

ABB BALDOR RELIANCE III

Customer information packet

D5050RS-BV

50HP, 1750RPM, DC, 2512ATZ, DPG-FV,

Specifications

Enclosure	DP
Frame	LC2512ATZ
Frame Material	Steel
Output Power	50.000 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	LC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F2
Overall Length	34.69 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

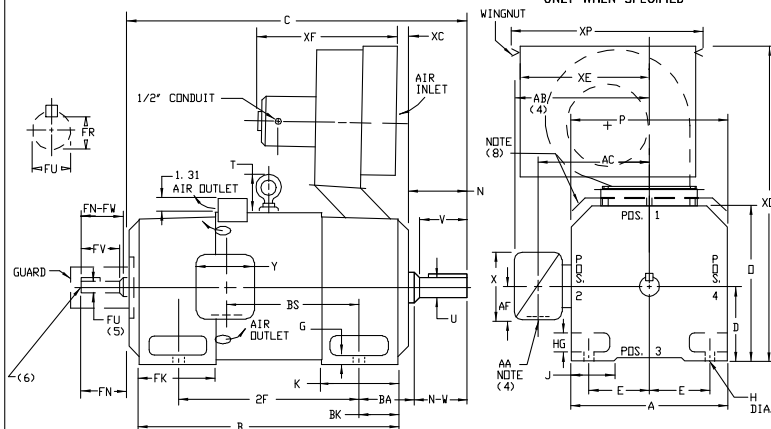
Part Detail

Revision	A
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G6481E B
Layout	609952-096
Eff. date	08-05-2016
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006LP									
CAT.NO.	D5050RS-BV	SPEC NO.		T25T1339					
FR	LC 2512ATZ	HP	50		DUTY		CONT		
ENCL.	DP	RPM	1750/2100			S.F.	1.0		
ENCL MOD	FORCE VENT	VOLTS		500		INSUL		F	
MAX SAFE SPEED	2250	AMPS		84.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		60BC03J30X					
MAX AMPS @ 25 C	3.38	O.D.E. BRG.		50BC02J30X					
HOT AMPS	2.44/1.85	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051AB; AIR BAFFLED									

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED



2.00

STUB SHAFT
SUPPLIED ONLY
WHEN SPECIFIED

GUARD

$\pm .0005$

.6250
DIA.
STUB SHAFT WITH
1.88 SQ. X 1.00 L.G. KEY

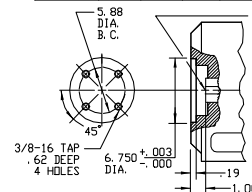
FRAME
SC2113ATZ-LC2113ATZ
SC2512ATZ-LC2512ATZ
MC2812ATZ-LC2813ATZ

DIMENSIONS ARE IN INCHES

FRAME	XC	XE	XF	XD	XP
SC2113ATZ-LC2113ATZ	1.00	10.00	17.25	28.00	14.50
SC2512ATZ-LC2512ATZ	2.50	10.00	17.25	30.31	14.50
MC2812ATZ-LC2813ATZ	1.75	10.00	18.50	30.62	14.50

FRAME	A	D(1)	E	G	H	HG	J	D	P	T	BA	K	FK	B
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	2.1
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	3.1
MC2812ATZ-LC2813ATZ	13.78	7.00	5.50	.62	.56	1.88	2.75	14.00	13.94	3.38	4.75	6.75	9.19	3.3

FRAME	C	B	BS	2F	DRIVE END SHUNT AND KEY								OPPOSITE DRIVE END SHUNT AND KEY								WT
					N	N-V	W	W-V	X	Y	RY	SD	LGTH	FN	FN-V	F	F-V	FX	SD	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	34		
SC2113ATZ	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	37		
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	40		
SC2113ATZ	31.69	25.86	12.06	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	53		
SC2113ATZ	33.19	26.56	15.56	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	57		
LC2113ATZ	34.69	28.06	18.06	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	61		
SC2113ATZ	36.19	28.56	18.56	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	65		
LC2113ATZ	37.69	29.06	19.06	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	69		
LC2113ATZ	39.62	32.19	18.19	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	88		
LC2113ATZ	41.25	33.81	18.25	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	94		



- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "A" AND "F" VARY FROM .000 TO .001.
- (3) "B" AND "F" VARY FROM .000 TO .001.
- (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AD", "AE", "XK". REF. TO THE MOTOR APPLICATION GUIDE FOR DIMENSIONS "V" AND "VPP". DIMENSIONS "D", MILL 60959S-2.
- (5) OPPOSITE DRIVE END SHAFT SPOULDED WHEN SPECIFIED.
- (6) MOTOR SHAFT TAPPED FOR SCREW-IN STOP SHAFT.
- (7) FOR THE MOTOR APPLICATION GUIDE, SEE THE REVERSE SIDE OF THE USE OF DDP: DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER.
- (8) FOR HORIZONTAL APPLICATIONS ONLY.
- (9) BOX COVER CAN BE ROTATED 180° END 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 BY BOX LOCATED ON TOP WHEN SPECIFIED.
- (10) ASSEMBLY CAN BE MOUNTED TO A RIGID SUPPORT OR A FLEXIBLE SUPPORT.
- (11) MOTOR WEIGHT MAY VARY 1 LB. FROM STANDARD RATINGS AND/OR ACCESSORIES. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
- 13

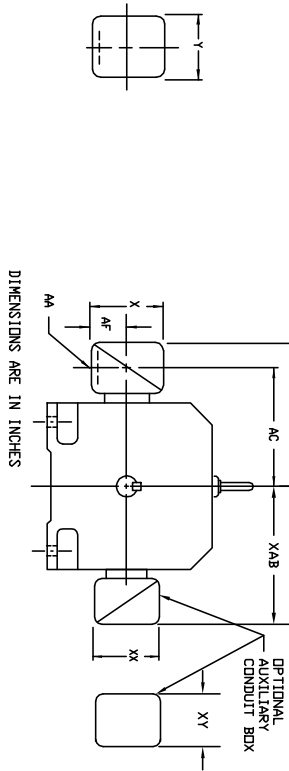
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: UPDATE FRAME SIZE		
REV. LTR: A	VERSION: 01	TDR: 000000845571
FILE: \\RGG\00015\585	REVISED: 10:46:47 03/25/2014	BY: RGGWT
MTL: -		

DIMENSION DRAWING: SC2113ATZ - C2813ATZ.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

STEEL TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	STANDARD SIZE	PART NUMBER				ONE SIZE LARGER				PART NUMBER				
			AK(1)	AB	AC	AF	Y	AK(1)	AB	AC		AF	Y		
C2113ATZ	40	3/4 & 1"	8.97	7.47	1.94	4.38	5.00	7.05028-1-R	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	7.05029-1-R
C2115ATZ	96	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	7.05029-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	7.05030-1-R
(2)	208	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	7.05030-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	7.05030-1-R
C2514ATZ	40	3/4 & 1"	10.03	8.53	1.94	4.38	5.00	7.05028-1-R	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	7.05029-1-R
C2514ATZ	96	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	7.05029-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	7.05030-1-R
(2)	208	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	7.05030-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	7.05030-1-R
C2815ATZ	188	2"	14.03	10.53	4.23	8.44	7.23	7.0674-R	3"	14.47	11.22	4.23	8.44	7.23	7.0674-2-R
C2815ATZ	188	3"	14.47	11.22	4.23	8.44	7.23	7.0674-2-R	4"	15.91	11.84	5.38	10.56	9.00	7.06308-3-R
(2)	269	4"	15.91	11.84	5.38	10.56	9.00	7.06308-3-R	5" (4)	18.72	13.47	7.00	12.75	15.00	7.06308-1-C

CAST IRON TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	STANDARD SIZE					PART		ONE SIZE LARGER					PART	
		AK(3)	AB	AC	AF	X	Y	NUMBER	AK(3)	AB	AC	AF	X	Y	NUMBER
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
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
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	705029-2-S
(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	705030-2-R
C2512ATZ	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
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	705029-2-R
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	705029-2-S
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	705030-2-R
C2812ATZ	128	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-RB
C2812ATZ	185	3"	14.47	10.72	3.62	7.88	9.25	76700-RB	4"	15.78	11.59	4.12	9.50	10.50	76708-R
C2813ATZ	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

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)									
STANDARD SIZE									
FRAME SIZE	AMPS	AB	AC	AF	X	AA	Y	PART NUMBER	PART NUMBER
C210	100	10.71	8.98	2.72	7.48	--	7.48	7.06310-56-A	7.06310-225-R
	200	11.66	9.23	3.33	8.82	--	8.82	7.06310-56-B	7.06310-225-R
	100	11.30	9.57	2.72	7.48	--	7.48	7.06310-56-A	7.06310-225-R
C250	200	11.85	9.84	3.35	8.82	--	8.82	7.06310-56-B	7.06310-225-R
	400	17.48	12.75	6.20	14.39	--	14.39	7.06310-63-B & 7.06310-63G	7.06310-63-B & 7.06310-63G
	800	17.48	12.75	6.20	14.39	--	14.39	7.06310-63-B & 7.06310-63G	7.06310-63-B & 7.06310-63G
	200	12.60	10.59	3.76	8.82	--	8.82	7.06310-56-B	7.06310-225-R
C280	400	18.27	13.54	6.20	14.39	--	14.39	7.06310-63-B & 7.06310-63G	7.06310-63-B & 7.06310-63G
	800	18.27	13.54	6.20	14.39	--	14.39	7.06310-63-B & 7.06310-63G	7.06310-63-B & 7.06310-63G
	1600	18.27	13.54	7.68	15.35	--	15.35	7.06310-63-C	7.06310-63-C

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)														
FRAME SIZE		XAB	XY	PART NUMBER	FRAME SIZE		XAB	XY	PART NUMBER	FRAME SIZE		XAB	XY	PART NUMBER
C210	7.38	4.25	4.25	602007-26-A	C210	10.88	8.00	8.00	706310-3-B	C250	11.88	8.00	8.00	706310-3-B
C250	8.44	4.25	4.25	602007-26-A	C250	11.88	8.00	8.00	706310-3-B	C280	12.62	8.00	8.00	706310-3-B
C280	9.12	4.25	4.25	602007-26-A	C280	12.62	8.00	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 ON 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

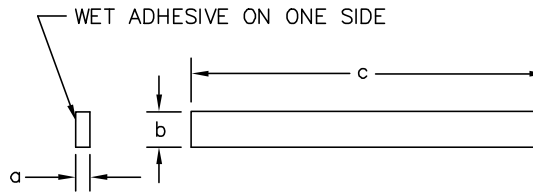
BALDOR

DIMENSION SHEET

SH 1 of 1

609959-001

065564-004



SYM	MAKE FROM	a	b	c	REMARKS
	065564-004				
A	X	1/8	5/8	24*	TERMBX & CVR 180AT-250AT
B	X	1/8	5/8	37 1/2*	TERMBX & CVR 280AT-320AT
C	Y	1/4	5/8	44 1/2 Δ	FILTER TO HOUSING GASKET
D	X	1/8	5/8	170"	TEAO HEAT EXCH.
E	Y	1/4	5/8	72" Δ	TERMBX & CVR

SYM	MAT'L SPEC	a	b	c
X	46024-XV	1/8	5/8	* 50' ROLL; WET ADHESIVE ON ONE SIDE
Y	46024-XV	1/4	5/8	* 50' ROLL; WET ADHESIVE ON ONE SIDE

Δ RELIANCE WILL CUT AND MOUNT ON FILTER HOUSING PER ASSEMBLY DRAWING 603989-2.

* PROD. NOTE: WHEN ORDERING THRU PURCHASING ORDER AS 50 FT. ROLLS, WET ADHESIVE ON ONE SIDE. RELIANCE WILL CUT AND MOUNT ON COVER. PER INSTRUCTIONS ON COVER DRAWINGS.

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

REV. DESC: CHANGE DESCRIPTION ON TITLE BLOCK		
REV. LTR: C	VERSION: 03	TDR: 000000571980
FILE: \RGG\00000\220	REVISED: 10:54:04 12/16/2010	BY: RGGWT
MTL: -		

BALDOR
GASKET,STRIP,CLOSED CELL NEOPRENE
SH 1 of 1

065564-004

