

# **ABB BALDOR RELIANCE III**



## **Customer information packet**

D5025R-BV

25HP, 1750RPM, DC, 2113ATZ, DPG-FV,

**Specifications**

<b>Enclosure</b>	DP
<b>Frame</b>	MC2113ATZ
<b>Frame Material</b>	Steel
<b>Output Power</b>	25.000 HP
<b>Agency Approvals</b>	CCSA US
<b>Ambient Temperature</b>	40 °C
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Drip Cover</b>	No Drip Cover
<b>Feedback Device</b>	NO FEEDBACK
<b>Field Winding Type</b>	STR SHUNT
<b>Frame Prefix</b>	MC
<b>Heater Indicator</b>	No Heater
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Motor Standards</b>	NEMA
<b>Mounting Arrangement</b>	F1
<b>Overall Length</b>	29.62 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Slinger Indicator</b>	No Slinger

**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>	G6005E B
<b>Layout</b>	616002-001
<b>Eff. date</b>	04-13-2015
<b>CD Diagram</b>	406770-006
<b>Poles</b>	00
<b>Leads</b>	
<b>Proprietary</b>	False
<b>Created date</b>	04-09-2015

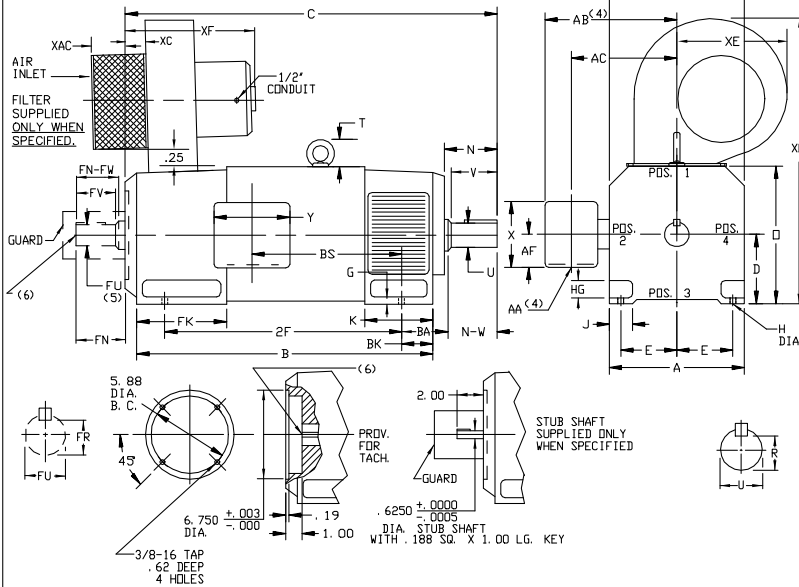
**Nameplate**

000613006HP					
<b>CAT.NO.</b>	D5025R-BV	<b>SPEC NO.</b>	T21T1351		
<b>FR</b>	MC 2113ATZ	<b>HP</b>	25	<b>DUTY</b>	CONT
<b>ENCL.</b>	DP	<b>RPM</b>	1750/ 2300	<b>S.F.</b>	1.0
<b>ENCL MOD</b>	FORCE VENT	<b>VOLTS</b>	500	<b>INSUL</b>	F
<b>MAX SAFE SPEED</b>	4500	<b>AMPS</b>	46.00	<b>AMB.</b>	40
	<b>FIELD DATA</b>	<b>SER.NO.</b>			
<b>WINDING</b>	STR SHUNT	<b>POWER CODE</b>	C		
<b>VOLTS</b>	300	<b>D.E. BRG.</b>	50BC03J30X		
<b>MAX AMPS @ 25 C</b>	3.32	<b>O.D.E. BRG.</b>	45BC02J30X		
<b>HOT AMPS</b>	2.40/ 1.57	<b>MIN. AMB.</b>	0	<b>TYPE</b>	TR
	BRUSH:419904051AB				

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)	SQ.	LGTH.	FN	FN-FW	FU(2)	FV	FR(3)		SQ.	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) \*B\* 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: \RG\00015\944		
MTL: -		

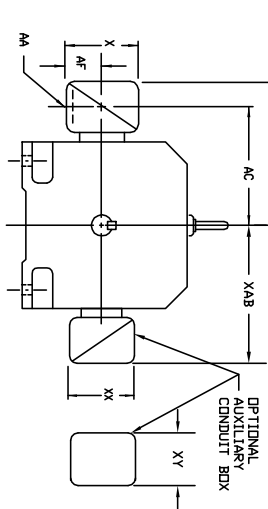
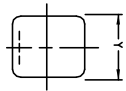
**BALDOR**

DIMENSION DRAWING, SC2113ATZ - LC2115ATZ, DPP, FOOT MTG

SH 1 of 1

609959-001

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



DIMENSIONS ARE IN INCHES

FRAME SIZE	MAX. AMPS	STANDARD SIZE						STEEL TERMINAL BOX DIMENSIONS						ONE SIZE LARGER								
		AK(1)	AB	AC	AF	X	Y	AK(1)	AB	AC	AF	X	Y	AK(1)	AB	AC	AF	X	Y			
C2113ATZ	40	3/4 & 1"	8.97	7.47	1.94	4.98	5.00	705028-1-R	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	705029-1-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" & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R
C2115ATZ (C)	208	2" & 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	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	4.98	5.00	705028-1-R	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	705029-1-R	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	705029-1-R
C2513ATZ (C)	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" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R
C2515ATZ	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	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R
C2813ATZ	188	2"	14.03	10.53	4.25	8.44	7.25	7487-4-R	2"	14.47	11.22	4.25	8.44	7.25	7487-4-R	2"	14.47	11.22	4.25	8.44	7.25	7487-4-R
C2813ATZ (C)	188	2"	14.03	10.53	4.25	8.44	7.25	7487-4-R	2"	14.47	11.22	4.25	8.44	7.25	7487-4-R	2"	14.47	11.22	4.25	8.44	7.25	7487-4-R
C2815ATZ	259	3"	15.91	11.22	4.25	8.44	7.25	7487-4-R	3"	15.91	11.22	4.25	8.44	7.25	7487-4-R	3"	15.91	11.22	4.25	8.44	7.25	7487-4-R
C2815ATZ (C)	259	3"	15.91	11.22	4.25	8.44	7.25	7487-4-R	3"	15.91	11.22	4.25	8.44	7.25	7487-4-R	3"	15.91	11.22	4.25	8.44	7.25	7487-4-R

FRAME SIZE	MAX. AMPS	STANDARD SIZE						CAST IRON TERMINAL BOX DIMENSIONS						ONE SIZE LARGER								
		AK(3)	AB	AC	AF	X	Y	AK(3)	AB	AC	AF	X	Y	AK(3)	AB	AC	AF	X	Y			
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	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-S
C2113ATZ (C)	40	1"	10.03	8.03	2.50	5.00	5.75	705028-2-T	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-S	2"	12.66	8.91	3.62	7.88	9.25	705030-2-S
C2115ATZ	96	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-S	2"	12.66	8.91	3.62	7.88	9.25	705030-2-S	2-1/2	12.66	8.91	3.62	7.88	9.25	705030-2-R
C2115ATZ (C)	208	2"	10.97	8.53	3.00	6.00	7.00	705029-2-S	2-1/2	12.66	8.91	3.62	7.88	9.25	705030-2-R	3"	14.47	10.72	3.62	7.88	9.25	76700-4-R
C2513ATZ	18	3/4	11.09	9.09	2.50	5.00	5.75	705028-2-S	1"	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-S
C2513ATZ (C)	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-S	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S
C2515ATZ	96	1-1/2	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	2-1/2	13.72	9.97	3.62	7.88	9.25	705030-2-S
C2515ATZ (C)	208	2"	12.78	10.34	3.00	6.00	7.00	75460-T	3"	14.47	10.72	3.62	7.88	9.25	76700-4-R	4"	15.78	11.59	4.12	9.50	10.50	76708-RR
C2813ATZ	185	3"	14.47	10.72	3.62	7.88	9.25	76700-4-R	4"	15.78	11.59	4.12	9.50	10.50	76708-RR	5"	18.59	13.34	7.00	12.75	15.00	76970-S
C2815ATZ	259	4"	15.78	11.59	4.12	9.50	10.50	76708-RR	5"	18.59	13.34	7.00	12.75	15.00	76970-S	5"	18.59	13.34	7.00	12.75	15.00	76970-S

FRAME SIZE	AMPS	STANDARD SIZE						OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)					
		AB	AC	AF	X	AA	Y	AK(1)	AB	AC	AF	X	Y
C210	100	10.71	8.98	2.72	7.48	---	7.48	706310-25-A	10.88	8.00	8.00	706310-3-B	8.00
	200	11.66	9.25	3.35	8.82	---	8.82	706310-56-B	11.88	8.00	8.00	706310-3-B	8.00
	100	11.30	9.57	2.72	7.48	---	7.48	706310-56-A	11.88	8.00	8.00	706310-3-B	8.00
C250	200	11.85	9.84	3.35	8.82	---	8.82	706310-56-B	12.62	8.00	8.00	706310-3-B	8.00
	400	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-63G	18.27	8.00	8.00	706310-3-B	8.00
	800	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-63G	18.27	8.00	8.00	706310-3-B	8.00
	200	12.60	10.59	3.76	8.82	---	8.82	706310-56-B	12.62	8.00	8.00	706310-3-B	8.00
C280	400	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-63G	18.27	8.00	8.00	706310-3-B	8.00
	800	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-63G	18.27	8.00	8.00	706310-3-B	8.00
	1600	18.27	13.54	7.68	15.35	---	15.35	706310-63-C	18.27	8.00	8.00	706310-3-B	8.00

- (1) 1/4" CONDUIT
- (2) 1/2" CONDUIT
- (3) 3/4" CONDUIT
- (4) 1" CONDUIT

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: 00000816512
REV. LTR: A	FILE: \RGG\00021\153	REVISED: 03: 09: 09 09/06/2013
MTL: -		BY: RGGWT



DIMENSION SHEET  
SH 1 of 1

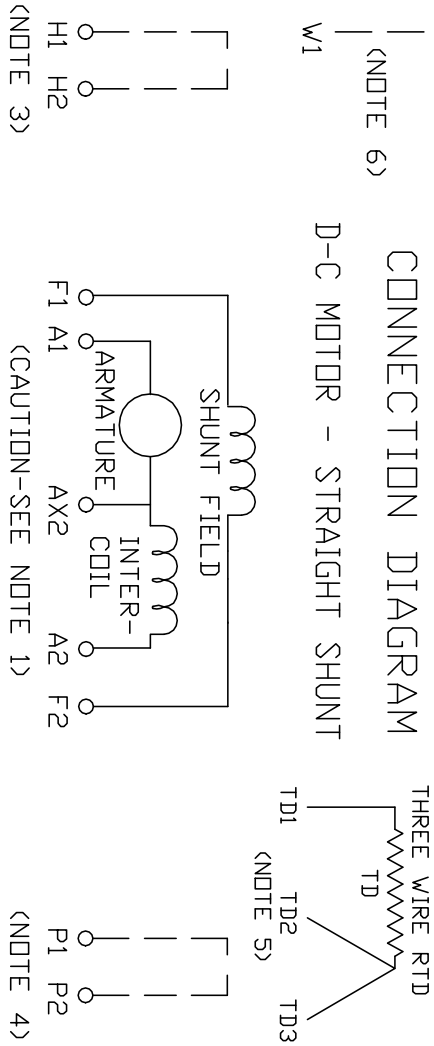
609959-001

406770-006

406770-006

**CONNECTION DIAGRAM**

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