

# **ABB BALDOR RELIANCE III**

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## **Customer information packet** CD2003R-2

3HP 1750/2300 240/240V C1811ATCZ SPG

**Specifications**

|                                 |                       |
|---------------------------------|-----------------------|
| <b>Armature Voltage</b>         | 240 V                 |
| <b>Base Speed</b>               | 1750 rpm              |
| <b>Enclosure</b>                | DP                    |
| <b>Field Voltage</b>            | 240 V                 |
| <b>Frame</b>                    | C1811ATCZ             |
| <b>Output Power</b>             | 3.000 HP              |
| <b>Agency Approvals</b>         | CCSA US               |
| <b>Ambient Temperature</b>      | 40 °C                 |
| <b>Armature Current</b>         | 11.0 a                |
| <b>Drip Cover</b>               | No Drip Cover         |
| <b>Duty Rating</b>              | CONT                  |
| <b>Feedback Device</b>          | NO FEEDBACK           |
| <b>Field Winding Type</b>       | STAB SHUNT            |
| <b>Frame Prefix</b>             | C                     |
| <b>Heater Indicator</b>         | No Heater             |
| <b>Insulation Class</b>         | F                     |
| <b>Lifting Lugs</b>             | Standard Lifting Lugs |
| <b>Motor Standards</b>          | NEMA                  |
| <b>Mounting Arrangement</b>     | F1                    |
| <b>Overall Length</b>           | 26.50 IN              |
| <b>Service Factor</b>           | 1.00                  |
| <b>Shaft Diameter</b>           | 1.125 IN              |
| <b>Shaft Ground Indicator</b>   | No Shaft Grounding    |
| <b>Shaft Slinger Indicator</b>  | No Slinger            |
| <b>Thermal Device - Bearing</b> | None                  |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | -          |
| <b>Type</b>         | DC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | G2201C B   |
| <b>Layout</b>       | 609980-023 |
| <b>Eff. date</b>    | 12-13-2019 |
| <b>CD Diagram</b>   | 406770-001 |
| <b>Poles</b>        | 00         |
| <b>Leads</b>        |            |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 12-12-2019 |

**Nameplate**

| 000613006HP     |            |                   |            |      |       |      |    |  |  |
|-----------------|------------|-------------------|------------|------|-------|------|----|--|--|
| CAT.NO.         | CD2003R-2  | SPEC NO.          | T18S1009   |      |       |      |    |  |  |
| FR              |            | HP                | 3          | DUTY |       | CONT |    |  |  |
| ENCL.           | DP         | RPM               | 1750/2300  |      | S.F.  | 1.0  |    |  |  |
| ENCL MOD        | GUARDED    | VOLTS             | 240        |      | INSUL |      | F  |  |  |
| MAX SAFE SPEED  | 2450       | AMPS              | 11.00      |      | AMB.  | 40   |    |  |  |
| FIELD DATA      |            | SER.NO.           |            |      |       |      |    |  |  |
| WINDING         | STAB SHUNT | POWER CODE        | C          |      |       |      |    |  |  |
| VOLTS           | 240        | D.E. BRG.         | 40BC02J30X |      |       |      |    |  |  |
| MAX AMPS @ 25 C | .99        | O.D.E. BRG.       | 30BC02J30X |      |       |      |    |  |  |
| HOT AMPS        | .74/.38    | MIN. AMB.         | 0          |      | TYPE  |      | TR |  |  |
|                 |            | BRUSH:419904051AB |            |      |       |      |    |  |  |
|                 |            | SPLASHPROOF       |            |      |       |      |    |  |  |

**Parts List**

| <b>Part number</b> | <b>Description</b>                       | <b>Quantity</b> |
|--------------------|------------------------------------------|-----------------|
| SA377000           | SA T18S1009                              | 1.000 ea        |
| AA018219           | AA T18S1009                              | 1.000 ea        |
| 000692000FS        | WARNING LABEL                            | 1.000 ea        |
| 000692000FP        | NP, WARNING LIFT INSTRUCTIONS            | 1.000 ea        |
| 033775004EA        | DRSCR #6-1/4 304 S.S.                    | 8.000 ea        |
| 000613006HP        | NAMEPLATE - RPM III D-C MOTOR W/CSA LOGO | 1.000 ea        |
| 422908009B         | SLVNG EXTRA SLVG LENGT                   | 28.000 ea       |
| 609844004A         | LEAD SHELF                               | 1.000 ea        |
| 036170006EA        | DRSCW METRIC NAMEPLATE                   | 2.000 ea        |
| 609848010A         | INSUL, LEAD SHELF                        | 1.000 ea        |
| 034180008EA        | KEY 5/16X5/16X1 L                        | 1.000 ea        |
| 417735001A         | SLEEVE                                   | 1.000 ea        |
| 036000025HB        | HHCS M6-1.0X25L PLTD.                    | 4.000 ea        |
| 036610008AB        | METRIC LCKW M6 PLTD-G508                 | 4.000 ea        |
| 036600008AB        | MFWSH M6 PLATED                          | 4.000 ea        |
| 036501008AB        | KPNUT M6-1.0 ZINCPLTED                   | 4.000 ea        |
| 036000030HB        | MHHCSM6-1.0X30MMPLTD-250                 | 4.000 ea        |
| 036601008AB        | M6 FLAT WASHER                           | 4.000 ea        |
| 036000012HB        | HHCS M6X12MM LONG PLATED                 | 2.000 ea        |
| 419904051AB        | BRUSH EXTRUDER DUTY C                    | 2.000 ea        |
| 706372003B         | ROCKR                                    | 1.000 ea        |
| 706364051AA        | BRHLD METRIC SPRING CHG.                 | 2.000 ea        |
| 801758052A         | BRKT,ODE,C180                            | 1.000 ea        |
| 801759054A         | BRKT,DE,C180                             | 1.000 ea        |
| 004824015A         | GREASE POLYREX EM                        | 0.100 lb        |
| 036000060JB        | M8-1.25 X 60MM HXHD CSCR                 | 2.000 ea        |
| 036000050HB        | MHHCS M6X50MM PLATED                     | 2.000 ea        |
| 406055001B         | GRFTG                                    | 1.000 ea        |
| 400638001E         | WWSHR (Customer number 43699)            | 1.000 ea        |
| 418150003A         | GREASE FITTING CAP                       | 2.000 ea        |
| 035000001A         | ALFTG 1/8" 1610-BL                       | 1.000 ea        |

|             |                                   |          |
|-------------|-----------------------------------|----------|
| 035000001A  | ALFTG 1/8" 1610-BL                | 1.000 ea |
| 034693001AB | PPLG - G508- use 034692001AB      | 1.000 ea |
| 034693001AB | PPLG - G508- use 034692001AB      | 1.000 ea |
| 036500009AB | METRIC NUTM8-1.25PLTD-360         | 4.000 ea |
| 036500009AB | METRIC NUTM8-1.25PLTD-360         | 4.000 ea |
| 609830005K  | TBOLT METRIC RP609830-            | 4.000 ea |
| 415000103G  | TLUG                              | 1.000 ea |
| 417733001A  | GSK C/ BOX BASE                   | 1.000 ea |
| 418018074A  | GROUND LABEL G100 METRIC 160 D.C. | 1.000 ea |
| 036620009AB | M8 EXTERNAL LK WASHER             | 1.000 ea |
| 036000012JB | M8-1.25 X 12MM HXHDC              | 1.000 ea |
| 032018004CK | HHCS 3/8-16X1/2L PLATED           | 4.000 ea |
| 422919167   | CVRKT BE                          | 1.000 ea |
| 422919160   | HHCVR KIT,C180,DE,LOUVERED        | 1.000 ea |
| 422919167   | CVRKT BE                          | 1.000 ea |
| 422919172   | HHCVR KIT,C180,ODE,SOLID          | 1.000 ea |
| 422919174   | CVRKT FE                          | 1.000 ea |
| 422919173   | HHCVR KIT,C180,ODE,LOUVERED       | 1.000 ea |
| 422919174   | CVRKT FE                          | 1.000 ea |
| 706320003A  | CONDUIT BOX                       | 1.000 ea |
| 075451000A  | COVER, CONDUIT BOX                | 1.000 ea |
| 065530000B  | GASK                              | 1.000 ea |
| 036000012HB | HHCS M6X12MM LONG PLATED          | 2.000 ea |
| 036000012JB | M8-1.25 X 12MM HXHDC              | 4.000 ea |
| 406770001   | C/D TAG (STAB SHUNT)              | 1.000 ea |
| 706305020A  | GUARD, SHAFT                      | 1.000 ea |
| 034180014DA | KEY 1/4X1/4X1-3/4 L               | 1.000 ea |
| 000640000P  | TAG WINDING THERMOST              | 1.000 ea |
| 000692000NF | NP 2POLE METRIC LABEL             | 1.000 ea |
| 004824007K  | SPECIAL PAINT                     | 0.100 ea |

## 609980-023

ACCESSORIES: PROVISION FOR  
TACHOMETER MOUNTING  
ONLY WHEN SPECIFIED

3/8-16 TAP  
.75 DEEP  
4 HOLES

4.500  $\pm$ .000  
-.003 DIA.

45°

5.88 DIA.  
B.C.

MOTOR SHAFT TAPPED  
FOR SCREW IN  
STUB SHAFT

2.25

.188 X .188  
X 1.00 KEY

.6250  $\pm$ .0005  
DIA.

STUB SHAFT SUPPLIED  
ONLY WHEN SPECIFIED

GUARD

FN

FN-FW  
(7)

FV

FU

GUARD

BS

FK

2F

B

Y

C

T

BB

AH

N

V

AK

U  
(9)

BD

N-W

BA

BK

K

AB

AC

BF TAP  
4 HOLES

45°

AA  
SEE  
NOTE (3)

J

G

E

A

D

H  
DI

FR

U

U

DIMENSIONS ARE IN INCHES

DIMENSIONS ARE IN INCHES

| FRAME     | C(10) | B     | BS    | 2F    | DRIVE END SHAFT AND KEY (9) |      |      |        |      |      |     | OPPOSITE DRIVE END SHAFT AND KEY (7) |      |       |        |      |       |     | WT. LBS. |       |
|-----------|-------|-------|-------|-------|-----------------------------|------|------|--------|------|------|-----|--------------------------------------|------|-------|--------|------|-------|-----|----------|-------|
|           |       |       |       |       | AH                          | N    | N-W  | UX(2)  | V    | R(4) | SQ. | LGTH                                 | FN   | FN-FW | FUX(2) | FV   | FR(4) | SQ. |          | LGTH. |
| C181ATCZ  | 24.06 | 14.00 | 11.00 | 12.50 | 2.62                        | 3.12 | 2.88 | 1.1250 | 2.62 | .986 | 250 | 1.75                                 | 2.44 | 2.25  | 1.1250 | 2.00 | .986  | 250 | 1.38     | 180   |
| C181PATCZ | 25.56 | 15.50 | 12.50 | 14.00 | 2.62                        | 3.12 | 2.88 | 1.1250 | 2.62 | .986 | 250 | 1.75                                 | 2.44 | 2.25  | 1.1250 | 2.00 | .986  | 250 | 1.38     | 215   |

| CAST IRON TERMINAL BOX DIMENSIONS |             |               |       |     |      |      |      |                |          |                 |       |      |      |      |          |                |
|-----------------------------------|-------------|---------------|-------|-----|------|------|------|----------------|----------|-----------------|-------|------|------|------|----------|----------------|
| FRAME                             | MAX<br>AMPS | STANDARD SIZE |       |     |      |      |      | PART<br>NUMBER |          | ONE SIZE LARGER |       |      |      |      |          | PART<br>NUMBER |
|                                   |             | AA(6)         | AB    | AC  | AD   | X    | Y    | AA(6)          | AB       | AC              | AD    | X    | Y    |      |          |                |
| C180A1C2                          | 6           | 3/4           | 1     | 3/8 | 7/8  | 2.50 | 6.00 | 5.75           | 705029-5 | 1               | 9/8   | 7/8  | 2.50 | 5.00 | 5.75     | 705028-5       |
|                                   | 10          | 1             | 3/8   | 7/8 | 2.50 | 6.00 | 5.75 | 705029-7       | 1-1/2    | 10/31           | 7/8   | 3.00 | 6.00 | 7.00 | 705029-5 |                |
|                                   | 16          | 1-1/2         | 1     | 3/8 | 7/8  | 2.50 | 6.00 | 5.75           | 705029-9 | 2               | 10/31 | 7/8  | 3.00 | 6.00 | 7.00     | 705029-5       |
|                                   | 40          | 1-1/2         | 10/31 | 7/8 | 3    | 6.00 | 7.00 | 705029-9       | 2        | 10/31           | 7/8   | 3.00 | 6.00 | 7.00 | 705029-9 |                |

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|                                           |                              |                   |
|-------------------------------------------|------------------------------|-------------------|
| REV. DESC: REVISE "D" DIMENSION TOLERANCE |                              |                   |
| REV. LTR: B                               | VERSION: 02                  | TDR: 000001150521 |
| FILE: \RGG\00030\981                      | REVISED: 12:00:27 10/06/2020 | BY: RGGNAS        |
| MTL: -                                    |                              |                   |

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COMPOUND OR GEARED MACHINES.
- (2) "U" AND "F" VARY +.0005, -0.0000
- (3) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.  
FOR "X/P" TERMINAL BOX DIMENSIONS SEE 609989-1  
FOR "Y" TERMINAL BOX DIMENSIONS SEE 609989-2
- (4) "R" AND "FR" VARY +.00, -0.015.
- (5) AA CONDUIT, TERMINAL BOX PROVIDED WITH DOUBLE KNOCKOUT.
- (6) AA PIPE TAP
- (7) "K" VARY +.0005, -0.0000  
"AK" VARIOUS +.000, -0.003.
- (8) FACE RUNOUT AND ECCENTRICITY .004 MAX. T. I. R.
- (9) DRIVE END SHIM EXTENSION  
180T AC MOTOR SHAT EXTENSION.
- (10) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DRP, DRIVE END ADD .25 TO "C" DIM. FOR BRACKET COVER.

TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2,  
W-1, W-4, W-5, W-7 OR C-1 MOUNTING IS SPECIFIED.  
BOX LOCATED ON TOP WHEN SPECIFIED.

MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED,  
CONSULT FACTORY.

609980-023

T18S1009: C1811ATCZ,3HP,1750RPM,240,240,DPG,F1

