

ABB BALDOR RELIANCE III

Customer information packet

D2040R-BV

40HP, 1750RPM, DC, 2115ATZ, DPG-FV,

Specifications

Enclosure	DP
Frame	LC2115ATZ
Frame Material	Steel
Output Power	40.000 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	STR. SHUNT
Frame Prefix	LC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F2
Overall Length	35.25 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.	G8381A B
Layout	616002-001
Eff. date	04-13-2015
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006HP									
CAT.NO.	D2040R-BV	SPEC NO.		T21T1380					
FR	LC 2115ATZ	HP	40		DUTY		CONT		
ENCL.	DP	RPM	1750/ 2100			S.F.	1.0		
ENCL MOD	FORCE VENT	VOLTS		240		INSUL		F	
MAX SAFE SPEED	4500	AMPS		146.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STR. SHUNT	POWER CODE		C					
VOLTS	150	D.E. BRG.		50BC03J30X					
MAX AMPS @ 25 C	5.63	O.D.E. BRG.		45BC02J30X					
HOT AMPS	4.44/ 3.47	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051AD									

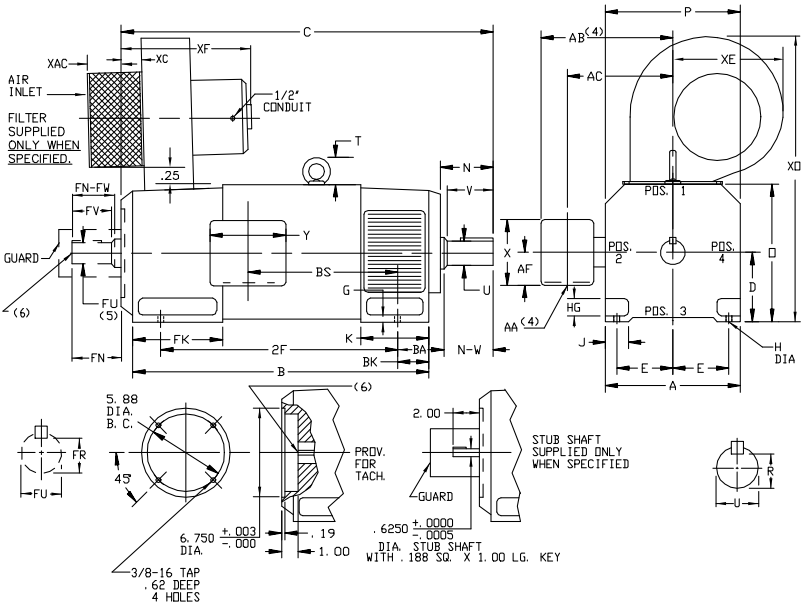
616002-001

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: FORCE VENTILATED
WITH INTEGRAL
BLOWER AND MOTOR
ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES SC2113ATZ THRU LC2115ATZ



DIMENSIONS ARE IN INCHES

FRAME	XAC	XC	XE	XF	XO
SC2113ATZ-LC2115ATZ	7.75	2.25	10.00	16.00	22.75

FRAME	A	D(1)	E	G	H	HG	J	O	P	T	BA	K	FK	BK
SC2113ATZ-LC2115ATZ	10.25	5.25	4.25	.44	.44	1.38	1.75	10.44	10.31	2.08	3.50	5.19	6.81	2.38

FRAME	C(7)	B	BS	2F	N	N-W	U(2)	V	R(3)	SO.	LGTH.	FN	FN-FW	FU(2)	FV	FR(3)	SO.	LGTH.	WT. LBS.
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	345
MC2113ATZ	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	370
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	400
MC2115ATZ	32.50	26.62	15.50	22.00	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	425
LC2115ATZ	35.25	29.38	18.25	22.00	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	480

- (1) "B" 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 SHAFT SUPPLIED ONLY WHEN SPECIFIED.
(6) MOTOR SHAFT TAPPED FOR SCREW-IN STUB SHAFT.
(7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DDP, 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, V-4, V-5, V-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.
BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, OR 4, EXCEPT BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION.
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	VERSION: 00	TDR: 000000578087
REV. LTR: -	REVISED: 08:22:49 01/28/2011	BY: CONNAS
MTL: -		

BALDOR

DIMENSION DRAWING, SC2113ATZ - LC2115ATZ, DPP, FOOT MTG

SH 1 of 1

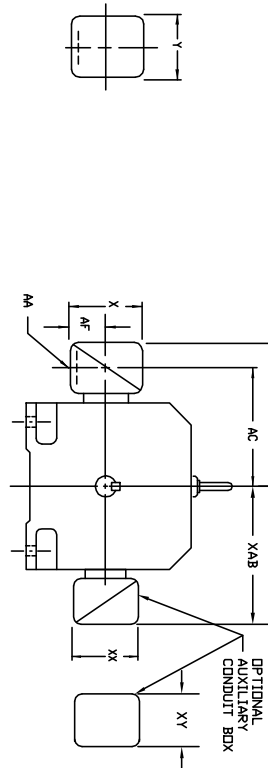
616002-001

**INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III**

TERMINAL BOX DIMENSIONS

STANDARD SIZE AND ONE SIZE LARGER
FRAMES C2113A1Z THRU C2815A1Z

DIMENSIONS ARE IN INCHES



FRAME SIZE		STANDARD SIZE						PART NUMBER						ONE SIZE LARGER						PART NUMBER					
MAX. AMPS	AAK 1'	AB	AF	X	Y			AAK 1'	AB	AF	X	Y			AAK 1'	AB	AF	X	Y						
C21.12A17	40	3/4 & 1"	8.97	7.47	1.94	4.38	5.50	705028-1-R	1-1/4 & -1/2	10.03	8.03	2.50	5.50	6.12	705029-1-R	2-1/4 & -1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R			
C21.12A17 (2)	96	1-1/4 & -1/2	10.03	8.03	2.50	5.50	6.12	705029-1-R	2-1/4 & -1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R	3-1/4 & -1/2	12.32	9.09	3.50	5.50	6.12	705031-1-R			
C21.12A17 (2)	128	2" & -1/2"	11.16	8.41	3.19	7.00	7.62	705030-1-R	3-1/4 & -1/2"	12.32	9.09	3.50	5.50	6.12	705031-1-R	4-1/4 & -1/2"	13.48	9.47	3.19	7.00	7.62	705032-1-R			
C21.12A17 (2)	160	3/4 & 1"	10.03	8.53	1.94	4.38	5.50	705028-1-R	1-1/4 & -1/2"	11.09	9.09	2.50	5.50	6.12	705029-1-R	2-1/4 & -1/2"	12.32	9.47	3.19	7.00	7.62	705030-1-R			
C21.12A17 (2)	96	1-1/4 & -1/2"	11.09	9.09	3.02	5.50	6.12	705030-1-R	2-1/4 & -1/2"	12.32	9.47	3.19	7.00	7.62	705031-1-R	3-1/4 & -1/2"	13.48	9.47	3.19	7.00	7.62	705032-1-R			
C21.12A17 (2)	128	2" & -1/2"	12.32	9.47	3.19	7.00	7.62	705030-1-R	3-1/4 & -1/2"	13.48	9.47	3.19	7.00	7.62	705031-1-R	4-1/4 & -1/2"	14.64	9.85	3.19	7.00	7.62	705032-1-R			
C28.12A17	128	2"	14.03	10.52	4.25	8.44	7.62	74874-1-R	3"	14.47	11.62	4.25	8.44	7.62	74874-1-R	4"	15.51	11.84	5.38	10.56	9.47	705036-3-R			
C28.12A17	160	2 1/2"	15.47	11.47	4.25	8.44	7.62	74874-1-R	3 1/2"	15.91	12.84	5.38	10.56	9.47	705036-3-R	4 1/2"	16.72	13.47	7.00	12.75	15.00	702656-1-C			
C28.12A17	208	3"	15.91	11.84	5.38	10.56	9.47	705036-3-R	4"	16.72	13.47	7.00	12.75	15.00	702656-1-C										

CAST IRON TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	AA(3)	STANDARD SIZE					PART NUMBER	ONE SIZE LARGER					PART NUMBER	
			AB	AC	AF	X	Y		AA(3)	AB	AC	AF	X		Y
C5812A17	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
C5812A17	40	1"	10.03	8.03	2.50	5.00	3.75	705028-2-T	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-R
C5812A17	96	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-R	2"	16.97	8.53	3.00	6.00	7.00	705029-2-S
C5812A17	208	2"	10.97	8.53	3.00	6.00	7.00	705029-2-S	2-1/2	12.66	8.97	3.62	7.88	9.25	767000-RB
C5812A17	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
C5812A17	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
C5812A17	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
C5812A17	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	767000-RB
C5812A17	128	2"	12.78	10.34	3.00	6.00	7.00	754603-T	3"	14.47	10.72	3.62	7.88	9.25	767000-RB
C5812A17	185	3"	14.47	10.72	3.62	7.88	9.25	767000-RB	3 1/2	15.78	11.34	4.12	9.50	10.50	767000-RB
C5812A17	208	4"	15.78	11.34	4.12	9.50	10.50	767000-RB	5" (4)	18.59	13.59	4.10	12.75	15.00	766700-S

CONDUIT BOX DIMENSIONS WITH TERMINAL BORDERS (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	706310-56-A	706310-225-R	
	200	11.26	9.25	3.35	8.82	---	8.82	706310-56-B	706310-225-R	
	100	11.30	9.57	2.72	7.48	---	7.48	706310-56-A	706310-225-R	
	200	11.85	9.84	3.35	8.82	---	8.82	706310-56-B	706310-225-R	
C250	400	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
	800	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
	200	12.60	10.99	3.76	8.82	---	8.82	706310-56-B	706310-225-R	
	400	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
C280	800	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
	1600	18.27	13.54	7.68	15.35	---	15.35	706310-63-C	706310-63-C	

OPTICAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)					
FRAME SIZE	XAB	XX	XY	FRAME SIZE	PART NUMBER
C310	7.98	4.25	4.25	C310	706310-3-B
C350	8.44	4.25	4.25	C350	706310-3-B
C380	9.12	4.25	4.25	C380	706310-3-B

- (1) STEEL CONDUIT.
(2) "AA" TERMINAL BOX FOR CELL13A17 AND C5512A17
(3) FRAMES PROVIDED WITH DOUBLE KNOCKOUT.
(4) "AA" PIPE TAP.
- (4) TERMINAL BOX 76870-05 AND 76870-0R EXTENDS BELOW MOTOR FEET.
TERMINAL BOX CAN BE ROUTED FOR LEAD OUTLET AT TOP, SIZES 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.
FOR "X"PP TERMINAL BOX DIMENSIONS SEE 609393-2
FOR "LL" TYPE TERMINAL BOX DIMENSIONS SEE 609393-3.

609959-001

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

406770-006			406770-006		
CONNECTION DIAGRAM D-C MOTOR - STRAIGHT SHUNT W1 <NOTE 6> H1 H2 SHUNT FIELD ARMATURE INTER-COIL F1 A1 AX2 A2 F2 <NOTE 3> <CAUTION-SEE NOTE 1> <NOTE 4> THREE WIRE RTD TD1 TD2 TD3 <NOTE 5> ARMATURE AND FIELD EXTERNAL CONNECTIONS WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS A1 A2 F1 F2 - + - + CCW ROTATION ROTATION FACING COMMUTATOR END A1 A2 F1 F2 - + + - CW ROTATION 1. CAUTION — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER. 2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C. 3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC. 4. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC. 5. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3. 6. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1. 7. 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 MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN. CUSTOMER _____ CUSTOMER ORDER NO. _____ RELIANCE S.D. NO. _____					
REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS		BALDOR D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT SH 1 of 1			
REV. LTR: -	VERSION: 00				TDR: 000000781086
FILE: \RSN\00026\515	REVISED: 02: 41:08 02/01/2013				
MTL: -	BY: MGHPC				