

BALDOR® • RELIANCE

Product Information Packet

D2030R-BV

30HP, 1750RPM, DC, 2113ATZ, DPG-FV,

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	400
Frame Group:	LC 2113ATZ	Mounting Pos.:	F1
HP:	30	Enclosure:	DPFV
RPM:	1750/2300	Wound:	STR SHUNT
Service Factor:	1.0	Arm V:	240
Arm A:	109.00	Field V:	150
Field A:	10.07	Field A Hot:	7.17/4.42
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

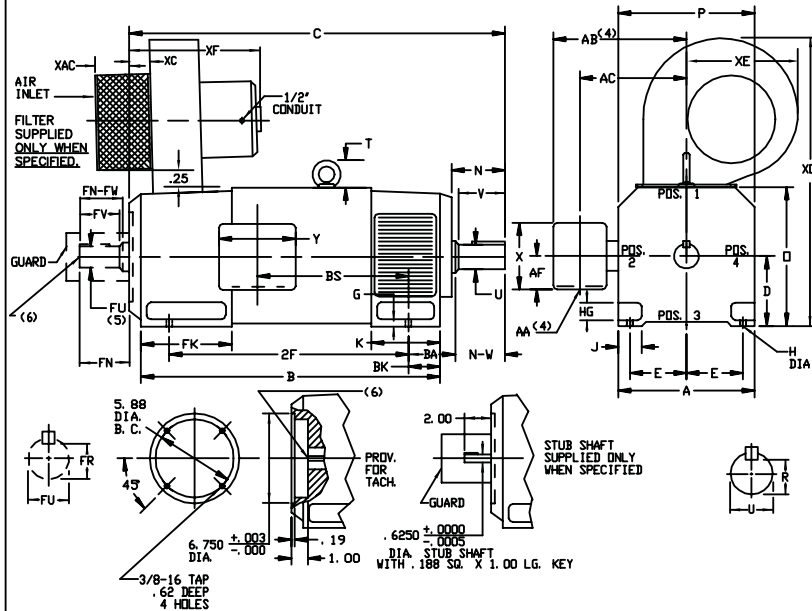
ENCLOSURE: DRIP-PROOF FULLY-GUARDED,
SPLASHPROOF

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

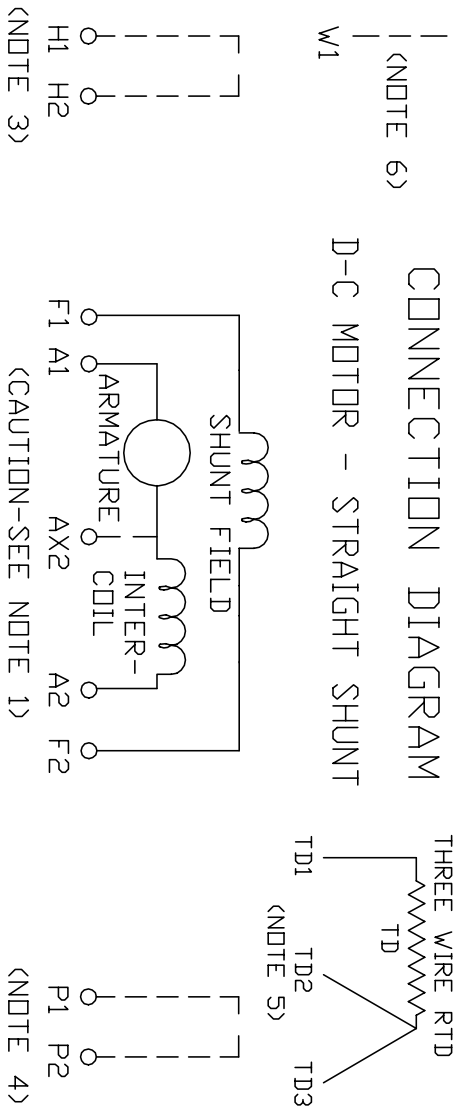
- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" AND "FU" VARY----+.000 - .001
- (3) "R" AND "FR" VARY----+.000 - .015
- (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". REFER 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



ROTATION FACING COMMUTATOR END

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 SENSORS, 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. _____



Rev. BY N.L. EVANS
CHK BY N. JESCHKE
APP BY E.J. HINER
DATE 5-5-69

CONNECTION DIAGRAM

406770-6

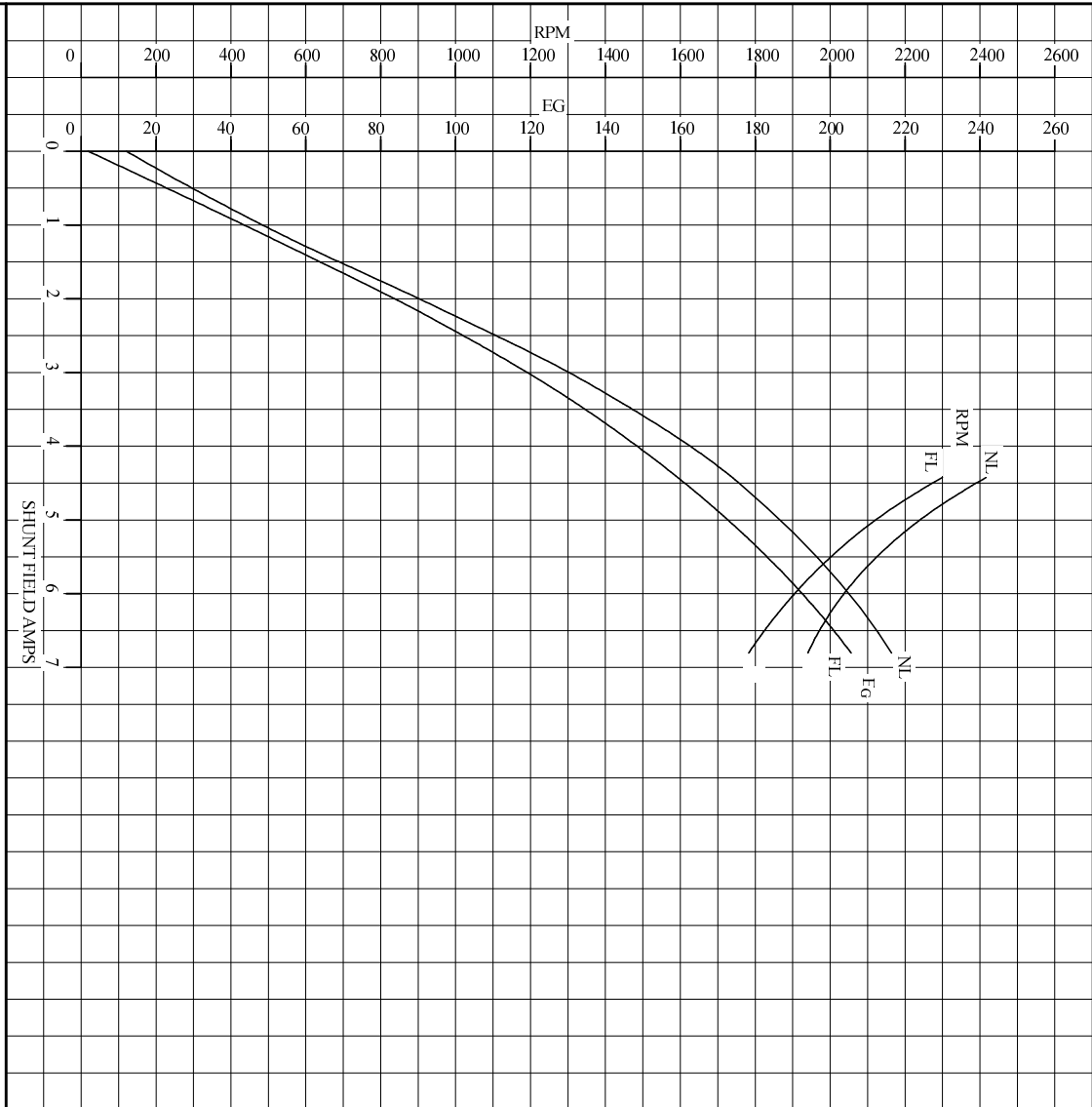
ORIGINAL AT RCC

C/R 244907, 290048, 354478, 354480

REL. S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	LC2113AT	30.0HP	1750	240	109
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
STRAIGHT SHUNT		1.0	DEPRV	40/F	CONT
					FIELD VOLTS
					150
POWER CODE		TYPE	WK ² (LB-FT ²)	HOT ARM. CIR. RES.	FLD. AMPS@25 °C
C		TR	2.868	.253	10.0
					HOT FIELD RES
					22.0
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)		TURNS PER COIL SHUNT/SERIES	TEST DATE
2.47	1.84	300/2.25		350/.00000	-
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	2.5	0	0	1927	0
1/4	27	21.3	7.63	1885	74.3
2/4	55	44.3	15.5	1843	81.5
3/4	82	66.3	22.8	1810	82.2
4/4	109	87.3	29.6	1781	80.9
O.L.	164	125	41.4	1738	76.4
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	
6.80	1926	1780	216	205	
6.20	2007	1869	208	196	
5.61	2102	1978	198	185	
5.01	2234	2116	187	173	
4.42	2416	2300	173	159	
REMARKS: TYPICAL DATA MAXIMUM SAFE SPEED = 4500 RPM SPEED REGULATOR REQUIRED FOR STABILITY					
RELIANCE ELECTRIC		DR. BY _____ CK. BY K. BRACKER APP. BY T. STEVON DATE _____		D-C MOTOR PERFORMANCE DATA D66014C ISSUE DATE 10-13-88	

c/r -

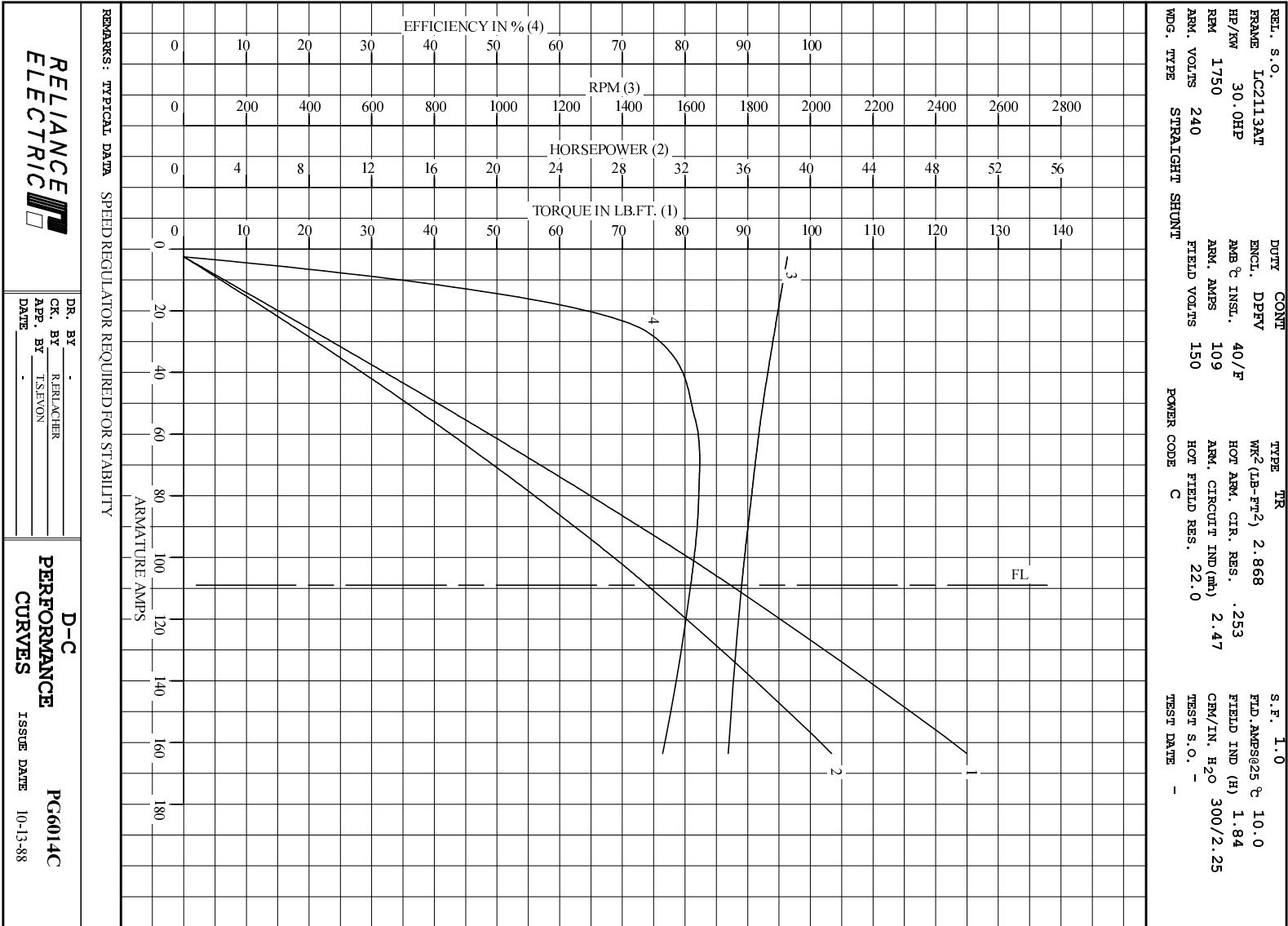
REL. S. O.	FRAME IC2113AT	RATING 30.0HP	BASE SPEED 1750	WINDING TYPE STRAIGHT SHUNT
S. F. ENCL. 1.0 DPEV	AMB°C/INSUL 40/F	DUTY CONT	POWER CODE/FORM FACTOR C	TYPE TR
COOLING AIR (CFM/IN H ² O) 300/2.25	R (hot) .181	T _e .00881	T _m .0264	WINDER RPM MAX. SAFE 4500
RESISTANCE	25°C .179	HOT .254	25°C -	INDUCTANCE 2.47 mH
ARM CIRCUIT	VOLTS 240	SHUNT FL-E2 150	BASIC RPM 1950	TURNS PER COIL -
SERIES S1-S2			MAX CONT RPM 2300	
			WINDER RPM 6.80	
			MAX. SAFE 1.84 H	



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

	DR. BY	-	D-C APPLICATION DATA ISSUE DATE 10-13-88
	CR. BY	REINACHER	
	APP. BY	TASHON	
	DATE	-	

C/R



C/R