ABB BALDOR RELIANCE

# Customer information packet

CD2003R-2

3HP 1750/2300 240/240V C1811ATCZ SPG

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11/15/2026 5:10:53 AM

## Specifications

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

## Part Detail

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

609980-023

# INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

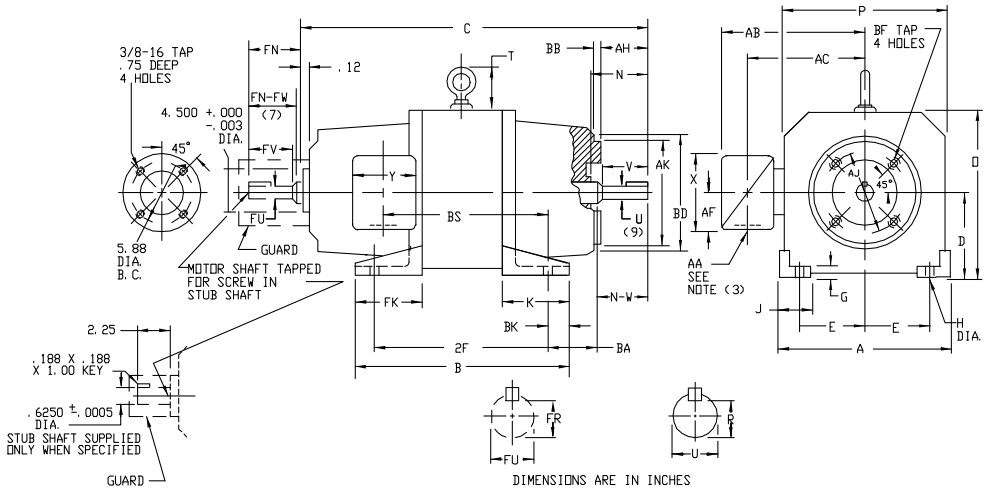
ENCLOSURE: DRIP-PROOF FULLY-GUARDED
SPLASHPROOF, TOTALLY ENCLOSED

MOUNTING: FOOT,NEMA AC "C" FACE
METHOD OF DRIVE:COUPLED OR BELTED

COOLING: SELF-VENTILATED
NON-VENTILATED

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

## FRAMES C180ATCZ




(1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
(2) "U" AND "FU" VARY +.0000 -.0005
(3) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
FOR "X/P" TERMINAL BOX DIMENSIONS SEE 609989-1.
FOR MILL TYPE TERMINAL BOX DIMENSIONS SEE 609989-2.
(4) "R" AND "FR" VARY +.000, -.015.
(5) AA CONDUIT, TERMINAL BOX PROVIDED WITH DOUBLE KNOCKOUT.
(6) AA PIPE TAP
(7) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
(8) "AK" VARIES +.000, -.003.
FACE RUNOUT AND ECCENTRICITY .004 MAX. T.I.R.
(9) DRIVE END SHAFT DIMENSIONS PER 180T AC MOTOR SHAFT EXTENSION.
(10) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF OPP. 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.

DIMENSIONS ARE IN INCHES

| FRAME | A | D(1) | E | G | H | J | O | P | T | BA | K | FK | BK | BB | BD | BF TAP | BF TAP "DEPTH" | AJ | AK(8) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C1811ATCZ-C1812ATCZ | 9.00 | 4.50 | 3.75 | .31 | .44 | 1.50 | 8.88 | 8.75 | 1.88 | 2.75 | 4.38 | 4.38 | .50 | .25 | 8.75 | 1/2-13 | .88 | 7.25 | 8.500 |

| FRAME | C(10) | B | BS | 2F | DRIVE END SHAFT AND KEY (9) AH | N | N-W | U(2) | V | R(4) | SQ. | LGTH | OPPOSITE DRIVE END SHAFT AND KEY (7) FN | FN-FW | FU(2) | FV | FR(4) | SQ. | LGTH. | WT. LBS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C1811ATCZ | 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 |
| C1812ATCZ | 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 |

STEEL TERMINAL BOX DIMENSIONS

| FRAME | MAX. AMPS | STANDARD SIZE AA(5) | AB | AC | AF | X | Y | PART NUMBER | ONE SIZE LARGER AA(5) | AB | AC | AF | X | Y | PART NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C180ATCZ | 40 | 3/4 & 1" | 7.31 | 5.75 | 1.94 | 4.38 | 5.00 | 705028-1-R | 1-1/4 & 1-1/2 | 8.31 | 6.31 | 2.50 | 5.50 | 6.12 | 705029-1-R |
| | 96 | 1-1/4 & 1-1/2 | 8.31 | 6.31 | 2.50 | 5.50 | 6.12 | 705029-1-R | 2" & 2-1/2 | 9.44 | 6.69 | 3.19 | 7.00 | 7.62 | 705030-1-R |

CAST IRON TERMINAL BOX DIMENSIONS

| FRAME | MAX AMPS | STANDARD SIZE AA(6) | AB | AC | AF | X | Y | PART NUMBER | ONE SIZE LARGER AA(6) | AB | AC | AF | X | Y | PART NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C180ATCZ | 18 | 3/4 | 9.38 | 7.38 | 2.50 | 5.00 | 5.75 | 705028-2-S | 1 | 9.38 | 7.38 | 2.50 | 5.00 | 5.75 | 705028-2-T |
| | 40 | 1 | 9.38 | 7.38 | 2.50 | 5.00 | 5.75 | 705028-2-T | 1-1/2 | 10.31 | 7.88 | 3.00 | 6.00 | 7.00 | 705029-2-R |
| | 96 | 1-1/2 | 10.31 | 7.88 | 3.00 | 6.00 | 7.00 | 705029-2-R | 2 | 10.31 | 7.88 | 3.00 | 6.00 | 7.00 | 705029-2-S |

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

| | | |
|---|---|---|
| REV. DESC: REVISE "D" DIMENSION TOLERANCE | | BALDOR - RELIANCE® |
| REV. LTR: B | VERSION: 02 | TDR: 000001150521 |
| FILE: \RGG\00030\981 | REVISED: 12:00:27 10/06/2020 | BY: RGGNAS |
| MTL: – | | DIMENSION DRAWING,C180ATCZ,TENV,DPP,FOOT MTG.,NEMA AC C-FACE |
| | | SH 1 of 1 |

609980-023

406770–001

406770–001

# CONNECTION DIAGRAM
## D-C MOTOR - STAB. SHUNT




ARMATURE AND FIELD EXTERNAL CONNECTIONS
WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS




ROTATION FACING COMMUTATOR END

1. CAUTION — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL SERIES FIELD IS MARKED S3 AND S4. FOR CUMULATIVE SERIES FIELD, CONNECT S3 TO S2 AND CONNECT S4 TO NEGATIVE. FOR DIFFERENTIAL SERIES FIELD CONNECT S4 TO S2 AND S3 TO NEGATIVE.
3. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
4. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
5. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
6. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, &TD3
7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
8. WARNING — MOTOR MUST BE GROUNDED TO PREVENT SERIOUS INJURIES TO PERSONNEL. GROUND THE MOTOR PER IEC, NATIONAL ELECTRICAL CODE AND ANY APPLICABLE LOCAL ELECTRICAL CODES. A TAPPED HOLE IS PROVIDED IN THE CONDUIT BOX, ON THE FOOT. FRAME BRACE OR OPPOSITE DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER _____ CUSTOMER
ORDER NO. _____ RELIANCE
S.O. NO. _____

| | | |
|---|---|---|
| REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8 | | |
| REV. LTR: A | VERSION: 01 | TDR: 000000970330 |
| FILE: \RSN\00026\422 | REVISED: 10:19:12 03/11/2016 | BY: RAGTBM |
| MTL: – | | |

BALDOR

D–C MOTOR CONNECTION DIAGRAM STAB. SHUNT

SH 1 of 1