

BALDOR® • RELIANCE

Product Information Packet

D5015R-BV

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

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	345
Frame Group:	SC 2113ATZ	Mounting Pos.:	F1
HP:	15	Enclosure:	DPFV
RPM:	1750/2300	Wound:	STR SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	27.00	Field V:	300
Field A:	2.24	Field A Hot:	1.69/1.15
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	50BC03J30X
ODE Bearing:	45BC02J30X	Brushes:	419904-51AB
Brush Qty.:			

616002-001

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

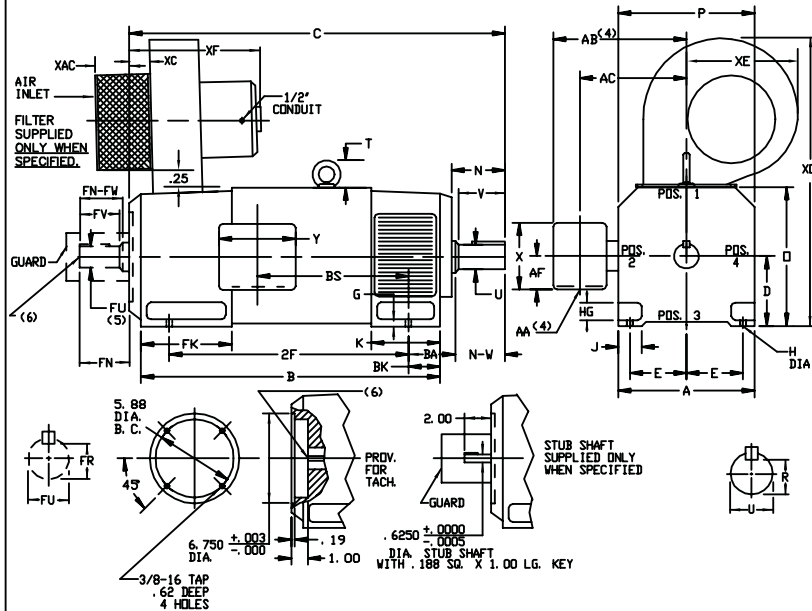
ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF

COOLING: FORCE VENTILATED
WITH INTEGRAL
BLOWER AND MOTOR

MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

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	DRIVE END SHAFT AND KEY					OPPOSITE DRIVE END SHAFT AND KEY(S)					VT.				
					N	N-W	U(2)	V	R(3)	SQ.	LGTH	FN	FN-FW	FU(2)		FV	FR(3)	SQ.	LGTH
SC2113ATZ	28.38	22.50	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	.375	2.25	345
MC2113ATZ	29.62	23.75	12.62	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	.375	2.25	370
LC2113ATZ	31.25	25.38	14.25	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	.375	2.25	400
MC2115ATZ	32.50	26.62	15.50	22.00	4.00	3.75	1.875	3.50	1.991	.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	1.991	.500	2.50	3.50	3.25	1.625	3.00	1.416	.375	2.25	480

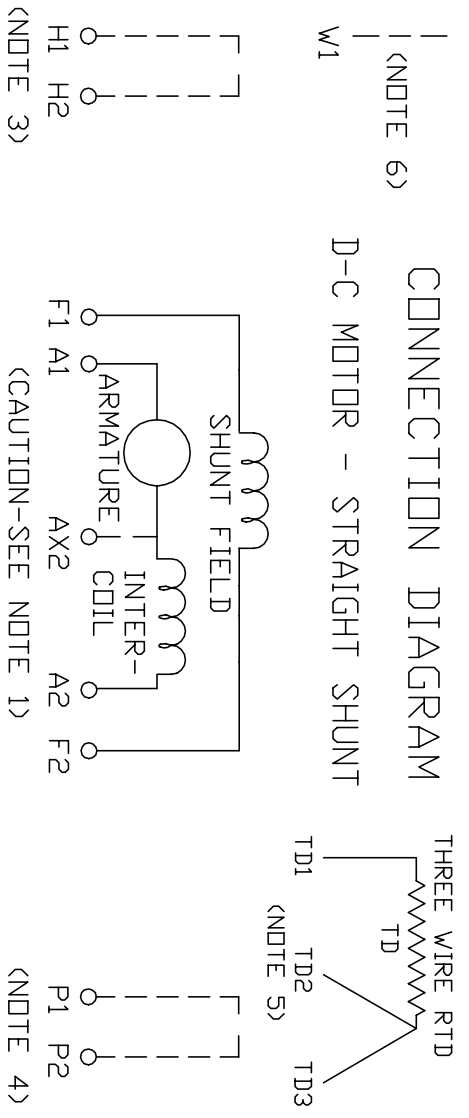
- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" AND "FU" VARY----+.000 - .001
- (3) "R" AND "FR" VARY----+.000 - .015
- (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". REFER 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 OPP. DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER. TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM 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
FILE: \RGG\00015\944		
MTL: -		

BALDOR
DIMENSION DRAWING: SC2113ATZ - LC2115ATZ, DPP, FOOT MTG
SH 1 of 1

616002-001



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 WEAR RTD'S, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
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 FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

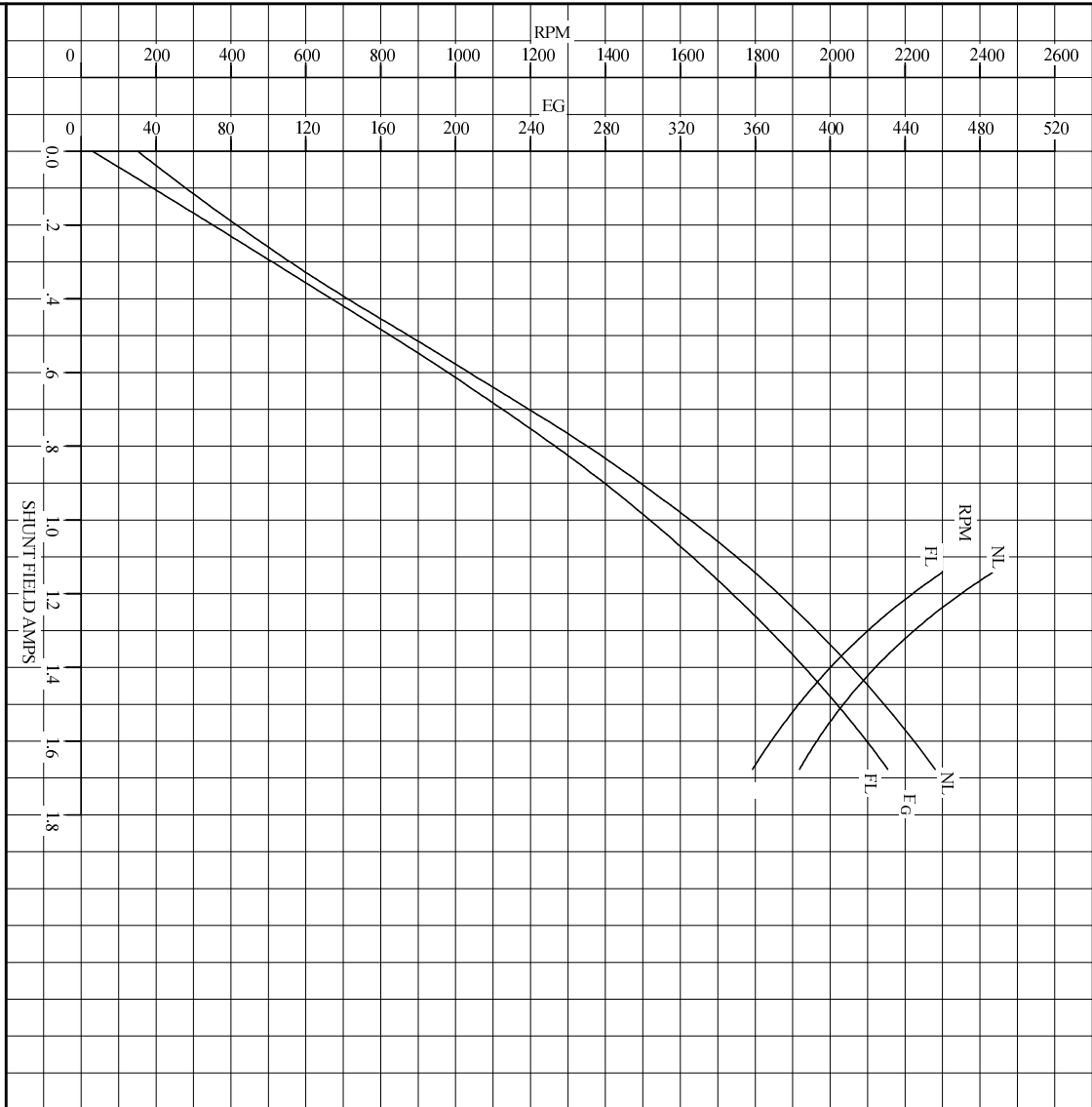
CUSTOMER _____ RELIANCE _____
 ORDER NO. _____ S.O. NO. _____

 RELIANCE ELECTRIC CLEVELAND, OHIO 44117 U.S.A.	REC. BY <u>N.L. EVANS</u> CK. BY <u>N. JESCHKE</u> APP. BY <u>E. J. HINER</u> DATE <u>5-5-69</u>
CONNECTION DIAGRAM 406770-6 ORIGINAL AT RCC	

C/R 244907, 290048, 354478, 354480

REL. S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	SC2113ATZ	15.0HP	1750	500	27.0
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
STRAIGHT SHUNT		1.0	DEPRV	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	2.09	2.22	178
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)		TURNS PER COIL SHUNT/SERIES	TEST DATE
22.5	18.6	300/2.25		1150/.00000	-
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	1.2	0	0	1910	0
1/4	6.8	10.1	3.59	1875	68.4
2/4	14	22.1	7.73	1839	79.0
3/4	20	33.5	11.6	1813	80.9
4/4	27	44.4	15.1	1791	80.4
O.L.	41	63.7	21.4	1765	76.8
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	
1.67	1909	1791	456	430	
1.54	2003	1883	435	410	
1.40	2112	1992	413	387	
1.27	2252	2128	388	362	
1.14	2434	2300	359	335	
REMARKS: TYPICAL DATA MAXIMUM SAFE SPEED = 4500 RPM SPEED REGULATOR REQUIRED FOR STABILITY					
RELIANCE ELECTRIC		DR. BY J. MARTIN CK. BY K. BRÄGGER APP. BY K. BRÄGGER DATE 10/8/95		D-C MOTOR PERFORMANCE DATA D66224C ISSUE DATE 08-09-2006	

REL. S. O.	FRAME	SC2113ATZ	RATING	15.0HP	BASE SPEED	1750	WINDING TYPE	STRAIGHT SHUNT
S. F.	ENCL.	AMB°C/INSUL	DUTY	CONT	POWER CODE/FORM FACTOR	C	TYPE	TR
1.0	DPFV	40/F						
COOLING AIR (CFM/IN H ² O) (sec)	R (hot)	T _e	T _m	T _m	BASIC RPM	MAX CONT RPM	WINDER RPM	MAX. SAFE
300/2.25	.294	.132	.0103	.0390	1950	2300	-	4500
WINDING	VOLTS	RESISTANCE		CURRENT		INDUCTANCE		TURNS PER COIL
ARM CIRCUIT	500	25°C	HOT	25°C	HOT			
SERIES SI-S2	-	1.65	2.10	-	27.0	22.5 mH		-
SHUNT FI-F2	300	135	179	2.23	1.68	18.7 H		1150



REMARKS: TYPICAL DATA SPEED REGULATOR REQUIRED FOR STABILITY
CURVES VALID FOR NAMEPLATE SPEED RANGE ONLY



DR. BY J. MARTIN
CR. BY R. RAJACHAR
APP. BY R. RAJACHAR
DATE 10/88

D-C APPLICATION DATA

SG6224C
ISSUE DATE 08-09-2006

