

BALDOR® • RELIANCE

Product Information Packet

D5015R

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

Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	320
Frame Group:	SC 2113ATZ	Mounting Pos.:	F1
HP:	15	Enclosure:	DPG
RPM:	1750/2300	Wound:	STAB SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	27.00	Field V:	300
Field A:	1.76	Field A Hot:	1.25/.89
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	50BC03J30X
ODE Bearing:	45BC02J30X	Brushes:	419904-51AB
Brush Qty.:			

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

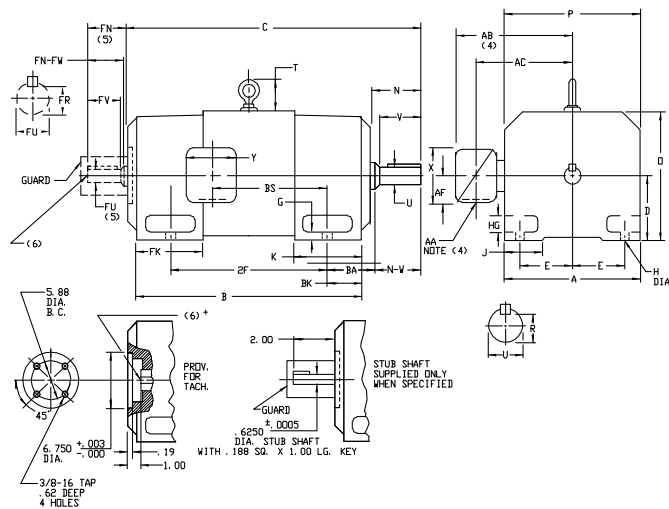
ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF, TOTALLY ENCLOSED

COOLING: SELF-VENTILATED
NON-VENTILATED

MOUNTING:FOOT
METHOD OF DRIVE:COUPLED OR BELTED

**ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED**

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	BK
SC2113ATZ-LC2113ATZ	10.25	5.25	4.05	.44	.44	1.38	1.75	10.44	10.31	2.56	3.50	5.19	6.81	2.38
SC2515ATZ-LC2515ATZ	12.31	6.25	5.00	.50	.56	1.62	2.00	12.50	12.44	3.06	4.25	6.06	8.00	2.98
MC2012ATZ-LC2012ATZ	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	C7,3	DRIVE DRUM SHAPES AND KEYS										OPPOSITE DRIVE DRUM SHAPES AND KEYS										WT
		B	BS	2F	N	N-W	V	R	Y	KG	LGTH	FN	FN-FV	FV	FN	FN-3	KG	LGTH	LGTH			
S21131A27	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A28	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A29	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A30	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A31	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A32	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A33	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A34	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A35	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A36	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A37	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A38	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A39	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A40	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A41	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A42	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A43	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A44	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A45	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A46	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A47	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A48	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A49	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A50	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A51	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A52	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A53	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A54	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A55	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A56	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A57	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A58	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A59	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A60	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A61	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A62	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A63	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A64	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A65	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A66	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A67	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A68	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A69	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A70	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A71	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A72	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A73	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A74	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A75	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A76	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A77	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A78	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A79	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			
S21131A80	28.38	28.20	11.38	18.00	4.00	3.75	1.875	3.50	1.991	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.5	3195			

- (1) "Z" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" AND "V" VARY-----, 0.00 - .001
- (3) "B" AND "F" VARY-----, 0.00 - .015
- (4) "T" AND "M" DIM. VARIES WITH "P" FOR DIMENSIONS "AA", "AB", "AC", "AD", "X" AND "Y", REFER TO BOX D/S (STD. 609599-1, "X/P" 609599-2, MILL 609599-3)
- (5) OPPOSITE DRIVE END SHANT SUPPLIED ONLY WHEN SPECIFIED.
- (6) WHEN SHANT TAPPED FOR SCREW-IN STD. SHANT
- (7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF
DPP. 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, W-5, W-7,
OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.
MOTOR WEIGHT MAY VARY 1% 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: -		

BALDOR

DIMENSION DRAWING, SC2113ATZ - LC2812ATZ, DPP, TENV, FOOT MTG

SH 1 of 1

406770-002

406770-002

CONNECTION DIAGRAM
D-C MOTOR - STAB. SHUNT
DUAL VOLTAGE FIELD

W1

(NOTE 7)

SHUNT FIELD

F2

INTER-COIL

AX2

SERIES FIELD

F11

SERIES FIELD

S2 S3

SERIES FIELD

S4 F22 P1 P2

ARMATURE

H1 H2 F1 A1

THREE WIRE RTD

TD1 TD2 TD3

(NOTE 6)

(NOTE 4)

(CAUTION-SEE NOTE 1)

(NOTE 2)

(NOTE 5)

ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS

CCW ROTATION

LOW VOLTAGE FIELD CONNECTION

CW ROTATION

CCW ROTATION

HIGH VOLTAGE FIELD CONNECTION

CW ROTATION

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 LEAD MARKED W1.

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 MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER ORDER NO.

CUSTOMER S.D. NO.

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: MGHP

BALDOR

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT, DUAL VOLTAGE FIELD

SH 1 of 1

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BALDOR
A MEMBER OF THE ABB GROUP

REL. S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	SC2113AT	15.0HP	1750	500	27.0
WINDING TYPE	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STAB. SHUNT	1.0	DPG	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	2.329	2.06	1.76	239
ARM. CIR. IND. (mH)	FIELD IND. (H)	COOLING AIR(CFM/IN H 20)		TURNS PER COIL SHUNT/SERIES	TEST DATE
20.8	25.1	-/-		1300/3	-
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	1.3	0	0	2024	0
1/4	6.8	9.42	3.53	1971	69.5
2/4	14	20.9	7.68	1927	79.9
3/4	20	32.0	11.5	1894	81.6
4/4	27	42.5	15.1	1868	81.0
O.L.	41	61.5	21.4	1832	77.4
RPM VS. FIELD AMPS			Eg VS. FIELD AMPS		
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED	
1.25	2023	1867	429	402	
1.16	2117	1949	412	384	
1.07	2221	2045	393	364	
.982	2351	2160	371	343	
.891	2516	2300	347	320	
REMARKS: TYPICAL DATA					
MAXIMUM SAFE SPEED = 4500 RPM					
RELIANCE ELECTRIC		DR. BY CK. BY APP. BY DATE		D-C MOTOR PERFORMANCE DATA D66059B ISSUE DATE 04/24/07	

