

BALDOR® • RELIANCE

Product Information Packet

D5025R

25 1750 LC2113ATZ DPG 500V

Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	394
Frame Group:	LC 2113ATZ	Mounting Pos.:	F1
HP:	25	Enclosure:	DPG
RPM:	1750/2300	Wound:	STAB SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	43.00	Field V:	300
Field A:	2.63	Field A Hot:	1.80/1.24
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

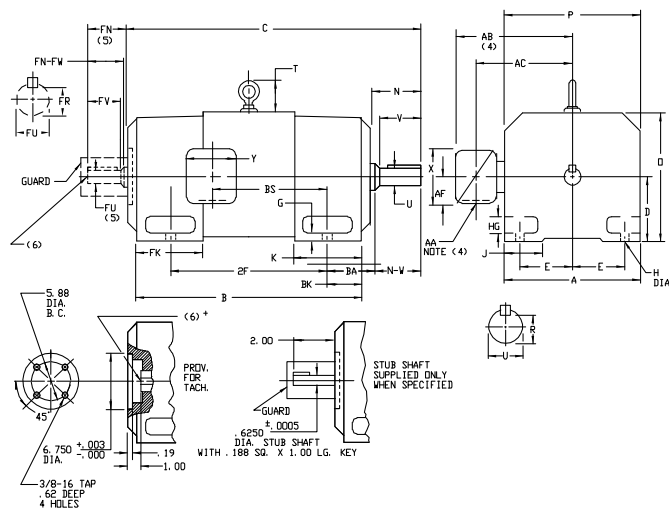
ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF, TOTALLY ENCLOSED

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	Q	P	T	BA	K	FK	BK
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	2.38
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	3.00
MC2812ATZ-LC2812ATZ	13.78	7.00	5.00	.62	.56	1.98	2.75	14.00	13.94	3.98	4.75	6.75	9.19	3.38

DRIVE END SHAFT AND KEY													OPPOSITE DRIVE END SHAFT AND KEYS													MT.
FRAME	C7	B	BS	2F	N	N-W	V	R	V-R	S	LGTH.	LGTH.	FW	FN-FW	V-FW	V	FW-R	S	LGTH.	LGTH.						
SC2113A7	28.5	23.8	22.0	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	2.25	2.15	2.15					
WC1213A7	28.5	23.8	22.0	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	2.25	2.15	2.15					
SC2122A7	28.5	23.8	22.0	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	2.25	2.15	2.15					
SC2132A7	28.5	23.8	22.0	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	2.25	2.15	2.15					
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LC2522A7	28.5	23.8	22.0	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	2.25	2.15	2.15					
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WC2132A7	28.5																									

- (1) IF DIMENSION WILL NOT EXCEED, SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
(2) "R" AND "FR" VARY---- 000 - .015
(3) "U" AND "FR" VARY---- 000 - .015
(4) "S" VARIES WITH H. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y".
(5) TYPED TO BOX 53 (STD. 609959-1, X/FP 609959-2, MILL 609959-3)
(6) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
(7) MOTOR SHAFT TAPPED FOR SCREW-IN SHUB STAFF.
(8) WHEN THE MOTOR APPLICATION DOES NOT INVOLVE THE USE OF
DPE, DRIVE FURN. APPLIED TO COLUMN 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: -		

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

INTER-COIL

ARMATURE

H1 H2 F1 A1

AX2

A2 S1

S2 S3

S4 F22 P1 P2

(NOTE 4)

(CAUTION-SEE NOTE 1)

(NOTE 2)

(NOTE 5)

SHUNT FIELD

SERIES FIELD

SERIES FIELD

TD1

TD2

TD3

(NOTE 6)

THREE WIRE RTD
TD

ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS

CCW ROTATION

LOW VOLTAGE FIELD CONNECTION

CCW ROTATION

CCW ROTATION

HIGH VOLTAGE FIELD CONNECTION

CW ROTATION

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

CUSTOMER ORDER NO. S.D. NO.

CUSTOMER 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: MGHPC

BALDOR

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

SH 1 of 1

REL. S.O.	FRAME	RATING	REM	ARM. VOLTS	ARM. AMPS
	LC2113AT	25.0HP	1750	500	43.0
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	2.868	1.05	2.61	165
ARM. CIR. IND. (mh)					
	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)		TURNS PER COIL SHUNT/SERIES	TEST DATE
12.4	18.2	-/-		950/4	-
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	1.6	0	0	2040	0
1/4	11	15.8	5.99	1991	74.6
2/4	22	34.2	12.7	1945	83.1
3/4	32	52.2	19.0	1908	84.5
4/4	43	69.6	24.9	1878	84.0
O.L.	65	102	35.7	1835	80.9
RPM VS. FIELD AMPS					
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED	
1.81	2040	1878	426	398	
1.67	2140	1959	407	379	
1.53	2252	2053	387	359	
1.39	2394	2164	364	337	
1.25	2575	2300	339	313	
REMARKS: TYPICAL DATA					
MAXIMUM SAFE SPEED = 4500 RPM					
RELIANCE 		DR. BY <u>B. D. GRANT</u> CK. BY <u>B. D. GRANT</u> APP. BY <u>T. S. EVON</u> DATE <u>06/10/85</u>		D-C MOTOR D66061B PERFORMANCE DATA ISSUE DATE 06/06/85	

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