

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **D2020R-BV**

**20HP, 1750RPM, DC, 2113ATZ, DPG-FV,**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:		Elec. Spec:	G6339B B	CD Diagram:	406770-006
Enclosure:	DP	Mfg Plant:		Mech. Spec:		Layout:	616002-001
Frame:	SC211	Mounting:	F1	Poles:	00	Created Date:	04-09-2015
Base:		Rotation:	R	Insulation:	F	Eff. Date:	04-13-2015
Field Type:		Literature:		Elec. Diagram:		Replaced By:	

Specs			
Enclosure:	DP		
Frame:	SC2113ATZ		
Frame Material:	Steel		
Agency Approvals:	CCSA US		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Drip Cover:	No Drip Cover		
Duty Rating:	CONT		
Feedback Device:	NO FEEDBACK		
Field Winding Type:	STR. SHUNT		
Frame Prefix:	SC		
Heater Indicator:	No Heater		
Insulation Class:	F		
Lifting Lugs:	Standard Lifting Lugs		
Mounting Arrangement:	F1		
Shaft Extension Location:	Pulley End		
Shaft Ground Indicator:	No Shaft Grounding		

<b>Shaft Slinger Indicator:</b>	No Slinger		
<b>Motor Standards:</b>	NEMA		

<b>Nameplate 000613006HP</b>	
<b>CAT.NO.</b>	D2020R-BV
<b>FR</b>	SC 2113ATZ
<b>ENCL.</b>	DP
<b>ENCL MOD</b>	FORCE VENT
<b>MAX SAFE SPEED</b>	4500
<b>FIELD DATA</b>	
<b>WINDING</b>	STR. SHUNT
<b>VOLTS</b>	150
<b>MAX AMPS @ 25 C</b>	7.12
<b>HOT AMPS</b>	5.07/ 3.32
	BRUSH:419904051AC
<b>SPEC NO.</b>	T21T1363
<b>HP</b>	20
<b>RPM</b>	1750/ 2300
<b>VOLTS</b>	240
<b>AMPS</b>	76.50
<b>SER.NO.</b>	
<b>DUTY</b>	CONT
<b>S.F.</b>	1.0
<b>INSUL</b>	F
<b>AMB.</b>	40
<b>POWER CODE</b>	D
<b>D.E. BRG.</b>	50BC03J30X
<b>O.D.E. BRG.</b>	45BC02J30X
<b>MIN. AMB.</b>	0
<b>TYPE</b>	TR

616002-001

## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED,  
SPLASHPROOF

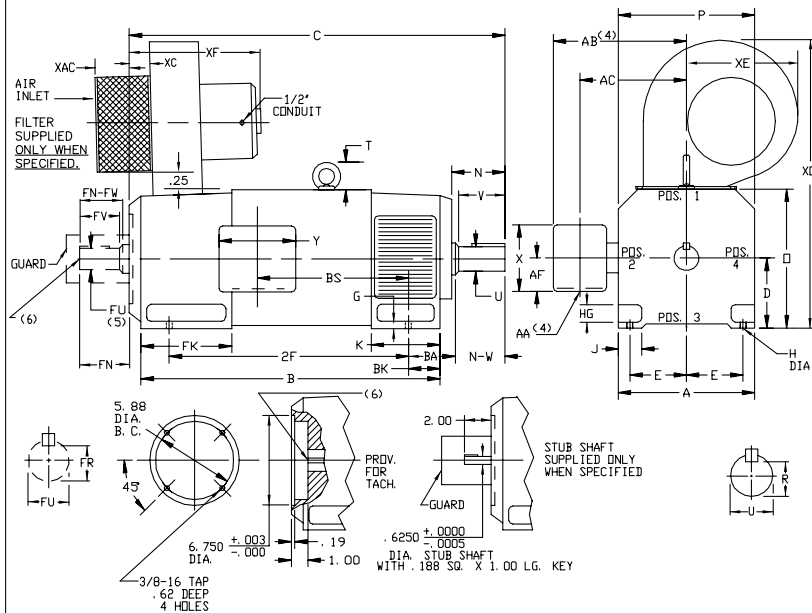
COOLING: FORCE VENTILATED  
WITH INTEGRAL  
BLOWER AND MOTOR

MOUNTING: FOOT

METHOD OF DRIVE: COUPLED OR BELTED

ACCESSORIES: PROVISION FOR  
TACHOMETER MOUNTING  
ONLY WHEN SPECIFIED

FRAMES SC2113ATZ THRU LC2115ATZ



616002-001

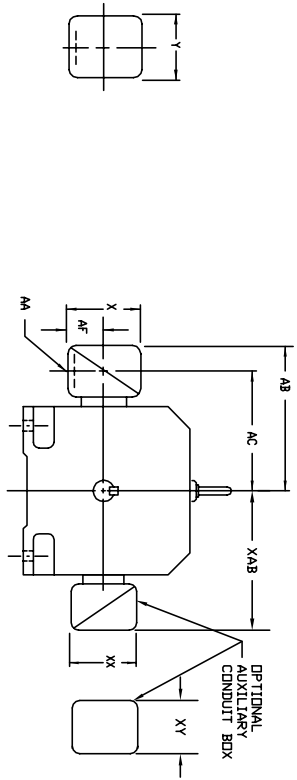
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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

609959-001

**INDUSTRIAL DIRECT CURRENT MOTORS  
AND GENERATORS - RPM III**  
TERMINAL BOX DIMENSIONS  
STANDARD SIZE AND ONE SIZE LARGER  
FRAMES C2113ATZ THRU C2815ATZ



DIMENSIONS ARE IN INCHES

FRAME SIZE	STANDARD SIZE						ONE SIZE LARGER								
	MAX. AMPS	AK(1)	AB	AC	AF	PART NUMBER	AK(1)	AB	AC	AF	PART NUMBER				
C2113ATZ	40	3/4 & 1"	8.97	7.47	1.94	4.38	5.00	7.05029-1-R	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	705029-1-R
C2115ATZ	96	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	705029-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R
(2)	40	3/4 & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R
C2513ATZ	40	3/4 & 1"	10.03	8.53	1.94	4.38	5.00	705029-1-R	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	705029-1-R
C2515ATZ	96	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	705029-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R
(2)	208	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R
C2813ATZ	128	2"	14.03	10.53	4.25	8.44	7.25	74874-R	3"	14.47	11.22	4.25	8.44	7.25	74874-R
C2815ATZ	185	3"	14.47	11.22	4.25	8.44	7.25	74874-R	4"	15.91	11.84	5.38	10.56	9.00	706308-3-R
(2)	259	4"	15.91	11.84	5.38	10.56	9.00	706308-3-R	5" (4)	18.72	13.47	7.00	12.75	15.00	706258-1-C

FRAME SIZE	STANDARD SIZE						ONE SIZE LARGER								
	MAX. AMPS	AK(3)	AB	AC	AF	PART NUMBER	AK(3)	AB	AC	AF	PART NUMBER				
C2113ATZ	18	3/4	10.03	8.03	2.50	5.00	5.75	705028-2-S	1"	10.03	8.03	2.50	5.00	5.75	705028-2-T
C2115ATZ	40	1"	10.03	8.03	2.50	5.00	5.75	705028-2-R	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-R
(2)	96	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-R	2"	10.97	8.53	3.00	6.00	7.00	705029-2-S
208	3/4	10.97	8.53	3.00	6.00	7.00	705029-2-S	2-1/2	12.66	8.91	3.62	7.88	9.23	705030-2-R	
18	1"	11.09	9.09	2.50	5.00	5.75	705028-2-T	1"	11.09	9.09	2.50	5.00	5.75	705028-2-T	
C2513ATZ	40	1-1/2	11.09	9.09	2.50	5.00	5.75	705028-2-T	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R
C2515ATZ	96	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S
(2)	208	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S	2-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R
C2813ATZ	128	2"	12.78	10.34	3.00	6.00	7.00	75460-T	3"	14.47	10.72	3.62	7.88	9.23	76708-R
C2815ATZ	185	3"	14.47	10.72	3.62	7.88	9.23	76708-R	4"	14.47	10.72	3.62	7.88	9.23	76708-R
(2)	259	4"	15.78	11.59	4.12	9.50	10.50	76708-R	5" (4)	18.59	13.34	7.00	12.75	15.00	76870-S

FRAME SIZE	STANDARD SIZE						ONE SIZE LARGER					
	AMP'S	AB	AC	AF	X	Y	AB	AC	AF	X	Y	
C210	100	10.71	8.98	2.72	7.48	7.48	706310-56-A	7.48	706310-56-A	7.48	706310-225-R	
200	11.26	9.25	3.35	8.82	8.82	706310-56-B	8.82	706310-56-B	8.82	706310-225-R		
100	11.30	9.57	2.72	7.48	7.48	706310-56-A	7.48	706310-56-A	7.48	706310-225-R		
200	11.85	9.84	3.35	8.82	8.82	706310-56-B	8.82	706310-56-B	8.82	706310-225-R		
400	17.48	12.75	6.20	14.39	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G		
800	17.48	12.75	6.20	14.39	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G		
200	12.60	10.99	3.76	8.82	8.82	706310-56-B	8.82	706310-56-B	8.82	706310-226-R		
400	18.27	13.54	6.20	14.39	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G		
800	18.27	13.54	6.20	14.39	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G	14.39	706310-63-B & 706310-63G		
1600	18.27	13.54	7.68	15.35	15.35	706310-63-C	15.35	706310-63-C	15.35	706310-63-C		

(1) "AA" CONDUIT TERMINAL BOX FOR C2113ATZ AND C2515ATZ  
 (2) STEEL TERMINAL BOX WITH DOUBLE KNOCKOUT.  
 (3) "AA" PIPE TAP.  
 (4) TERMINAL BOX 76870-S AND 76870-R EXTENDS BELOW MOTOR FEET. TERMINAL BOX CAN BE ROTATED FOR LEAD DULLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, V-5, V-7, PR-C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED. FOR "XY" TERMINAL BOX DIMENSIONS SEE 609959-2. FOR "XYP" TERMINAL BOX DIMENSIONS SEE 609959-3.

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

REV. DESC: ADD 706310-63G C/BOX TO C250 AND C280 FRAMES	VERSION: 01	TDR: 000000816512
REV. LTR: A		
FILE: \RGG\00021\153		REVISED: 03:09:09 09/06/2013
MTL: -		BY: RGGWT

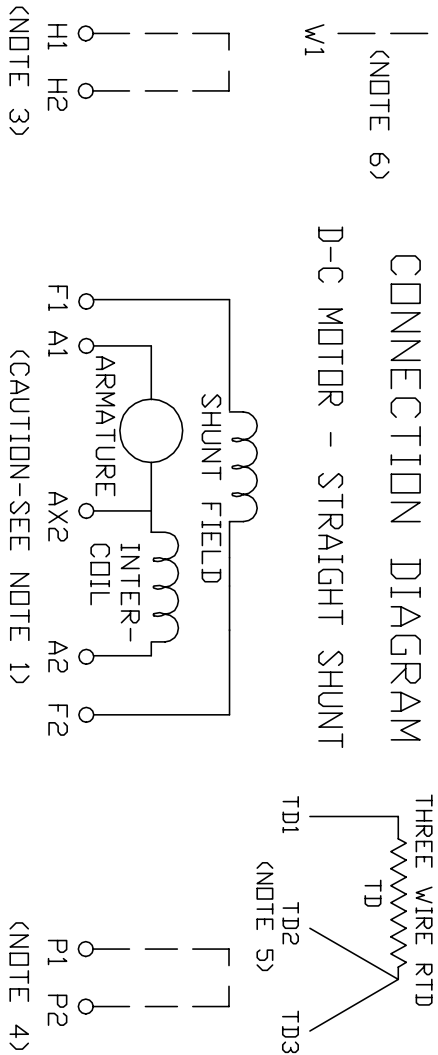


DIMENSION SHEET  
SH 1 of 1

609959-001

406770-006

406770-006



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 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