

ABB BALDOR RELIANCE III

Customer information packet

D5020R-BV

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

Specifications

Enclosure	DP
Frame	SC2113ATZ
Frame Material	Exposed Laminations
Output Power	20.000 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	SC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	28.63 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

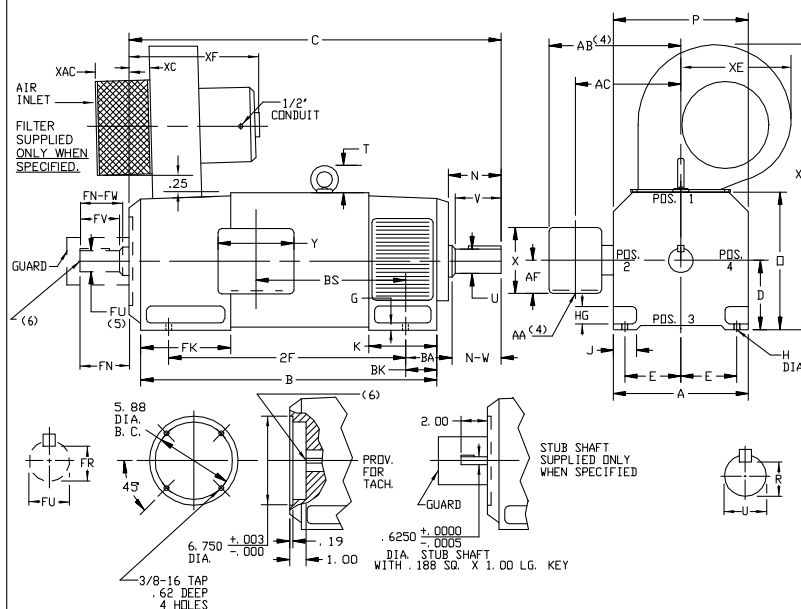
Part Detail

Revision	-
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G6006D B
Layout	616002-001
Eff. date	04-13-2015
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006HP									
CAT.NO.	D5020R-BV	SPEC NO.		T21T1350					
FR	SC 2113ATZ	HP	20		DUTY		CONT		
ENCL.	DP	RPM	1750/ 2300			S.F.	1.0		
ENCL MOD	FORCE VENT	VOLTS		500		INSUL		F	
MAX SAFE SPEED	4500	AMPS		37.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STR SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		50BC03J30X					
MAX AMPS @ 25 C	3.04	O.D.E. BRG.		45BC02J30X					
HOT AMPS	2.17/ 1.45	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051AB									

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED



DIMENSIONS ARE IN INCHES

FRAME	XAC	XC	XE	XF	XC
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	2.3

FRAME	C(7)	B	BS	2F	DRIVE END SHAFT AND KEY							OPPOSITE DRIVE END SHAFT AND KEY(S)							WT.
					N	N-W	U(2)	V	R(3)	SQ.	LGTH.	FN	FN-FW	FU(2)	FV	FR(3)	SQ.	LGTH.	
SC2113A7Z	28.38	22.50	11.38	18.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	3.34
MC2113A7Z	29.62	23.75	12.62	18.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	3.70
LC2113A7Z	31.25	25.38	14.25	18.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	4.00
SC2115A7Z	32.50	26.62	15.50	22.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	4.25
LC2115A7Z	35.25	28.38	18.25	22.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	4.80

- (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 "F/U" VARY---H.O.P.---.001
- (3) "R" AND "F/R" VARY---.000---.015
- (4) TERMINAL BOX WARE---WITH 0.0 P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y".
- (5) REFER TO SHIP D/S. (STD. 609959-1, "X"/P. 609959-2, MILL 609959-3)
- (6) POSITIVE DRIVE END SHAFT SUPPLIED AND WHEN SPECIFIED.
- (7) MOTOR SHAFT TAPPED FOR SCREW-IN STUB SHAFT.
- (8) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF POSITIVE DRIVE END, ADD .25 TO "C" DIM.
- (9) TERMINAL BOX CAN BE ROTATED FOR LEAD OUT TOP, TOP SIDES OR BOTTOM.
- (10) 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.
- (11) BLOWER ASSEMBLY CAN BE LOCATED AT EITHER END.
- (12) BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION.
- (13) MOTOR WEIGHT MAY VARY 15% FOR NON-AND REMOTE RINGS AND ACCESSORIES.
- (14) DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED ON FACTORY DRAWING.

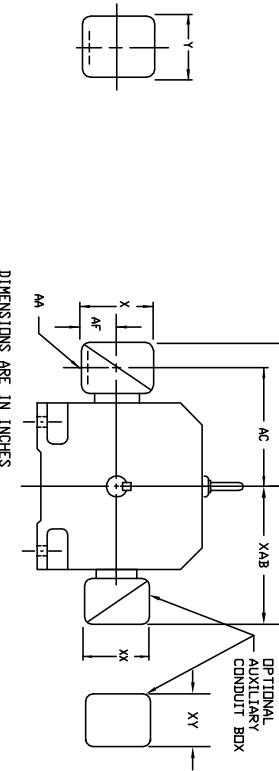
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. LTR: -	VERSION: 00	TDR: 000000578087
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MTL: -		

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	MAX. AMPS	STANDARD SIZE						STEEL TERMINAL BOX DIMENSIONS						ONE SIZE LARGER					
		AK(1)	AB	AC	AF	X	Y	NUMBER	AK(1)	AB	AC	AF	X	Y	NUMBER	AK(1)	AB	AC	AF
C2113ATZ	40	3/4 & 1"	8.97	7.47	1.94	4.38	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
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
(2)	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
C2516ATZ	40	3/4 & 1"	10.03	8.53	1.94	4.38	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
C2514ATZ	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
(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	2" & 2-1/2	12.22	9.47	3.19
C2816ATZ	155	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	3"	14.47	11.22	4.25
C2815ATZ	185	3"	14.47	11.22	4.25	8.44	7.25	74874-24-R	4"	15.91	11.84	5.38	10.56	9.00	706308-3-R	4"	15.91	11.84	5.38
(2)	269	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	706589-1-C	5" (4)	18.72	13.47	7.00

FRAME SIZE	MAX. AMPS	STANDARD SIZE						CAST IRON TERMINAL BOX DIMENSIONS						ONE SIZE LARGER					
		AK(3)	AB	AC	AF	X	Y	NUMBER	AK(3)	AB	AC	AF	X	Y	NUMBER	AK(3)	AB	AC	AF
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
C2115ATZ	40	1"	10.03	8.03	2.50	5.00	5.75	705028-2-T	1-1/2	10.97	8.53	3.00	5.00	5.75	705029-2-R	2"	10.97	8.53	3.00
C2115ATZ	96	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-R	2"	12.66	8.91	3.62	7.88	9.25	705030-2-R	2-1/2	12.66	8.91	3.62
(2)	208	2"	10.97	8.53	3.00	6.00	7.00	705029-2-S	2-1/2	11.09	9.09	2.50	5.00	5.75	705028-2-S	1"	11.09	9.09	2.50
C2516ATZ	40	3/4	11.09	9.09	2.50	5.00	5.75	705028-2-S	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R	2"	12.03	9.59	3.00
C2514ATZ	96	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R	2"	13.72	9.97	3.62	7.88	9.25	705030-2-R	2-1/2	13.72	9.97	3.62
C2514ATZ	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-R	4"	15.78	11.59	4.12
C2813ATZ	185	3"	14.47	10.72	3.62	7.88	9.25	76700-R	4"	15.78	11.59	4.12	9.50	10.50	76700-R	5"	18.59	13.34	7.00
C2815ATZ	269	4"	15.78	11.59	4.12	9.50	10.50	76700-R	5" (4)	18.59	13.34	7.00	12.75	15.00	76870-S	5" (4)	18.59	13.34	7.00

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

FRAME SIZE	AMPS	STANDARD SIZE						OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)					
		AB	AC	AF	X	AA	Y	FRAME SIZE	AB	AC	AF	X	Y
C210	100	10.71	8.98	2.72	7.48	---	7.48	C210	10.86	8.00	8.00	8.00	706310-3-B
	200	11.66	9.25	3.35	8.82	---	8.82	C250	11.88	8.00	8.00	8.00	706310-3-B
	100	11.30	9.57	2.72	7.48	---	7.48	C280	12.62	8.00	8.00	8.00	706310-3-B
	200	11.85	9.84	3.35	8.82	---	8.82						
C250	400	17.48	12.75	6.20	14.39	---	14.39	C210	10.86	8.00	8.00	8.00	706310-3-B
	800	17.48	12.75	6.20	14.39	---	14.39	C250	11.88	8.00	8.00	8.00	706310-3-B
	200	12.60	10.59	3.76	8.82	---	8.82	C280	12.62	8.00	8.00	8.00	706310-3-B
	400	18.27	13.54	6.20	14.39	---	14.39						
C280	800	18.27	13.54	6.20	14.39	---	14.39						
	1600	18.27	13.54	7.68	15.35	---	15.35						

- (1) MAX CONDUIT
(2) RATES PROVIDED WITH DOUBLE KNUCKLE
(3) MAX PIPE LAP

- (4) TERMINAL BOX 76870-S AND 76870-98 EXTENDS BELOW MOTOR FEET
TERMINAL BOX 76870-S AND 76870-98 EXTENDS BELOW MOTOR FEET
DR C-1 MOUNTING IS SPECIFIED. BOX LOCATED IN TOP WHEN SPECIFIED.
FOR "X"/"Y" TERMINAL BOX DIMENSIONS SEE 609959-2
FOR MILL TYPE 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

REV. LTR: A

VERSION: 01

TDR: 000000816512

FILE: \RGG\00021\153

REVISED: 03: 09: 09 09/06/2013

MTL: -

BY: RGGWT

BALDOR

DIMENSION SHEET

SH 1 of 1

609959-001

