

ABB BALDOR RELIANCE III

Customer information packet D5050R-BV

50HP, 1750RPM, DC, 2115ATZ, DPG-FV,

Specifications

| | |
|---------------------------------|-------------------------|
| Enclosure | DP |
| Frame | LC2115ATZ |
| Frame Material | Steel |
| Output Power | 50.000 HP |
| Agency Approvals | CCSA US |
| Ambient Temperature | 40 °C |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Drip Cover | No Drip Cover |
| Feedback Device | NO FEEDBACK |
| Field Winding Type | STR. SHUNT |
| Frame Prefix | LC |
| Heater Indicator | No Heater |
| Lifting Lugs | Standard Lifting Lugs |
| Motor Standards | NEMA |
| Mounting Arrangement | F1 |
| Overall Length | 35.25 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Slinger Indicator | No Slinger |

Part Detail

| | |
|---------------------|------------|
| Revision | B |
| Type | DC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | G8475A B |
| Layout | 616002-001 |
| Eff. date | 10-09-2025 |
| CD Diagram | 406770-006 |
| Poles | 00 |
| Leads | |
| Proprietary | False |
| Created date | 04-09-2015 |

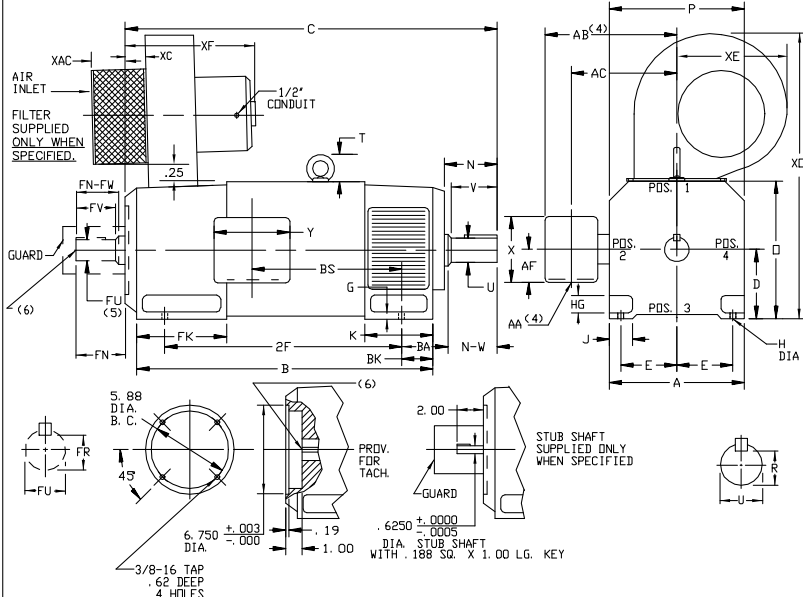
Nameplate

| 000613006HP | | | | | |
|------------------------|-------------------|--------------------|------------|--------------|------|
| CAT.NO. | D5050R-BV | SPEC NO. | T21T2354 | | |
| FR | LC 2115ATZ | HP | 50 | DUTY | CONT |
| ENCL. | DP | RPM | 1750/2100 | S.F. | 1.0 |
| ENCL MOD | FORCE VENT | VOLTS | 500 | INSUL | F |
| MAX SAFE SPEED | 04500 | AMPS | 87.00 | AMB. | 40 |
| | FIELD DATA | SER.NO. | | | |
| WINDING | STR. SHUNT | POWER CODE | C | | |
| VOLTS | 300 | D.E. BRG. | 50BC03J30X | | |
| MAX AMPS @ 25 C | 3.95 | O.D.E. BRG. | 45BC02J30X | | |
| HOT AMPS | 2.85/2.36 | MIN. AMB. | 0 | TYPE | TR |
| | BRUSH:419904051AC | | | | |

616002-001

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED
COOLING: FORCE VENTILATED
WITH INTEGRAL
BLOWER AND MOTOR
ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED
FRAMES SC2113ATZ THRU LC2115ATZ



DIMENSIONS ARE IN INCHES

| FRAME | XAC | XC | XE | XF | XO |
|---------------------|------|------|-------|-------|-------|
| SC2113ATZ-LC2115ATZ | 7.75 | 2.25 | 10.00 | 16.00 | 22.75 |

| FRAME | A | D(1) | E | G | H | HG | J | O | P | T | BA | K | FK | BK |
|---------------------|-------|------|------|-----|-----|------|------|-------|-------|------|------|------|------|------|
| SC2113ATZ-LC2115ATZ | 10.25 | 5.25 | 4.25 | .44 | .44 | 1.38 | 1.75 | 10.44 | 10.31 | 2.08 | 3.50 | 5.19 | 6.81 | 2.38 |

| FRAME | C(7) | B | BS | 2F | DRIVE END SHAFT AND KEY | | | | | | | OPPOSITE DRIVE END SHAFT AND KEY(5) | | | | | WT. LBS. | | |
|-----------|-------|-------|-------|-------|-------------------------|------|-------|------|-------|------|-------|-------------------------------------|-------|-------|------|-------|----------|------|-------|
| | | | | | N | N-W | U(2) | V | R(3) | SO. | LGTH. | FN | FN-FW | FU(2) | FV | FR(3) | | SO. | LGTH. |
| SC2113ATZ | 28.38 | 22.50 | 11.38 | 18.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | .500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | .375 | 2.25 | 345 |
| MC2113ATZ | 29.62 | 23.75 | 12.62 | 18.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | .500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | .375 | 2.25 | 370 |
| LC2113ATZ | 31.25 | 25.38 | 14.25 | 18.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | .500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | .375 | 2.25 | 400 |
| MC2115ATZ | 32.50 | 26.62 | 15.50 | 22.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | .500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | .375 | 2.25 | 425 |
| LC2115ATZ | 35.25 | 29.38 | 18.25 | 22.00 | 4.00 | 3.75 | 1.875 | 3.50 | 1.591 | .500 | 2.50 | 3.50 | 3.25 | 1.625 | 3.00 | 1.416 | .375 | 2.25 | 480 |

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
 - (2) "U" AND "FU" VARY-----+.000 -.001
 - (3) "R" AND "FR" VARY-----+.000 -.015
 - (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". REFER TO BDX D/S. (STD. 609959-1, "X/P" 609959-2, MILL 609959-3)
 - (5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
 - (6) MOTOR SHAFT TAPPED FOR SCREW-IN STUB SHAFT.
 - (7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DPP, DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER.
- TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, V-5, V-7, OR C-1 MOUNTING IS SPECIFIED. BDX LOCATED ON TOP WHEN SPECIFIED.
BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, OR 4, EXCEPT BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION.
MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

616002-001

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

| | | |
|--------------------------|------------------------------|-------------------|
| REV. DESC: LOADED TO BUS | VERSION: 00 | TDR: 000000578087 |
| REV. LTR: - | REvised: 08:22:49 01/28/2011 | BY: CONNAS |
| FILE: \RGG\00015\944 | | |
| MTL: - | | |

BALDOR

DIMENSION DRAWING, SC2113ATZ - LC2115ATZ, DPP, FOOT MTG

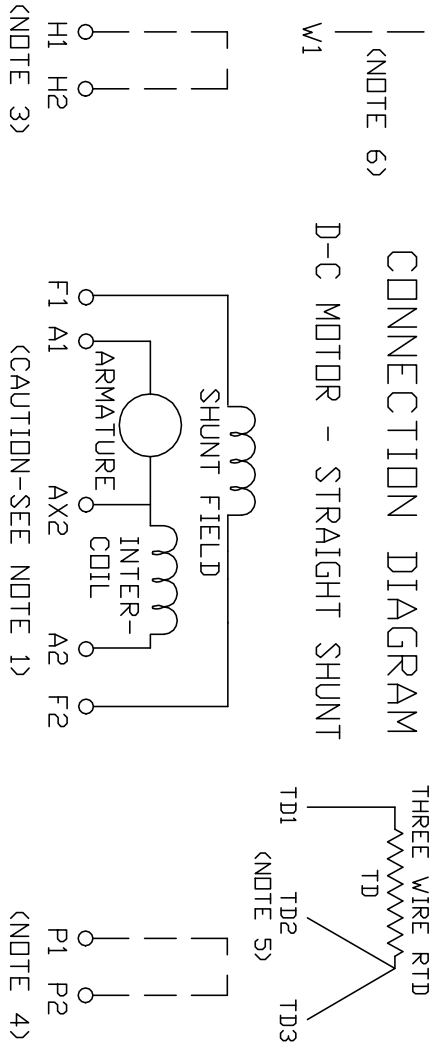
SH 1 of 1

406770-006

406770-006

CONNECTION DIAGRAM

(NOTE 6)
W1
D-C MOTOR - STRAIGHT SHUNT



ARMATURE AND FIELD EXTERNAL CONNECTIONS
WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS



ROTATION FACING COMMUTATOR END

1. **CAUTION** — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
4. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
5. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3.
6. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
7. **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 OPPOSITE DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER _____ RELIANCE
ORDER NO. _____ S.D. NO. _____

| | | |
|--|--------------------------------|-------------------|
| REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS | | |
| REV. LTR: - | VERSION: 00 | TDR: 000000781086 |
| FILE: \RSN\00026\515 | REVISED: 02: 41: 08 02/01/2013 | |
| MTL: - | BY: MGHPC | |

BALDOR

D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT
SH 1 of 1