

ABB BALDOR RELIANCE III

Customer information packet D2030R

30 1750 SC2512ATZ DPG 240V

Specifications

Enclosure	DP
Frame	SC2512ATZ
Frame Material	Steel
Output Power	30.000 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	31.69 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

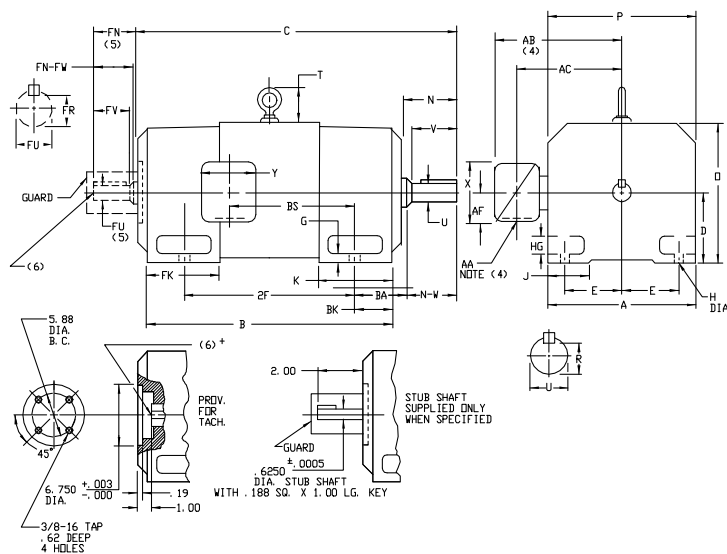
Part Detail

Revision	-
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G6073A A
Layout	609950-001
Eff. date	04-13-2015
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006HP									
CAT.NO.	D2030R	SPEC NO.		T25S1330					
FR	SC 2512ATZ	HP	30		DUTY		CONT		
ENCL.	DP	RPM	1750/ 2300			S.F.	1.0		
ENCL MOD	GUARDED	VOLTS		240		INSUL		F	
MAX SAFE SPEED	4500	AMPS		111.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE		C					
VOLTS	150	D.E. BRG.		60BC03J30X					
MAX AMPS @ 25 C	3.45	O.D.E. BRG.		50BC02J30X					
HOT AMPS	2.46/ 1.45	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051AD									

FRAMES SC2113ATZ THRU LC2812ATZ



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

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.
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.
MC2812ATZ-LC2812ATZ	13.78	7.00	5.00	.62	.56	1.88	2.75	14.00	13.94	3.38	4.75	6.75	9.19	3.

FRAME	C(7)	DIVE END SHIFT AND KEY										OPPOSITE DIVE END SHIFT AND KEY(S)									
		B	S	BS	2F	N	N+V	U(4)	V	R(3)	SG	LGTH.	FN	FN+V	FK(4)	FK	FK(3)	SG	LGTH.		
32213123AT	28	28	25	11	18	18	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	
32213123AT	29	28	25	11	18	18	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	
32213123AT	30	28	25	11	18	18	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	
32213123AT	31	29	26	12	19	19	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	
32213123AT	31	29	26	12	19	19	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	
32213123AT	32	29	26	12	19	19	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	
32213123AT	33	29	26	12	19	19	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	
32213123AT	34	29	26	12	19	19	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	
32213123AT	35	29	26	12	19	19	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	
32213123AT	36	29	26	12	19	19	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	
32213123AT	37	29	26	12	19	19	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	
32213123AT	38	29	26	12	19	19	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	
32213123AT	39	29	26	12	19	19	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	
32213123AT	40	29	26	12	19	19	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	
32213123AT	41	29	26	12	19	19	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	
32213123AT	42	29	26	12	19	19	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	
32213123AT	43	29	26	12	19	19	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	
32213123AT	44	29	26	12	19	19	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	
32213123AT	45	29	26	12	19	19	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	

- (1) "P" DIMENSION WILL NOT EXCEED SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" AND "F" VARY----- 0.00 - .001
- (3) "R" AND "FR" VARY----- 0.00 - .015
- (4) TERMINAL BOX VARIES WITH H. FOR DIMENSIONS "AA", "AB", "AC", "AD", "AE", "X" AND "Y", REFER TO BOX D/S (STB. 609599-1, X/P. 609599-2, MILL 609599-3)
- (5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
- (6) SHAFT END TAPPED FOR SCREW-IN STUB SHAFT.
- (7) IF THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DPE, DRIVE END, AND P.S. 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.

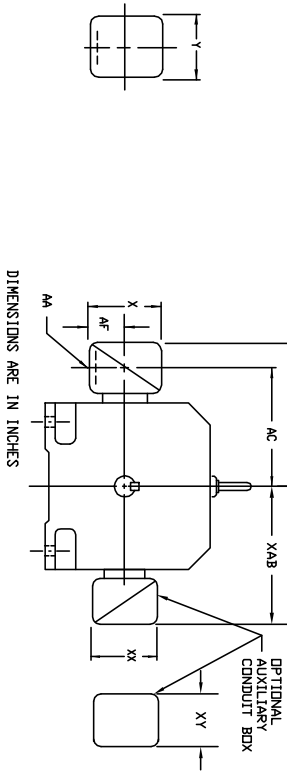
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: LOADED TO BUS		
REV. LTR: -	VERSION: 00	TDR: 000000577407
FILE: \RGG\00015\543	REVISED: 10:21:19 01/26/2011	BY: RGGBG
MTL: -		

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						PART NUMBER		
		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	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" & 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	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R
C2513ATZ	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	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" & 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	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R
C2813ATZ	188	2"	14.03	10.53	4.25	8.44	7.25	74874-R	2"	14.47	11.22	4.25	8.44	7.25	74874-R	2"	14.47	11.22	4.25	8.44	7.25	74874-R
C2815ATZ	188	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	10.56	9.00	706308-3-R
(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	12.75	15.00	706589-1-C

CAST IRON TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	STANDARD SIZE						ONE SIZE LARGER							
		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
C2513ATZ	40	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	96	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
C2515ATZ	188	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
C2813ATZ	188	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
C2815ATZ	269	3"	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
(2)	400	4"	14.47	10.72	3.62	7.88	9.25	76700-R	5"	15.78	11.59	4.12	9.50	10.50	76700-S
C3813ATZ	665	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)

FRAME SIZE	AMPS	STANDARD SIZE						OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)					
		AB	AC	AF	X	AA	Y	FRAME SIZE	XAB	XY	XY	XY	PART NUMBER
C210	100	10.71	8.98	2.72	7.48	---	7.48	C210	10.88	8.00	8.00	8.00	706310-225-R
	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
C250	200	11.85	9.84	3.35	8.82	---	8.82						
	400	17.48	12.75	6.20	14.39	---	14.39						
	800	17.48	12.75	6.20	14.39	---	14.39						
	200	12.60	10.59	3.76	8.82	---	8.82						
	400	18.27	13.54	6.20	14.39	---	14.39						
	800	18.27	13.54	6.20	14.39	---	14.39						
C280	1600	18.27	13.54	7.68	15.35	---	15.35						

- (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 IN TOP WHEN SPECIFIED.
FOR "X"/TERMINAL BOX DIMENSIONS SEE 609959-3.
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	VERSION: 01	TDR: 000000816512
REV. LTR: A		
FILE: \RGG\00021\153		REVISED: 03: 09: 09 09/06/2013
MTL: -		BY: RGGWT

BALDOR

DIMENSION SHEET

SH 1 of 1

609959-001

406770-001

406770-001

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8

REV. LTR: A

FILE: \RSN\00026\422

MTL: -

VERSION: 01

REVISED: 10:19:12 03/11/2016

TDR: 000000970330

BY: RAGTBM

BALDOR

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

SH 1 of 1

406770-001

406770-001

CONNECTION DIAGRAM

D-C MOTOR - STAB. SHUNT

W1

(NOTE 7)

SHUNT FIELD

INTER-COIL

AX2

A2 S1

SERIES FIELD

S2 S3

(NOTE 2)

S4

F2 P1

P2

(NOTE 5)

TD1

TD2

TD3

(NOTE 6)

THREE WIRE RTD

ARMATURE

H1 H2 F1 A1

(NOTE 4)

(CAUTION-SEE NOTE 1)

ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS

CCW ROTATION

A1 A2 S1 S2 F1 F2

CW ROTATION

A1 S1 A2 S2 F1 F2

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 DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER

CUSTOMER

RELIANCE

ORDER NO.

S.D. NO.