

ABB BALDOR RELIANCE III

Customer information packet D5510R

10HP, 1750RPM, DC, 2113ATY, TEFC,

Specifications

Enclosure	TEFC
Frame	MC2113ATZ
Frame Material	Exposed Laminations
Output Power	10.000 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	STAB SHUNT
Frame Prefix	MC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	33.44 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.	G6142B A
Layout	609951-013
Eff. date	04-13-2015
CD Diagram	406770-002
Poles	00
Leads	
Proprietary	False
Created date	04-10-2015

Nameplate

000613006HP									
CAT.NO.		SPEC NO.	T21S0304						
FR	MC 2113ATZ	HP	10	DUTY		CONT			
ENCL.	TEFC	RPM	1750/ 2300		S.F.	1.0			
ENCL MOD		VOLTS	500		INSUL		F		
MAX SAFE SPEED	4500	AMPS	17.50		AMB.		40		
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE	C						
VOLTS	300	D.E. BRG.	50BC03J30X						
MAX AMPS @ 25 C	1.55	O.D.E. BRG.	45BC02J30X						
HOT AMPS	1.06/ .76	MIN. AMB.	0		TYPE		TR		
BRUSH:419904051E; FLD. DATA									
FOR HIGH VOLTS; FIELD VOLTS					150/300				

Parts List

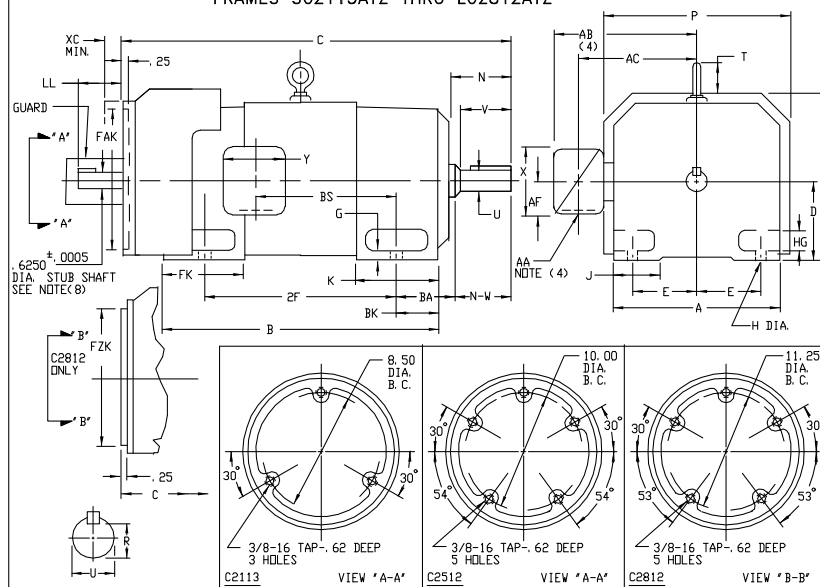
Part number	Description	Quantity
SA297167	SA T21S0304	1.000 ea
AA016180	AA T21S0304	1.000 ea
000613006HP	NAMEPLATE - RPM III D-C MOTOR W/CSA LOGO	1.000 ea
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 ea
000692000FS	WARNING LABEL	1.000 ea
033775004EA	DRSCR #6-1/4 304 S.S.	6.000 ea
406770002	C/D TAG STAB SHUNT D.V.	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	4.000 ea
036000020KB	MHHCS M10-1.5X20MM PLTD.	4.000 ea
036501008AB	KPNUT M6-1.0 ZINCPLTED	8.000 ea
036610010AB	MHSLW M10 PLATED	4.000 ea
419904-51E	BRUSH N	4.000 ea
419905003A	FLAT WASHER ROCKER RPM III RGG	4.000 ea
419905008A	HARDWARE	8.000 ea
706364051AA	BRHLD ADD HARDWARE	4.000 ea
706372001B	ROCKR METRIC	1.000 ea
034530018AB	P/NIP 1/8X2-1/4L PLATED	1.000 ea
034630001AJ	1/8" PIPE COUPLING	1.000 ea
034693001AB	PPLG - G508- use 034692001AB	1.000 ea
034693001AB	PPLG - G508- use 034692001AB	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
035000001A	ALFTG 1/8" 1610-BL	1.000 ea
036000055JB	HHCS,DE CAP	2.000 ea
036000060KB	HHCS,DE CAP	3.000 ea
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 ea
036500010AB	METRIC NUT M10-1.5PLTD400	4.000 ea
406055001B	GRFTG	1.000 ea
400638001H	SPRING WASHER (Customer number 43699)	1.000 ea
418150003A	GREASE FITTING CAP	2.000 ea
609830005N	TBOLT METRIC RP609830-	4.000 ea
801924102E	BRKT,ODE,C210	1.000 ea

801925102A	BRKT,DE,C210	1.000 ea
032018004AK	HHCS 1/4-20X1/2 PLATED	4.000 ea
032018004CK	HHCS 3/8-16X1/2L PLATED	3.000 ea
032018014DK	HHCS 1/2-13X1-3/4 PLTD	4.000 ea
034001012AB	WSHR 1/4" PLATED	4.000 ea
034017016AB	LCKW 1/2" PLATED	4.000 ea
034180012EA	KEY 5/16X5X16X1-1/2 L	1.000 ea
036000012HB	HHCS M6X12MM LONG PLATED	2.000 ea
036000045JB	M8-1.25 X 45MM HXHCS	4.000 ea
036620009AB	M8 EXTERNAL LK WASHER	1.000 ea
065530000B	GASK	1.000 ea
075451000A	COVER, CONDUIT BOX	1.000 ea
078547001R	FAN A 78547001P	1.000 ea
412043012B	400G BUTTON	1.000 ea
415072001B	CLAMP	1.000 ea
417733001G	GASKT	2.000 ea
418010006A	CAST,MPLATE,180-280,EX1,7BY	1.000 ea
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 ea
422919001	CVRKT BE SOLID C210	1.000 ea
422919001	CVRKT BE SOLID C210	1.000 ea
422919001	CVRKT BE SOLID C210	1.000 ea
422919012	HHCVR KIT,C210,ODE,SOLID	1.000 ea
422919012	HHCVR KIT,C210,ODE,SOLID	1.000 ea
422919012	HHCVR KIT,C210,ODE,SOLID	1.000 ea
603909002A	GRILL, FAN	1.000 ea
706320003A	CONDUIT BOX	1.000 ea
706365001A	FNGRL	1.000 ea
801953001A	FNCVR	1.000 ea
000640000P	TAG WINDING THERMOST	1.000 ea
000692000NG	LABEL ;NP 4POLE METRIC LABEL	1.000 ea
034180020GA	KEY 1/2X1/2X2-1/2 L	1.000 ea

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: FAN COOLED
ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES SC2113ATZ THRU LC2812ATZ



DIMENSIONS ARE IN INCHES

FRAME	A	B(1)	E	G	H	HG	J	D	P	T	BA	K	FK	BK	FAK(6)	FZK(7)	XC
SC2113ATZ-LC2113ATZ	10.25	5.25	4.25	.44	.44	1.38	1.75	11.62	12.75	1.38	3.50	5.19	6.81	2.38	9.750	N/A	1.25
SC2812ATZ-LC2812ATZ	12.31	6.25	5.00	.50	.56	1.62	2.00	13.62	14.75	1.94	4.25	6.06	8.00	3.38	11.250	N/A	1.25
MC2812ATZ-LC2812ATZ	13.78	7.00	5.00	.62	.56	1.88	2.75	15.06	16.12	2.31	4.75	6.75	9.19	3.50	N/A	12.500	1.25

FRAME	C	B	BS	2 ^o	DRIVE END SHOT AND KEY							WT. 15
					N	N	U	K	R	S	LGTH	
SG2113A72	32.9	22.90	11.38	18.00	4.00	7.51	8.75	3.50	.591	590	2.50	355
SG2113A73	33.44	23.73	12.62	18.00	4.00	7.51	8.75	3.50	.591	590	2.50	380
LC2113A73	35.06	25.38	14.25	18.00	4.00	7.51	8.75	3.50	.591	590	2.50	410
SG2151A73	35.94	26.56	15.36	20.00	4.00	7.52	12.25	4.00	.845	590	3.00	355
MC2151A73	37.44	26.56	15.36	20.00	4.00	7.52	12.25	4.00	.845	590	3.00	390
LC2151A77	38.94	28.06	16.05	20.00	4.00	7.52	12.25	4.00	.845	590	3.00	630
MC8181A77	41.62	29.94	14.25	22.00	5.00	7.75	3.75	4.50	.621	625	3.50	835
LC8181A77	43.68	31.29	16.50	22.00	5.00	7.75	3.75	4.50	.621	625	3.50	900

- (1) "B" DIMENSION SHALL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES-----, .000 - .001
- (3) "F" VARIES-----, .000 - .015
- (4) TERMINAL BOX WAS WITH A/F. FOR LEADCTIONS "AA", "AB", "AC", "AD", "AE", "X" AND "Y", SEE DRAWING NUMBER 609599-1.
- (5) WALLS OR OBSTRUCTIONS MUST NOT ENCRUGH AIR INLET SPACE "XC".
- (6) "FAK" VARIES X .003 - .005-----FACE ROUNDTD AND ECCENTRICITY: 007 MAX. 1 I.R.
- (7) "FAR" VARIES X .003 - .005-----FACE ROUNDTD AND ECCENTRICITY: 007 MAX. 1 I.R.
- (8) STUB SHAFT SUPPLIED ONLY WHEN SPECIFIED. KEY SIZE .188 X .188 X 1/8"
- (9) FOR R-.045 OR "SPY" PROVISIONS ON "C2812" ADD 1.00 TO "L" DIMENSION.
- (10) TERMINAL ROTATED FOR LEAD OUTLET AND "L" DIMENSION.
- (11) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-2, W-3, W-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.
- (12) MINIMUM MOUNTING CLEARANCE FROM RADIATION SHIELDING AND NECESSARIES.
- (13) IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

TACHOMETER	LU
BC-42	
BC-46	
RD-11	
RD-12	4.
RD-51	
RD-61	
RD-62	
RE-210	
M627, M628	
M727, M737	
M738	
DYNAPAR 74S	
RE-045	3. 8
SPY	1. 1
	SEE NOTES (9)

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

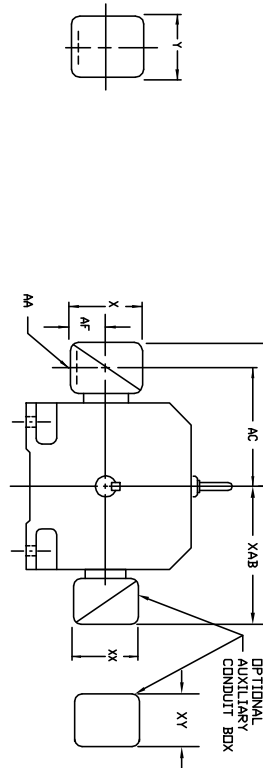
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BALDOR
 DIMENSION DRAWING, SC2113ATZ - LC2812ATZ, TEFC, FOOT MTG
 SH 1 of 1

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.	STEEL TERMINAL BOX DIMENSIONS										PART		
		STANDARD SIZE					ONE SIZE LARGER							
AK(1)	AB	AC	AF	X	Y	NUMBER	AK(1)	AB	AC	AF	X	Y	NUMBER	
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
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)	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
C2815ATZ	40 3/4 & 1"	10.03	8.03	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
C2816ATZ	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
(3)	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
C2818ATZ	188 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
C2819ATZ	188 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
C2815ATZ	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

CAST IRON TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	STANDARD SIZE					PART		ONE SIZE LARGER					PART	
		AB	AC	AF	X	Y	NUMBER	AK(3)	AB	AC	AF	X	Y	NUMBER	
C2113ATZ	18	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	
C2113ATZ	40	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-R	
C2115ATZ	96	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"	10.97	8.53	3.00	6.00	7.00	705029-2-S	2-1/2							
C2812ATZ	18	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	
C2812ATZ	40	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	
C2814ATZ	96	12.03	9.59	3.00	6.00	7.00	705029-2-R	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S	
C2815ATZ	208	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-R	
C2816ATZ	188	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	
C2817ATZ	269	14.47	10.72	3.62	7.88	9.25	76700-R	4"	15.78	11.59	4.12	9.50	10.50	76700-S	
	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	76700-S	

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)
STANDARD SIZE

FRAME SIZE	AMPS	STANDARD SIZE									
		AB	AC	AF	X	AA	Y	PART NUMBER			
C210	100	10.71	8.98	2.72	7.48	--	7.48	706310-56-A			
	200	11.66	9.25	3.35	8.82	--	8.82	706310-56-B			
	100	11.30	9.57	2.72	7.48	--	7.48	706310-56-A			
C250	200	11.85	9.84	3.35	8.82	--	8.82	706310-56-B			
	400	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-63G			
	800	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-63G			
	200	12.60	10.59	3.76	8.82	--	8.82	706310-56-B			
C280	400	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-63G			
	800	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-63G			
	1600	18.27	13.54	7.68	15.35	--	15.35	706310-63-C			

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)

FRAME SIZE	YAB	XY	PART NUMBER		FRAME SIZE	YAB	XY	PART NUMBER	
			C210	C250				C210	C250
C210	7.38	4.25	602007-26-A		C210	10.88	8.00	706310-3-B	
C250	8.44	4.25	602007-26-A		C250	11.88	8.00	706310-3-B	
C280	9.12	4.25	602007-26-A		C280	12.62	8.00	706310-3-B	

(1) 1/4" CONDUIT.
(2) RACEWAYS PROVIDED WITH DOUBLE KNUCKLE.
(3) 1/4" 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 ON TOP WHEN SPECIFIED.
FOR "X"/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
FILE: \RGG\00021\153	REVISED: 03: 09: 09 09/06/2013
MTL: -	BY: RGGWT

BALDOR

DIMENSION SHEET

SH 1 of 1

609959-001

406770-002			406770-002	
CONNECTION DIAGRAM D-C MOTOR - STAB. SHUNT DUAL VOLTAGE FIELD (NOTE 7) W1 (NOTE 4) (CAUTION-SEE NOTE 1) (NOTE 2) (NOTE 5)				
ARMATURE AND FIELD EXTERNAL CONNECTIONS WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS CCW ROTATION LOW VOLTAGE FIELD CONNECTION CW ROTATION CCW ROTATION HIGH VOLTAGE FIELD CONNECTION CW ROTATION ROTATION FACING COMMUTATOR END				
1. CAUTION — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER. 2. OPTIONAL SERIES FIELD IS MARKED S3 AND S4. FOR CUMULATIVE SERIES FIELD, CONNECT S3 TO S2 AND CONNECT S4 TO NEGATIVE. FOR DIFFERENTIAL SERIES FIELD CONNECT S4 TO S2 AND S3 TO NEGATIVE. 3. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C. 4. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC. 5. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC. 6. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3 7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1. 8. 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 _____ ORDER NO. _____ S.D. NO. _____ CUSTOMER _____ RELIANCE _____				
REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS		BALDOR		
REV. LTR: -	VERSION: 00	TDR: 000000781086	D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT, DUAL VOLTAGE FIELD	
FILE: \RSN\00026\434		REVISED: 02: 35: 07 02/01/2013	SH 1 of 1	
MTL: -		BY: MGHPC		