

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **D2015R-BV**

**15HP,1750RPM,DC,2113ATZ,DPG-FV,**

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| Part Detail       |            |                |             |
|-------------------|------------|----------------|-------------|
| Type:             | DC         | Prod. Type:    | TR          |
| Power Code:       | D          | Weight:        | 345         |
| Frame Group:      | SC 2113ATZ | Mounting Pos.: | F1          |
| HP:               | 15         | Enclosure:     | DPFV        |
| RPM:              | 1750/2300  | Wound:         | STR SHUNT   |
| Service Factor:   | 1.0        | Arm V:         | 240         |
| Arm A:            | 56.00      | Field V:       | 150         |
| Field A:          | 4.73       | Field A Hot:   | 3.41/2.24   |
| Insulation Class: | F          | Ambient:       | 40          |
| Duty:             | CONT       | DE Bearing:    | 50BC03J30X  |
| ODE Bearing:      | 45BC02J30X | Brushes:       | 419904-51AD |
| Brush Qty.:       |            |                |             |

616002-001

## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED,  
SPLASHPROOF

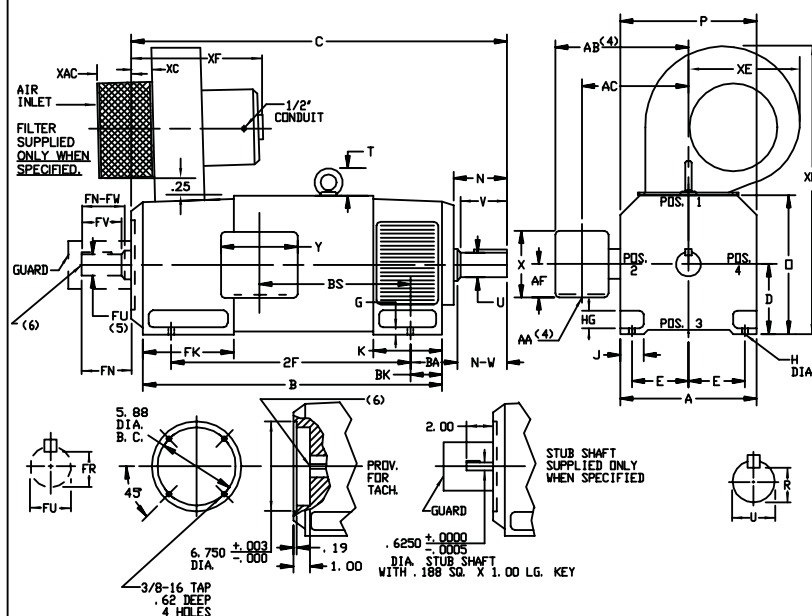
MOUNTING: FOOT

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 | 1.44 | 1.44 | 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(S) |      |      |       |       |      |       | VT.           |
|-----------|-------|-------|-------|-------|-------------------------|------|-------|------|-------|-------------------------------------|------|------|-------|-------|------|-------|---------------|
|           |       |       |       |       | N                       | N-W  | U(2)  | V    | R(3)  | SQ.                                 | LGTH | FN   | FN-FW | FU(2) | FV   | FR(3) |               |
| 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-----4.000 - .001  
 (3) "R" AND "FR" VARY-----4.000 - .015  
 (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". REFER TO BOX 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 OPP. 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. BOX 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.

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

616002-001



- | CUSTOMER | CUSTOMER ORDER NO. | RELANCE S.D. NO. |
|----------|--------------------|------------------|
| _____    | _____              | _____            |

CONNECTION  
DIAGRAM

406770-6

ORIGINAL AT RCC

|                                                                                                         |                |                                                                                                   |                         |                                                                       |                 |
|---------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------------------------------------------|-------------------------|-----------------------------------------------------------------------|-----------------|
| REL. S.O.                                                                                               | FRAME          | RATING                                                                                            | RPM                     | ARM. VOLTS                                                            | ARM. AMPS       |
|                                                                                                         | SC2113AT       | 15.0HP                                                                                            | 1750                    | 240                                                                   | 56.0            |
| WINDING TYPE                                                                                            |                |                                                                                                   |                         |                                                                       |                 |
|                                                                                                         | S.F.           | ENCL.                                                                                             | AMB °C/INSUL            | DUTY                                                                  | FIELD VOLTS     |
| STRAIGHT SHUNT                                                                                          | 1.0            | DEPV                                                                                              | 40/F                    | CONT                                                                  | 150             |
| POWER CODE                                                                                              |                |                                                                                                   |                         |                                                                       |                 |
|                                                                                                         | TYPE           | WK <sup>2</sup> (LB-FT <sup>2</sup> )                                                             | HOT ARM. CIR. RES.      | FLD. AMPS@25 °C                                                       | HOT FIELD RES   |
| 6/3 F 230-50-0                                                                                          | TR             | 2.329                                                                                             | .501                    | 4.73                                                                  | 43.8            |
| ARM. CIR. IND. (mH)                                                                                     |                |                                                                                                   |                         |                                                                       |                 |
|                                                                                                         | FIELD IND. (H) | COOLING AIR (CFM/IN H <sup>20</sup> )                                                             |                         | TURNS PER COIL SHUNT/SERIES                                           | TEST DATE       |
| 4.58                                                                                                    | 4.58           | 300/2.25                                                                                          |                         | 600/.00000                                                            | -               |
| LOAD PERFORMANCE                                                                                        |                |                                                                                                   |                         |                                                                       |                 |
| LOAD                                                                                                    | AMPERES        | TORQUE<br>IN LB.-FT.                                                                              | OUTPUT<br>IN HP         | RPM                                                                   | %<br>EFFICIENCY |
| NO LOAD                                                                                                 | 1.7            | 0                                                                                                 | 0                       | 1911                                                                  | 0               |
| 1/4                                                                                                     | 14             | 10.7                                                                                              | 3.81                    | 1865                                                                  | 70.8            |
| 2/4                                                                                                     | 28             | 22.7                                                                                              | 7.87                    | 1824                                                                  | 78.3            |
| 3/4                                                                                                     | 42             | 34.2                                                                                              | 11.6                    | 1788                                                                  | 79.8            |
| 4/4                                                                                                     | 56             | 45.2                                                                                              | 15.1                    | 1755                                                                  | 79.1            |
| O.L.                                                                                                    | 84             | 65.1                                                                                              | 21.2                    | 1709                                                                  | 75.3            |
| RPM VS. FIELD AMPS                                                                                      |                |                                                                                                   |                         |                                                                       |                 |
| FIELD AMPS                                                                                              | RPM N.L.       | RPM F.L.                                                                                          | Eg N.L.<br>@ BASE SPEED | Eg F.L.<br>@ BASE SPEED                                               |                 |
| 3.42                                                                                                    | 1911           | 1755                                                                                              | 218                     | 208                                                                   |                 |
| 3.12                                                                                                    | 2009           | 1852                                                                                              | 208                     | 197                                                                   |                 |
| 2.82                                                                                                    | 2121           | 1965                                                                                              | 197                     | 186                                                                   |                 |
| 2.53                                                                                                    | 2272           | 2109                                                                                              | 184                     | 173                                                                   |                 |
| 2.23                                                                                                    | 2474           | 2300                                                                                              | 169                     | 159                                                                   |                 |
| REMARKS: TYPICAL DATA      MAXIMUM SAFE SPEED = 4500      RPM<br>SPEED REGULATOR REQUIRED FOR STABILITY |                |                                                                                                   |                         |                                                                       |                 |
| <b>RELIANCE</b><br>    |                | DR. BY <u>B. GRANT</u><br>CK. BY <u>B. GRANT</u><br>APP. BY <u>T. EVON</u><br>DATE <u>8-16-85</u> |                         | <b>D-C MOTOR</b><br>PERFORMANCE DATA<br>D66207C<br>ISSUE DATE 8-16-85 |                 |

