



Customer information packet

D5015R

15HP, 1750RPM, DC, 2113ATZ, DPG,

Specifications

Enclosure	DP
Frame	SC2113ATZ
Frame Material	Steel
Output Power	15.000 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	A
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G6059B A
Layout	609950-001
Eff. date	09-29-2020
CD Diagram	406770-002
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006HP									
CAT.NO.	D5015R	SPEC NO.		T21S1322					
FR	SC 2113ATZ	HP	15		DUTY		CONT		
ENCL.	DP	RPM	1750/2300		S.F.		1.0		
ENCL MOD	GUARDED	VOLTS		500		INSUL		F	
MAX SAFE SPEED	2450	AMPS	27.00		AMB.		40		
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		50BC03J30X					
MAX AMPS @ 25 C	1.76	O.D.E. BRG.		45BC02J30X					
HOT AMPS	1.25/.89	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051AB									
FLD. DATA FOR HIGH VOLTS;									

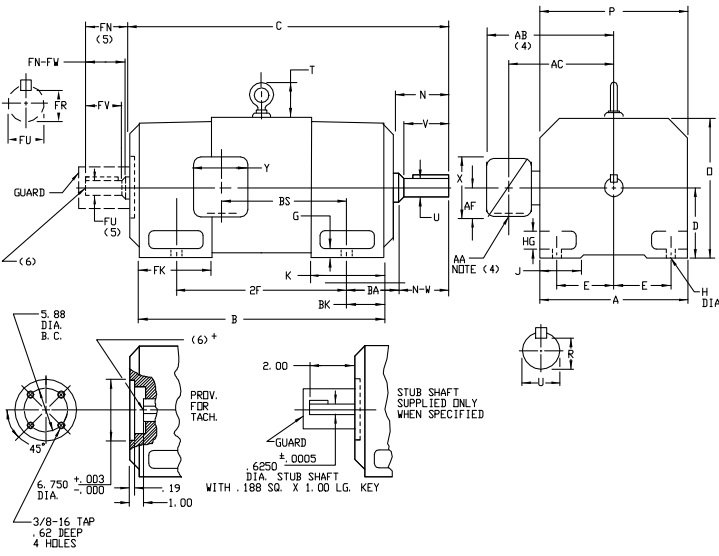
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FIELD VOLTS 150/300	

609950-001

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED, COOLING: SELF-VENTILATED
SPLASHPROOF, TOTALLY ENCLOSED NON-VENTILATED
MOUNTING: FOOT ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING
METHOD OF DRIVE: COUPLED OR BELTED ONLY WHEN SPECIFIED

FRAMES SC2113ATZ THRU LC2812ATZ



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

FRAME	A	X(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	7.00	5.50	62	56	1.88	2.75	14.00	13.94	3.38	4.75	6.75	9.19	3.50

FRAME	D(7)	B	BS	2F	N	N-W	UK(2)	V	R(3)	SQ	LGTH.	FN	FN-FW	FK(2)	FV	FR(3)	SV	LGTH.	WT.
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	315
LC2113ATZ	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	340
SC2512ATZ	31.69	25.06	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	505
MC2512ATZ	33.19	26.56	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	540
LC2512ATZ	34.69	28.06	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	580
MC2812ATZ	37.38	29.94	14.25	22.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	775
LC2812ATZ	39.62	32.19	16.50	22.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	850

- (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 "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 BOX D/S. (STD. 609959-1, "X/P" 609959-2, MILL. 609959-3)
(5) OPPOSITE DRIVE END SHFT SUPPLIED ONLY WHEN SPECIFIED.
(6) MOTOR SHFT TAPPED FOR SCREW-IN STUB SHFT.
(7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DFP, 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, W-4, V-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.

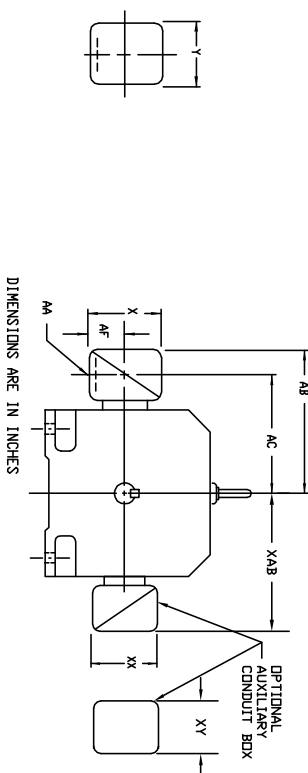
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REV. LTR: -	REVISED: 10:21:19 01/26/2011	BY: RGGBG
FILE: \RGG\00015\543		
MTL: -		

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

609950-001

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

STEEL TERMINAL BOX DIMENSIONS																	
FRAME SIZE	MAX. AMPS	STANDARD SIZE						PART NUMBER		ONE SIZE LARGER						PART NUMBER	
		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	4.38	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	
C2516ATZ	40	3/4 & 1"	8.03	6.53	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	
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)	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	
C2816ATZ	155	3"	14.03	10.53	4.23	8.44	7.23	74874-R		4"	14.47	11.22	4.23	8.44	7.23	74874-24-R	
C2815ATZ	259	4"	14.47	11.22	4.23	8.44	7.23	74874-24-R		5" (4)	15.91	11.84	5.38	10.56	9.00	702508-3-R	
(2)	259	5"	15.91	11.84	5.38	10.56	9.00	702508-3-R			16.72	13.47	7.00	12.75	15.00	702508-1-C	

CAST IRON TERMINAL BOX DIMENSIONS														
FRAME SIZE	MAX. AMPS	STANDARD SIZE						ONE SIZE LARGER						
		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
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
C2115ATZ	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
(2)	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
C2516ATZ	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
C2514ATZ	40	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
C2514ATZ	96	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R	2"	12.03	9.59	3.00	6.00	7.00
C2514ATZ	208	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
C2813ATZ	155	3"	14.47	10.72	3.62	7.88	9.25	76700-R	4"	14.47	10.72	3.62	7.88	9.25
C2815ATZ	259	4"	15.78	11.59	4.12	9.50	10.50	76708-R	5" (4)	15.78	11.59	4.12	9.50	10.50

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

STANDARD SIZE											
FRAME SIZE	AMPS	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	9.23	3.33	8.82	--	8.82	706310-56-B			
	400	11.30	9.57	2.72	7.48	--	7.48	706310-56-A			
	800	11.85	9.84	3.35	8.82	--	8.82	706310-56-B			
C250	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			
	400	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-63G			
C280	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	XAB	XY	PART NUMBER	FRAME SIZE	XAB	XY	PART NUMBER
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) MAX CONDUIT
(2) FRAMES PROVIDED WITH DOUBLE KNUCKLE
(3) MAX PIPE DIA.

(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" 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

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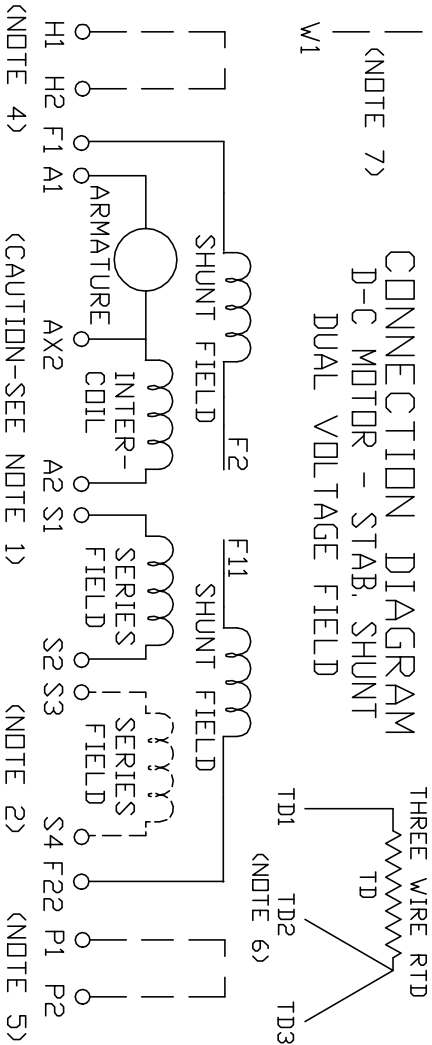
BY: RGGWT

BALDOR

DIMENSION SHEET

SH 1 of 1

609959-001



ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS

A1	A2	S1	S2	F1	F11	F2	F22
A1	S1	A2	S2	F1	F11	F2	F22

Diagram illustrating the decomposition of the tensor product of two representations into a direct sum of irreducible representations. The top row shows the tensor product of two representations, each with a single node. The bottom row shows the direct sum of three representations: one with two nodes and two with one node.

$$\begin{array}{c} \bullet \\ | \\ \bullet \\ + \\ \bullet \\ | \\ \bullet \\ + \\ \bullet \\ | \\ \bullet \\ | \\ \bullet \\ | \\ \bullet \end{array}$$

CCW ROTATION LOW VOLTAGE FIELD CONNECTION CW ROTATION

H1	
AC	
S1	
SC	
F1	
FII	
FC	
FCD	

TH	SI	AC	SC	FI	FI	FC	FC
1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9
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11	11	11	11	11	11	11	11
12	12	12	12	12	12	12	12
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55	55	55	55	55	55	55	55
56	56	56	56	56	56	56	56
57	57	57	57	57	57	57	57
58	58	58	58	58			

CCW ROTATION HIGH VOLTAGE FIELD CONNECTION CW ROTATION

RUAIJUN FALING COMMIAIR 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 RTDS, 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.O. NO. _____

CUSTOMER 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

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