KB                | 1.000 ea |
| 032018005AK | HHCS 1/4-20X5/8 PLATED                  | 4.000 ea |
| 032018008CK | HHCS 3/8-16X1L PLATED                   | 4.000 ea |
| 043292000AJ | GASK 320-400                            | 1.000 ea |
| 077176000L  | C/BOX, PAINTED 440                      | 1.000 ea |

|             |                                       |          |
|-------------|---------------------------------------|----------|
| 077176001A  | CBOX Cover 360-400                    | 1.000 ea |
| 402731001A  | GASK 360-440                          | 1.000 ea |
| 406099000A  | PLUG - FAN COVER 320-440              | 1.000 ea |
| 415000115H  | T/LUG #2AWG-4/0AWG                    | 1.000 ea |
| MG1025Y17   | WILKOFAS, 789.701, SUPER E PEARL GOLD | 0.250 ga |
| 033775004EA | DRSCR #6-1/4 304 S.S.                 | 2.000 ea |
| 034180034HA | KEY 5/8X5/8X4-1/4 L                   | 1.000 ea |
| 032509020C  | CARRIAGE BOLT - 360                   | 3.000 ea |
| HW1000A32   | 5/16 FL WASHER WIDE,ID=.344,OD=1.125  | 3.000 ea |
| 032018005DL | 1/2-13 X 5/8 SILICON BRONZE HHCS      | 1.000 ea |
| 14PA1000    | PACKAGING 314 GROUP COMBINED PRINT    | 1.000 ea |

## AC Induction motor performance data

Record #93159 - Typical performance - not guaranteed values

|           |           |
|-----------|-----------|
| Winding   | A36WG1194 |
| Type      | A3662M    |
| Enclosure | TEFC      |

## Nameplate data

|                |             |              |    |
|----------------|-------------|--------------|----|
| Rated Output   | 40          |              |    |
| Volts          | 230 / 460   |              |    |
| Full Load Amps | 99.6 / 49.8 |              |    |
| R.P.M.         | 1190        |              |    |
| Hz             | 60          | Phase        | 3  |
| KVA Code       | G           |              |    |
| S.F.           | 1.15        |              |    |
| NEMA Nom. Eff. | 94.1        | Power Factor | 80 |
| Duty           | CONT        |              |    |
| S.F. Amps      |             |              |    |

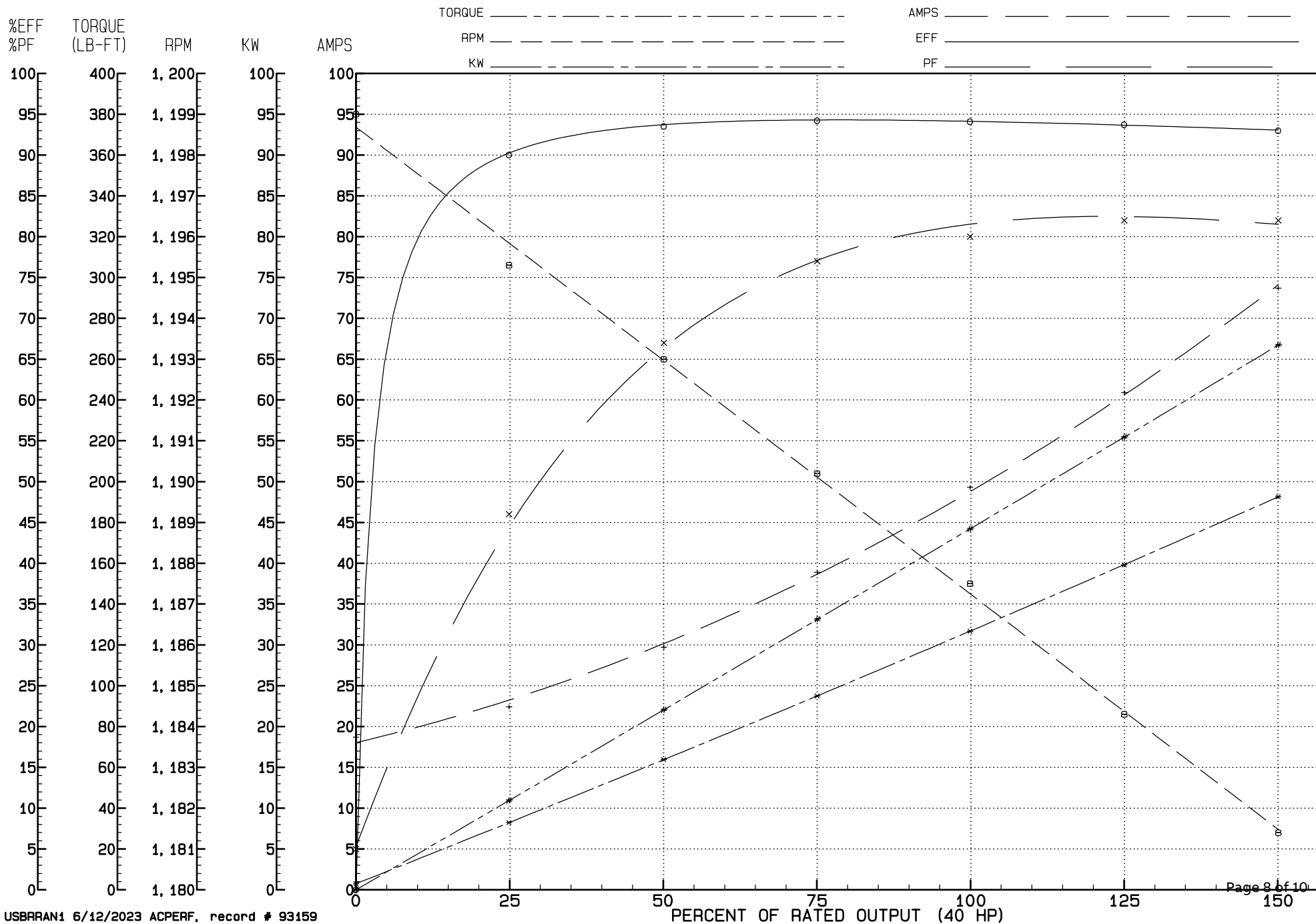
## 460 V. 60 Hz:

## High Voltage Connection

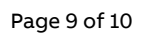
|                           |                |
|---------------------------|----------------|
| Full Load Torque          | 176.8 LB-FT    |
| Start Configuration       | direct on line |
| Breakdown Torque          | 514 LB-FT      |
| Pull-up Torque            | 266 LB-FT      |
| Locked-rotor Torque       | 335 LB-FT      |
| Starting Current          | 312 A          |
| No-load Current           | 18.7           |
| Line-line Res. @ 25°C     | 0.14922 Ω      |
| Temp. Rise @ Rated Load   | 43°C           |
| Temp. Rise @ S.F. Load    | 51°C           |
| Locked-rotor Power Factor | 25.4           |
| Rotor inertia             | 0              |

## Load Characteristics 460 V, 60 Hz, 40 HP

| % of Rated Load | NL   | 25     | 50   | 75     | 100    | 125    | 150    | SF   |
|-----------------|------|--------|------|--------|--------|--------|--------|------|
| Power Factor    | 5    | 46     | 67   | 77     | 80     | 82     | 82     | 81   |
| Efficiency      | 0    | 90     | 93.5 | 94.2   | 94.1   | 93.7   | 93     | 93.9 |
| Speed           | 1199 | 1195.3 | 1193 | 1190.2 | 1187.5 | 1184.3 | 1181.4 | 1186 |
| Line amperes    | 18.7 | 22.4   | 29.7 | 38.9   | 49.3   | 60.9   | 73.7   | 56.3 |

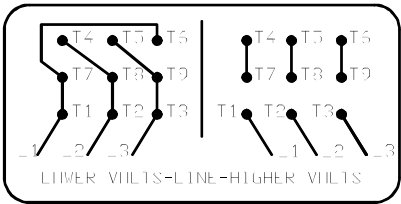
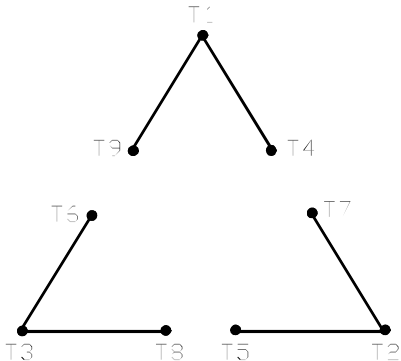






416820-002

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