



Customer information packet

D5505R

5HP, 1750RPM, DC, 2113ATZ, TENV,

Specifications

Enclosure	TENV
Frame	SC2113ATZ
Frame Material	Steel
Output Power	5.000 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	SC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	28.38 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.	G6082C A
Layout	609950-001
Eff. date	04-13-2015
CD Diagram	406770-002
Poles	00
Leads	
Proprietary	False
Created date	04-10-2015

Nameplate

000613006HP									
CAT.NO.	D5505R	SPEC NO.		T21S0201					
FR	SC 2113ATZ	HP	5	DUTY		CONT			
ENCL.	TENV	RPM	1750/ 2300		S.F.		1.0		
ENCL MOD		VOLTS		500		INSUL		F	
MAX SAFE SPEED	4500	AMPS		9.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		50BC03J30X					
MAX AMPS @ 25 C	1.06	O.D.E. BRG.		45BC02J30X					
HOT AMPS	.71/ .51	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051F; FLD. DATA									
FOR HIGH VOLTS; FIELD VOLTS						150/300			

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III

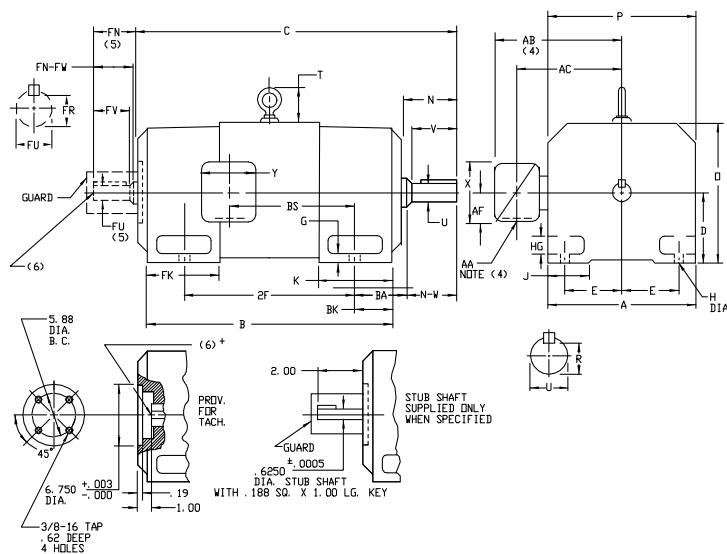
ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF, TOTALLY ENCLOSED

COOLING: SELF-VENTILATED
NON-VENTILATED

MOUNTING:FOOT
METHOD OF DRIVE:COUPLED OR BELTED

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES SC2113ATZ THRU LC2812ATZ



DIMENSIONS ARE IN INCHES; SEE 609950-1M FOR DIMENSIONS IN MILLIMETERS

FRAME	A	B(1)	E	G	H	HG	J	D	P	T	BA	K	FK	BK
SC2113ATZ-LC2113ATZ	10.25	5.25	4.25	.44	.44	1.38	1.75	10.44	10.31	2.56	3.50	5.19	6.81	2.38
SC2512ATZ-LC2512ATZ	12.31	6.25	5.00	.50	.56	1.62	2.00	12.50	12.44	3.06	4.25	6.06	8.00	3.00
MC2812ATZ-LC2812ATZ	13.78	7.25	5.00	.62	.56	1.88	2.75	14.00	13.94	3.38	4.75	6.75	9.19	3.38

FRAME	DRIVE END SWIFT AND KEY										OPPOSITE DRIVE END SWIFT AND KEY										W
	7	8	BS	2F	N	N-W	U	V	R3	SQ	LGTH	FN	FN-FW	FV2	FW	FR2	SQ	LGTH	W		
SC21N13AT	28.6	22.50	11.68	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	3.3		
SC21N13AT	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	3.3		
SC21N13AT	30.62	25.00	13.62	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	3.3		
SC21N13AT	31.69	26.25	14.62	20.00	4.50	4.25	2.125	4.00	1.845	500	3.00	4.00	3.75	1.875	3.50	1.591	500	2.50	3.50		
MC25N13AT	31.69	26.25	13.56	20.00	4.50	4.25	2.125	4.00	1.845	500	3.00	4.00	3.75	1.875	3.50	1.591	500	2.50	3.50		
LC25N13AT	34.69	28.62	15.06	20.00	4.50	4.25	2.125	4.00	1.845	500	3.00	4.00	3.75	1.875	3.50	1.591	500	2.50	3.50		
MC25N13AT	37.78	30.00	16.00	20.00	5.00	4.75	2.375	4.50	2.091	625	3.50	4.50	4.25	2.125	4.00	1.845	500	2.50	3.50		
MC25N13AT	37.78	32.25	16.00	20.00	5.00	4.75	2.375	4.50	2.091	625	3.50	4.50	4.25	2.125	4.00	1.845	500	2.50	3.50		

- (1) "P" DIMENSION WILL NOT BE EXCEEDED SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" AND "F" VARY----- 000 - .001
- (3) "R" AND "FR" VARY----- 000 - .015
- (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AD", "X" AND "Y". REFER TO BOX D/S (CTB. 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 SHAFT STUD.
- (7) IF THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DTP. DRIVE END, ADD .65 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, W-1, W-4, W-5, W-7,
OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.
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.

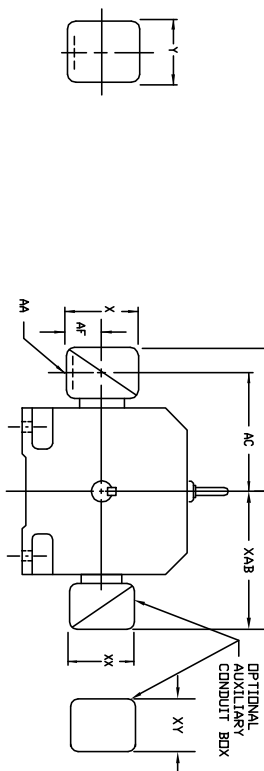
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REV. LTR: -	VERSION: 00	TDR: 000000577407
FILE: \RGGG\00015\543	REVISED: 10:21:19 01/26/2011	BY: RGGGB
MTL: -		

BALDOR
 DIMENSION DRAWING,SC2113ATZ - LC2812ATZ,DPP,TENV,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
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
(2)	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	3"	14.47	11.22	4.25
C2816ATZ	195	3"	14.47	11.22	4.25	8.44	7.25	74874-24-R	3"	15.91	11.84	5.38	10.56	9.00	706308-3-R	3"	15.91	11.84	5.38
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	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"	10.03	8.03	2.50
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	6.00	7.00	705029-2-R	1-1/2	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"	12.66	8.91	3.62
(2)	208	2"	12.66	8.91	3.62	7.88	9.25	705030-2-R	2-1/2	11.09	9.09	2.50	5.00	5.75	705028-2-T	2-1/2	11.09	9.09	2.50
C2516ATZ	40	3/4	11.09	9.09	2.50	5.00	5.75	705028-2-S	1"	12.03	9.59	3.00	6.00	7.00	705029-2-R	1-1/2	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"	13.72	9.97	3.62
C2515ATZ	208	2"	12.78	10.34	3.00	6.00	7.00	75460-T	2-1/2	14.47	10.72	3.62	7.88	9.25	705030-2-R	3"	15.78	11.59	4.12
C2813ATZ	188	2"	14.47	10.72	3.62	7.88	9.25	76700-R	3"	15.78	11.59	4.12	9.50	10.50	76708-R	3"	15.78	11.59	4.12
C2815ATZ	269	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	5" (4)	18.59	13.34	7.00

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

FRAME SIZE	AMPS	STANDARD SIZE						ONE SIZE LARGER					
		AB	AC	AF	X	AA	Y	AB	AC	AF	X	Y	AA
C210	100	10.71	8.98	2.72	7.48	---	7.48	10.71	8.98	2.72	7.48	---	7.48
	200	11.66	9.23	3.33	8.82	---	8.82	11.66	9.23	3.33	8.82	---	8.82
	400	11.30	9.57	2.72	7.48	---	7.48	11.30	9.57	2.72	7.48	---	7.48
C250	200	11.85	9.84	3.35	8.82	---	8.82	11.85	9.84	3.35	8.82	---	8.82
	400	17.48	12.75	6.20	14.39	---	14.39	17.48	12.75	6.20	14.39	---	14.39
	800	17.48	12.75	6.20	14.39	---	14.39	17.48	12.75	6.20	14.39	---	14.39
	200	12.60	10.59	3.76	8.82	---	8.82	12.60	10.59	3.76	8.82	---	8.82
	400	18.27	13.54	6.20	14.39	---	14.39	18.27	13.54	6.20	14.39	---	14.39
	800	18.27	13.54	6.20	14.39	---	14.39	18.27	13.54	6.20	14.39	---	14.39
C280	1600	18.27	13.54	7.68	15.35	---	15.35	18.27	13.54	7.68	15.35	---	15.35

FRAME SIZE	XAB	OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)					
		XY	XY	PART NUMBER	FRAME SIZE	XAB	XY
C210	7.38	4.25	4.25	602007-26-A	C210	10.88	8.00
C250	8.44	4.25	4.25	602007-26-A	C250	11.88	8.00
C280	9.12	4.25	4.25	602007-26-A	C280	12.62	8.00

(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"/P/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

406770-002

406770-002

CONNECTION DIAGRAM
D-C MOTOR - STAB. SHUNT
DUAL VOLTAGE FIELD

W1

(NOTE 7)

SHUNT FIELD

F2

INTER-COIL

AX2

ARMATURE

H1 H2 F1 A1

AX2

A2 S1

SERIES FIELD

S2 S3

SERIES FIELD

S4 F22 P1 P2

TD1

TD2

TD3

THREE WIRE RTD

TD

(NOTE 6)

(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 LEAD MARKED W1.

7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED TD1, TD2, & TD3

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

CUSTOMER

ORDER NO.

S.D. NO.

RELIANCE

REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS

REV. LTR: -

VERSION: 00

TDR: 000000781086

FILE: \RSN\00026\434

REVISED: 02: 35: 07 02/01/2013

MTL: -

BY: MGHPC

BALDOR

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT, DUAL VOLTAGE FIELD

SH 1 of 1

G6082C A: Electrical Design

Page 6 of 6