

# **BALDOR**® • *RELIANCE*

## **Product Information Packet**

# **D51300R-BV**

**300HP, 1150RPM, DC, 4013ATZ, DPG-FV,**

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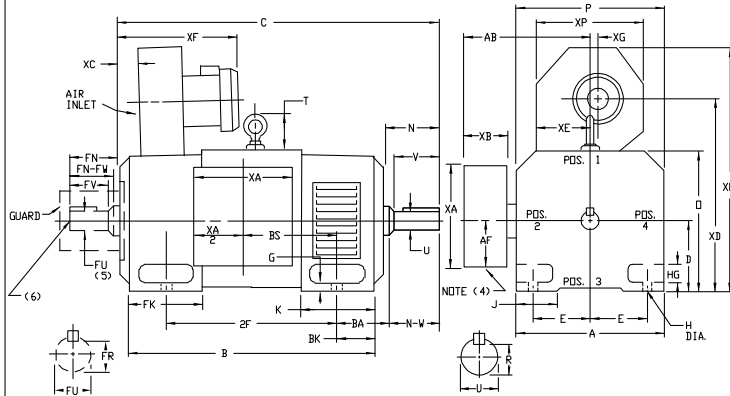
Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	3015
Frame Group:	LC 4013ATZ	Mounting Pos.:	F2
HP:	300	Enclosure:	DPFV
RPM:	1150/2000	Wound:	STR. SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	485.00	Field V:	300
Field A:	13.20	Field A Hot:	9.27/4.87
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	95BC02J30X
ODE Bearing:	95BC02J30X	Brushes:	419904-52AA
Brush Qty.:			

609962-013

## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR  
MOUNTING: FOOT SPLASHPROOF ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

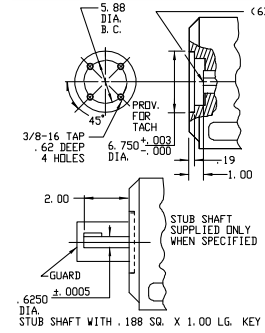
FRAMES C4011ATZ THRU ULC4013ATZ



DIMENSIONS ARE IN INCHES

FRAME	A	Dx1	E	G	H	HG	J	D	P	T	BA	K	FK	BK	AB	AF	RK(3)
C4011ATZ-ULC4013ATZ	19.38	10.00	8.00	1.06	2.82	3.50	19.81	19.56	4.31	6.62	8.75	12.12	5.25	16.12	8.00	6.24	

FRAME	METHOD OF DRIVE	C(7)	B	BS	2F	DRIVE END SHAFT AND KEY						OPPOSITE DRIVE END SHAFT AND KEY				WT. LBS.				
						N-W	UC(2)	V	RC(3)	SO	LGTH	FN	FN-FW	FK(2)	FV		FR(3)	SO	LGTH	
C4011ATZ	COUPLED	58.19	46.06	16.00	28.00	7.62	7.25	3.625	7.00	3.134	.875	5.75	7.62	7.25	3.625	7.00	3.134	875	5.75	2900
ULC4011ATZ	BELTED	55.19	42.06	14.00	25.00	8.62	8.25	4.125	8.00	3.563	1.000	6.50	7.62	7.25	3.625	7.00	3.134	875	5.75	2905
MC4013ATZ	COUPLED	56.94	46.81	20.75	36.00	7.62	7.25	3.625	7.00	3.134	.875	5.75	7.62	7.25	3.625	7.00	3.134	875	5.75	2800
UMC4013ATZ	BELTED	57.94	46.81	20.75	36.00	8.62	8.25	4.125	8.00	3.563	1.000	6.50	7.62	7.25	3.625	7.00	3.134	875	5.75	2805
LC4013ATZ	COUPLED	60.19	50.06	24.00	36.00	7.62	7.25	3.625	7.00	3.134	.875	5.75	7.62	7.25	3.625	7.00	3.134	875	5.75	3100
ULC4013ATZ	BELTED	61.19	50.06	24.00	36.00	8.62	8.25	4.125	8.00	3.563	1.000	6.50	7.62	7.25	3.625	7.00	3.134	875	5.75	3105



FRAME	XA	XB	XC	XD	XE	XF	XG	XD	XP
C4011ATZ-ULC4013ATZ	16.00	6.00	6.88	26.00	8.69	23.50	3.38	33.62	15.12

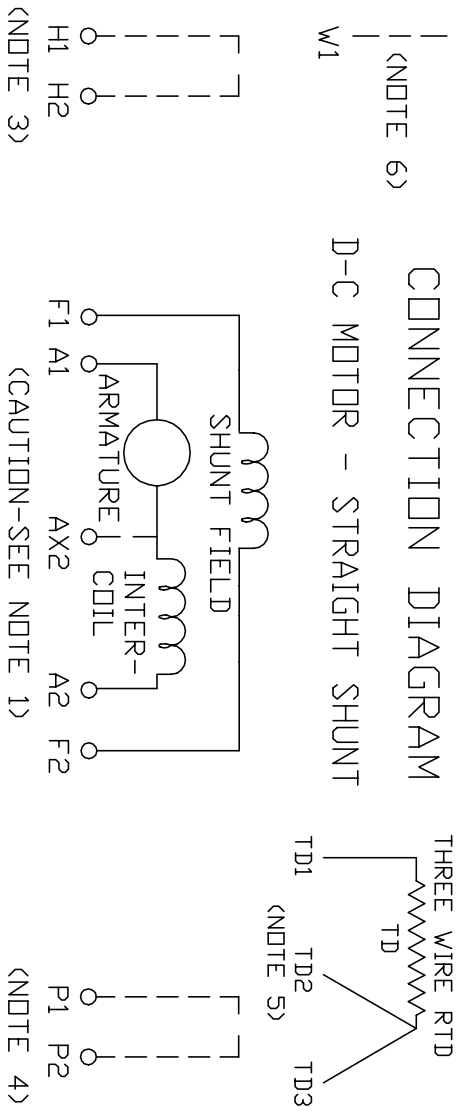
- (1) "B" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
  - (2) "F" AND "FV" VARY ----+.000 - .001
  - (3) "R" AND "FR" VARY ----+.000 - .015
  - (4) CUSTOMER TO PROVIDE HOLE IN TERMINAL BOX FOR CONDUIT.
  - (5) OPPOSITE DRIVE 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 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. 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: 000000577407
REV. LTR: -	REVISED: 12:04:54 01/26/2011	BY: CONNAS
FILE: \RGG\00015\600		
MTL: -		

**BALDOR**  
DIMENSION DRAWING, C4011ATZ - ULC4013ATZ, DPP, FOOT MTG.  
SH 1 of 1

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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 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. \_\_\_\_\_



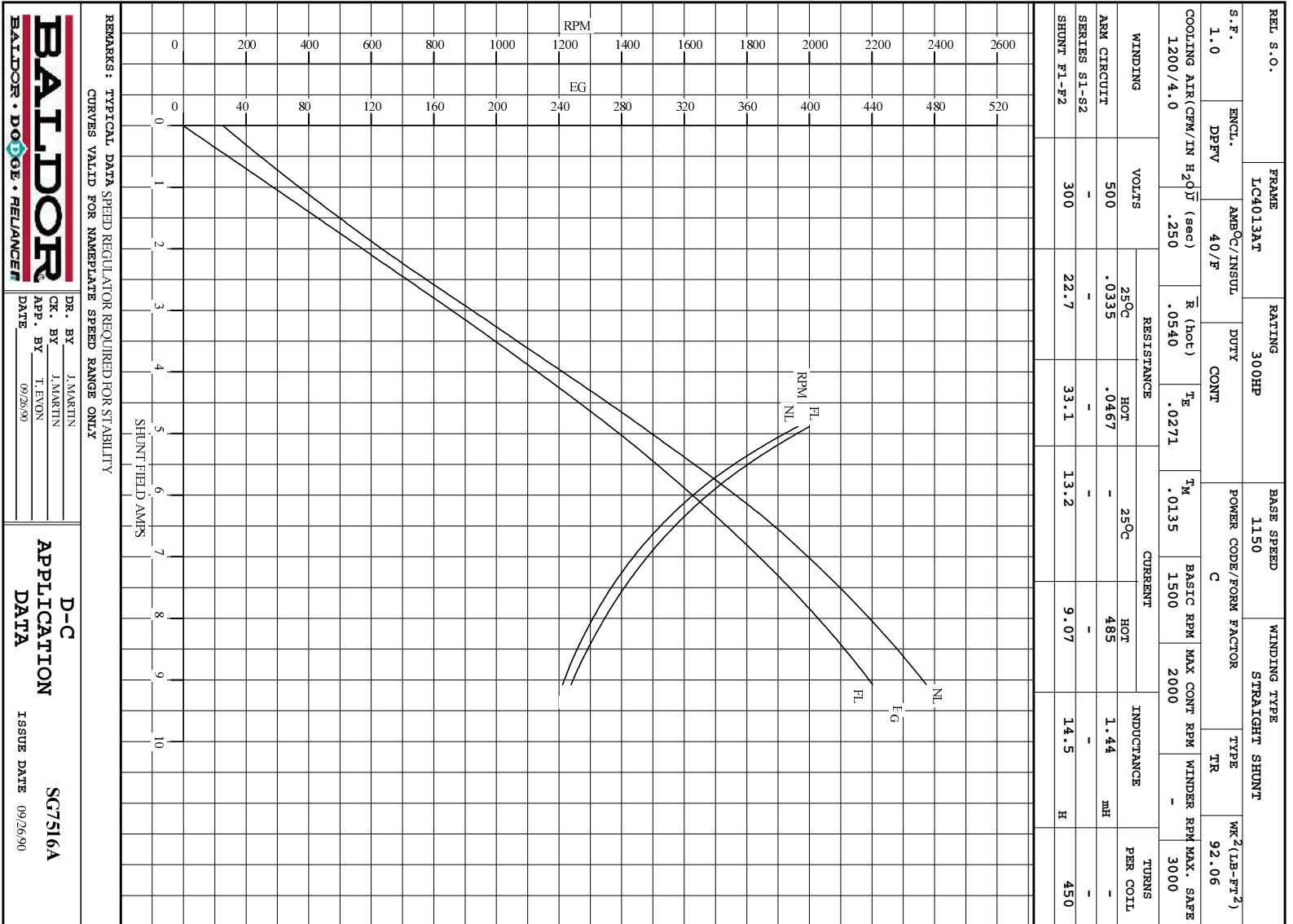
Rev. BY N.L. EVANS  
 CK. BY N. JESCHKE  
 App. BY E.J. HINER  
 DATE 5-5-69

**CONNECTION DIAGRAM**

**406770-6**

ORIGINAL AT RCC

C/R 244907, 290048, 354478, 354480




REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	LC4013AT	300HP	1150	500	485
WINDING TYPE	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STRAIGHT SHUNT	1.0	DPFV	40/F	CONT	300
POWER CODE	TYPE	WK 2 (LB-PT 2)	HOT ARM. CIR. RES.	FLD. AMPS@25 °C	HOT FIELD RES
C	TR	92.06	.0467	13.2	33.0

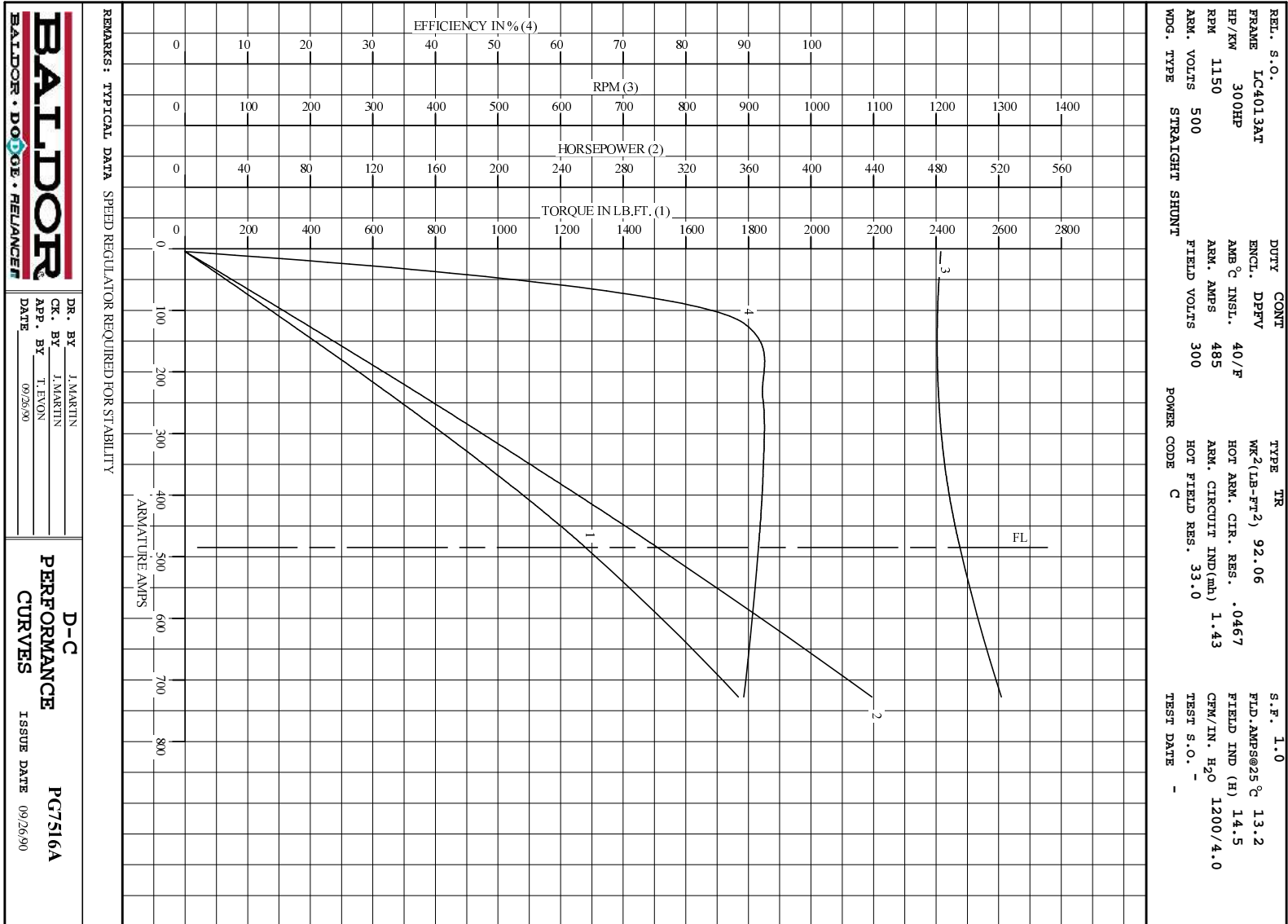
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
1.43	14.5	1200/4.0	450/.00000	-

LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	4.5	0	0	1208	0
1/4	121	334	76.4	1202	89.3
2/4	243	671	154	1204	92.3
3/4	364	990	229	1216	92.4
4/4	485	1280	302	1238	91.6
O.L.	728	1768	439	1304	89.3

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	
9.07	1207	1238	474	440	
8.02	1305	1342	441	406	
6.98	1441	1485	399	367	
5.93	1644	1690	349	322	
4.88	1962	2000	292	272	

REMARKS: TYPICAL DATA  
 MAXIMUM SAFE SPEED = 3000 RPM  
 SPEED REGULATOR REQUIRED FOR STABILITY

	DR. BY J. MARTIN	<b>D-C MOTOR PERFORMANCE DATA</b> DG7516A ISSUE DATE 09/26/90
	CK. BY T. EVON	
	APP. BY T. EVON DATE 09/26/90	



DR. BY J.MARTIN  
 CK. BY J.MARTIN  
 APP. BY T. EYON  
 DATE 09/26/90

**D-C PERFORMANCE CURVES**  
 ISSUE DATE 09/26/90  
**PCT516A**