

ABB BALDOR RELIANCE III

Customer information packet

D5130R-BV

30HP, 1150RPM, DC, 2115ATZ, DPG-FV,

Specifications

Enclosure	DP
Frame	LC2115ATZ
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	STR. SHUNT
Frame Prefix	LC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
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.	G8380A 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.		SPEC NO.	T21T1378						
FR	LC 2115ATZ	HP	30	DUTY		CONT			
ENCL.	DP	RPM	1150/ 1800		S.F.	1.0			
ENCL MOD	FORCE VENT	VOLTS	500		INSUL		F		
MAX SAFE SPEED	4500	AMPS	54.00		AMB.		40		
FIELD DATA		SER.NO.							
WINDING	STR. SHUNT	POWER CODE	C						
VOLTS	300	D.E. BRG.	50BC03J30X						
MAX AMPS @ 25 C	3.95	O.D.E. BRG.	45BC02J30X						
HOT AMPS	2.97/ 1.63	MIN. AMB.	0		TYPE		TR		
BRUSH:419904051AB									

ABB BALDOR RELIANCE III

CS MOTOR INFORMATION
LC2115ATZ

NAMEPLATE PACKET
30.0HP

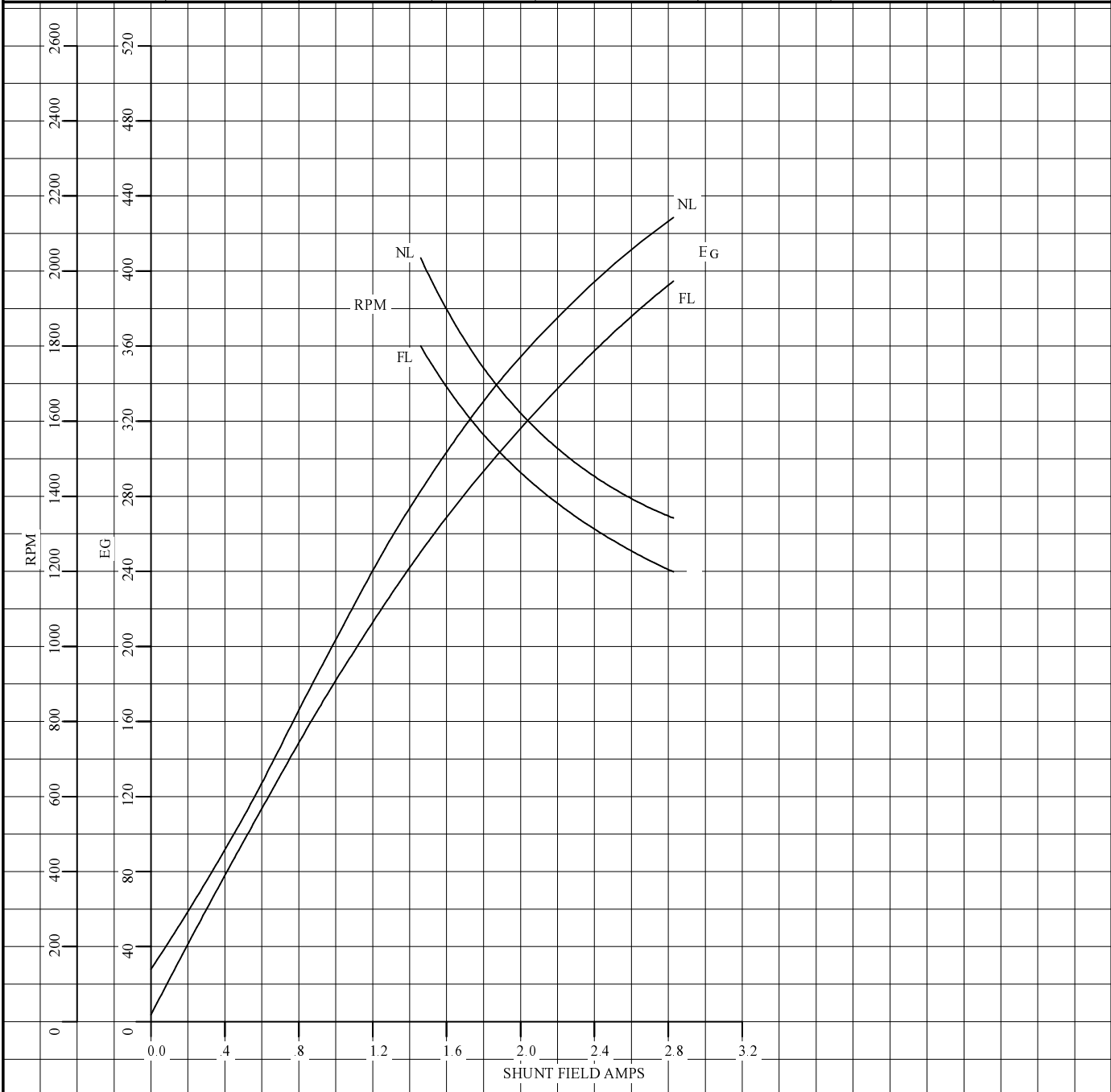
D5130R BASE SPEED
1150

WINDING TYPE PG-FV,
STAB SHUNT

S.F.	ENCL.	AMB ⁰ C/INSUL	DUTY	POWER CODE/FORM FACTOR	TYPE	WK ² (LB-FT ²)
1.0	DPFV	40/F	CONT	C	TR	3.618

COOLING AIR(CFM/IN H ₂ O) ³	ΔT (sec)	R (hot)	T _E	T _M	BASIC RPM	MAX CONT RPM	WINDER RPM	MAX. SAFE
300/2.25	.0986	.178	.0126	.0175	1380	1800	-	4500

WINDING	VOLTS	RESISTANCE		CURRENT		INDUCTANCE	TURNS PER COIL
		25 ⁰ C	HOT	25 ⁰ C	HOT		
ARM CIRCUIT	500	1.00	1.35	-	54.0	17.7 mH	-
SERIES S1-S2	-	.0225	.0299	-	54.0	-	2.00
SHUNT F1-F2	300	76.6	106	3.92	2.83	11.4 H	680



REMARKS: TYPICAL DATA

CURVES VALID FOR NAMEPLATE SPEED RANGE ONLY



DR. BY T. BELL
CK. BY T. BELL
APP. BY T. SEVON
DATE 09-13-95

D-C
APPLICATION
DATA

SG8380AB

ISSUE DATE 09-13-95

REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS	
	LC2115ATZ	30.0HP	1150	500	54.0	
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STAB. SHUNT		1.0	DPFV	40/F	CONT	300
POWER CODE	TYPE	WK ² (LB-FT ²)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C	HOT FIELD RES	
C	TR	3.618	1.35	3.91	106	
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H ² 0)		TURN PER COIL SHUNT/SERIES	TEST DATE	
17.7	11.3	300/2.25		680/2	-	
LOAD PERFORMANCE						
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY	
NO LOAD	.89	0	0	1333	0	
1/4	14	32.9	8.07	1289	78.7	
2/4	27	67.4	16.1	1252	83.2	
3/4	41	100	23.3	1221	82.3	
4/4	54	131	29.9	1196	80.0	
O.L.	81	186	40.9	1156	73.7	
RPM VS. FIELD AMPS						
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED		
2.82	1332	1196	428	394		
2.48	1425	1286	401	365		
2.14	1552	1402	369	331		
1.80	1741	1563	330	293		
1.45	2034	1800	282	250		
MAXIMUM SAFE SPEED = 4500 RPM						
REMARKS: TYPICAL DATA						
		DR. BY T. BELL CK. BY T. BELL APP. BY T.S.EVON DATE 09-13-95		D-C MOTOR PERFORMANCE DATA		DG8380AB ISSUE DATE 09-13-95

HP/KW 30.0HP

RPM 1150

ARM. VOLTS 500

WDG. TYPE STAB. SHUNT

ENCL. DPFV

AMB °C INSL. 40/F

ARM. AMPS 54.0

FIELD VOLTS 300

WK²(LB-FT²) 3.618

HOT ARM. CIR. RES. 1.35

ARM. CIRCUIT IND(mh) 17.7

HOT FIELD RES. 106

POWER CODE C

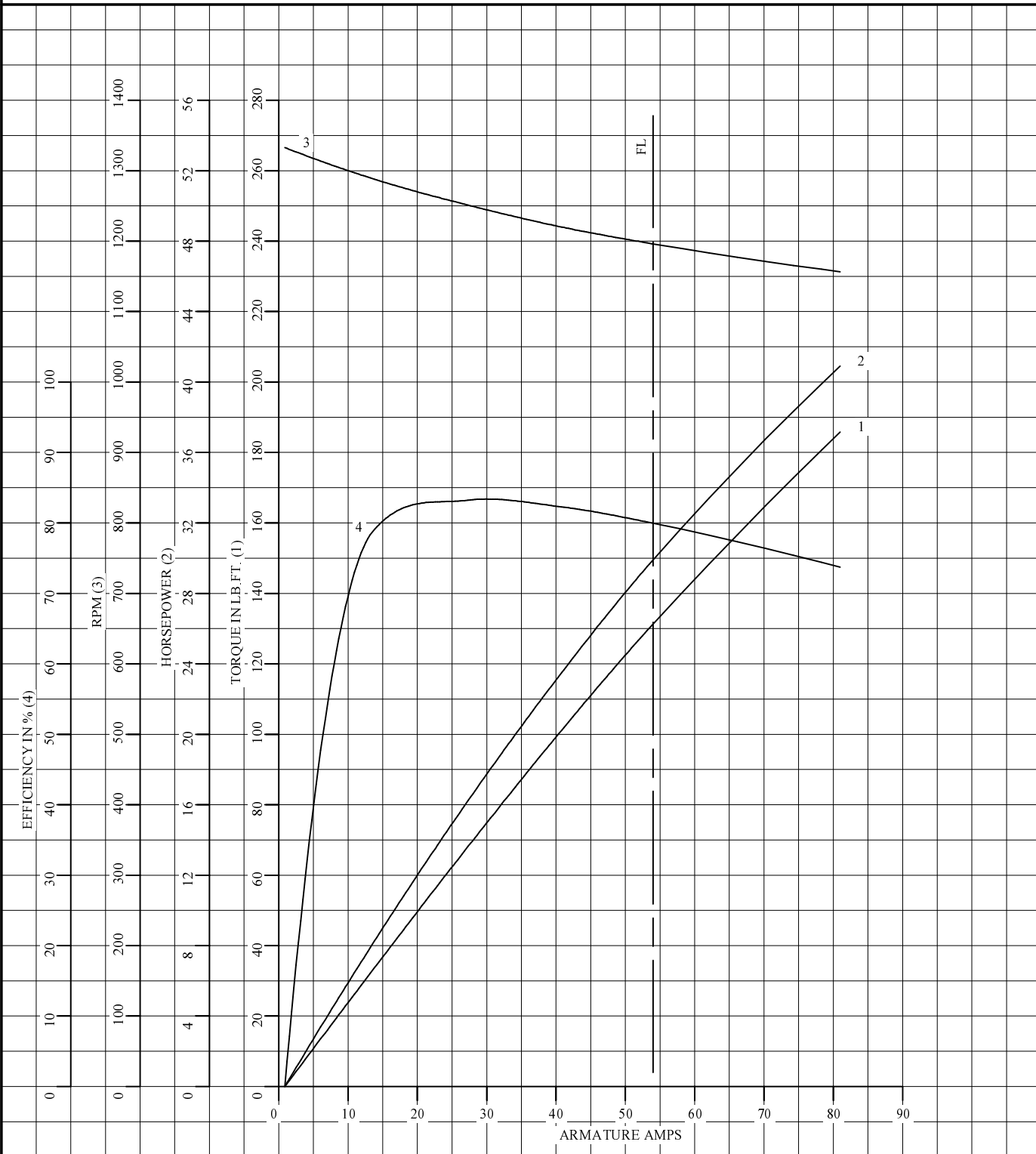
FLD.AMPS@25 °C 3.91

FIELD IND (H) 11.3

CFM/IN. H₂O 300/2.25

TEST S.O. -

TEST DATE -



REMARKS: TYPICAL DATA



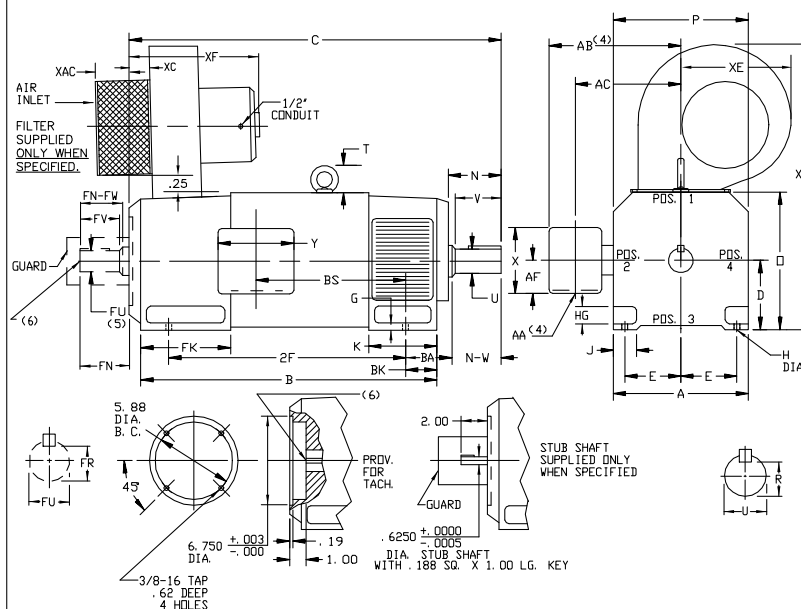
DR. BY T. BELL
CK. BY T. BELL
APP. BY T. S. EVON
DATE 09-13-95

**D-C
PERFORMANCE
CURVES**

PG8380AB

ISSUE DATE 09-13-95

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED



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	2.36

FRAME	C(7)	B	BS	2F	DRIVE END SHAFT AND KEY							OPPOSITE DRIVE END SHAFT AND KEY(S)							WT.
					N	N-W	U(2)	V	R(3)	SQ.	LGTH.	FN	FN-FW	FU(2)	FV	FR(3)	SQ.	LGTH.	
SC2113A7Z	28.38	22.50	11.38	18.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	345
MC2113A7Z	29.62	23.75	12.62	18.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	370
MC2113A7Z	31.25	25.38	14.25	18.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	400
MC2115A7Z	35.25	26.62	15.50	22.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	425
MC2115A7Z	32.50	28.38	18.25	22.00	4.00	3.75	1.875	3.50	1.91	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	480

- (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 "F"U" VARY ---.4, .000 - .01.
- (3) "P" AND "F"U" VARY ---.000 - .015.
- (4) TERMINAL BOX VARIES WITH H.P. DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y".
- (5) REFER TO BOX D'S. (STD. 609959-1, "X"/P 609959-2, MILL 609959-3)
- (6) DRIVE END SHAFT SUPPLIED UNLESS OTHERWISE SPECIFIED.
- (7) MOTOR SHAFT TAPPED FOR SCREW-IN STUB SHAFT.
- (8) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DRIVE END AND LEAVE END, "C" DIMENSION IS NOT REQUIRED.
- (9) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
- (10) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, W-4, W-5, W-7, OR C-2 MOUNTING BOX IS SPECIFIED BY DIMENSION ON DRAWING.
- (11) BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, 4, OR 5.
- (12) BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION.
- (13) MINIMUM CLEARANCE DIMENSIONS FOR NON-SHAFT ACCESSORIES.
- (14) IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

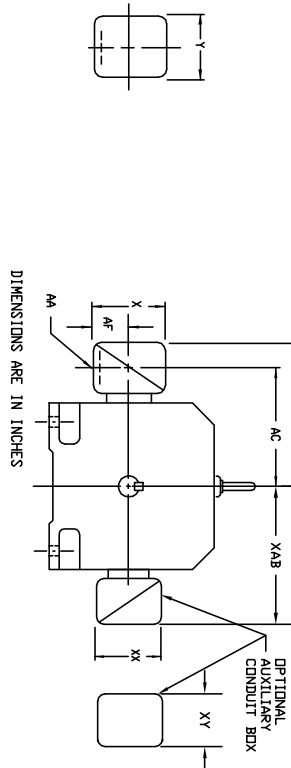
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. LTR: -	VERSION: 00	TDR: 000000578087
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MTL: -		

DIMENSION DRAWING,SC2113ATZ – LC2115ATZ,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

FRAME SIZE	MAX. AMPS	STANDARD SIZE						STEEL TERMINAL BOX DIMENSIONS					
		AK(1)	AB	AC	AF	X	Y	PART NUMBER	AK(1)	AB	AC	AF	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
C2113ATZ	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
C2115ATZ	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
C2514ATZ	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
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
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
C2816ATZ	128	2"	14.03	10.53	4.23	8.44	7.23	74874-R	3"	14.47	11.22	4.23	8.44
C2816ATZ	185	3"	14.47	11.22	4.23	8.44	7.23	74874-24-R	4"	15.91	11.84	5.38	10.56
C2815ATZ	269	4"	15.91	11.84	5.38	10.56	9.00	700308-3-R	5" (4)	18.72	13.47	7.00	12.75

FRAME SIZE	MAX. AMPS	STANDARD SIZE						CAST IRON TERMINAL BOX DIMENSIONS					
		AK(3)	AB	AC	AF	X	Y	PART NUMBER	AK(3)	AB	AC	AF	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
C2113ATZ	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
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
	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
	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
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
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
C2515ATZ	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
C2813ATZ	128	2"	12.78	10.34	3.00	6.00	7.00	75460-T	3"	14.47	10.72	3.62	7.88
C2813ATZ	185	3"	14.47	10.72	3.62	7.88	9.25	76700-8R	4"	15.78	11.59	4.12	9.50
C2815ATZ	269	4"	15.78	11.59	4.12	9.50	10.50	76700-8R	5" (4)	18.59	13.34	7.00	12.75

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	PART NUMBER	AB	AC	AF	X	Y
C210	100	10.71	8.98	2.72	7.48	--	7.48	706310-56-A	10.86	8.00	8.00	8.00	706310-3-B
	200	11.66	9.23	3.33	8.82	--	8.82	706310-56-B	11.88	8.00	8.00	8.00	706310-3-B
	100	11.30	9.57	2.72	7.48	--	7.48	706310-56-A	11.88	8.00	8.00	8.00	706310-3-B
C250	200	11.85	9.84	3.35	8.82	--	8.82	706310-56-B	12.62	8.00	8.00	8.00	706310-3-B
	400	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-63G	18.59	13.34	7.00	12.75	706310-63-B & 706310-63G
	800	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-63G	18.59	13.34	7.00	12.75	706310-63-B & 706310-63G
C280	200	12.60	10.59	3.76	8.82	--	8.82	706310-56-B	12.62	8.00	8.00	8.00	706310-3-B
	400	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-63G	18.59	13.34	7.00	12.75	706310-63-B & 706310-63G
	800	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-63G	18.59	13.34	7.00	12.75	706310-63-B & 706310-63G
	1600	18.27	13.54	7.68	15.35	--	15.35	706310-63-C	18.59	13.34	7.00	12.75	706310-63-C

- (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"/"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

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609959-001

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