

BALDOR® • ***RELIANCE***

Product Information Packet

D5005R

5 1750 DPG C1811ATZ STRT SHUNT

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	D	Weight:	194
Frame Group:	C 1811ATZ	Mounting Pos.:	F1
HP:	5	Enclosure:	DPG
RPM:	1750/2300	Wound:	STR SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	9.00	Field V:	300
Field A:	1.01	Field A Hot:	.72/.47
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	40BC02J30X
ODE Bearing:	30BC02J30X	Brushes:	419904-51E
Brush Qty.:			

609980-001

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

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

MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: SELF-VENTILATED
NON-VENTILATED

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES C180ATZ

DIMENSIONS ARE IN INCHES

FRAME	A	BK (1)	E	G	H	J	D	P	T	BA	K	FK	BK
C1811ATZ-C1812ATZ	9.00	4.50	3.75	.31	1.44	1.50	8.88	8.75	1.88	2.75	4.38	4.38	1.50

FRAME	C (8)	B	BS	2F	N	N-W	LK (2)	V	R (4)	SD	LGTH	FN	FN-FW	FUC (2)	FV	FR (4)	SD	LGTH	LBS.
C1811ATZ	23.94	14.00	11.00	12.50	3.00	2.75	1.3750	2.50	1.201	.312	1.75	2.44	2.25	1.1250	2.00	.986	2.50	1.38	175
C1812ATZ	25.44	15.50	12.50	14.00	3.00	2.75	1.3750	2.50	1.201	.312	1.75	2.44	2.25	1.1250	2.00	.986	2.50	1.38	175

FRAME	MAX AMPS	AA (5)	AB	AC	AF	X	Y	PART NUMBER	ONE SIZE LARGER	PART NUMBER
C180ATZ	40	3/4 & 1"	7.31	5.75	1.94	4.38	5.00	705028-1-R	1-1/4 & 1-1/2	8.31 6.31 2.50 5.50 6.12 705029-1-R
	96	1-1/4 & 1-1/2	8.31	6.31	2.50	5.00	6.12	705029-1-R	2" & 2-1/2"	9.44 6.69 3.19 7.00 7.62 705030-1-R

FRAME	MAX AMPS	AA (6)	AB	AC	AF	X	Y	PART NUMBER	ONE SIZE LARGER	PART NUMBER
C180ATZ	18	3/4	9.38	7.38	2.50	5.00	5.75	705028-2-S	1	9.38 7.38 2.50 5.00 5.75 705028-2-T
	40	1	9.38	7.38	2.50	5.00	5.75	705028-2-T	1-1/2	10.31 7.88 3.00 6.00 7.00 705029-2-R
	96	1-1/2	10.31	7.88	3.00	6.00	7.00	705029-2-R	2	10.31 7.88 3.00 6.00 7.00 705029-2-S

(1) 'B' 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 +.0000 - .0005

(3) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.

(4) 'R' AND 'FR' VARY +.0000 - .015

(5) AA CONDUIT. TERMINAL BOX PROVIDED WITH DOUBLE KNOCKOUT.

(6) AA PIPE TAP

(7) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.

(8) 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.

MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

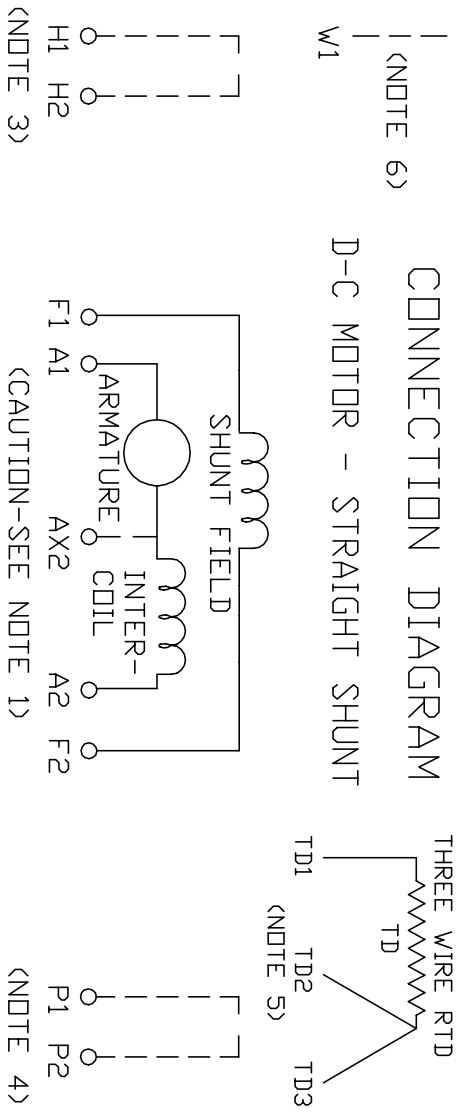
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: LOADED TO BUS	VERSION: 00	TDR: 000000577407
REV. LTR: -	REVISED: 01:47:13 01/26/2011	BY: CONNAS
MTL: -		

DIMENSION DRAWING, C180ATZ, DPP, TENV, FOOT MTG.

SH 1 of 1

100-066600

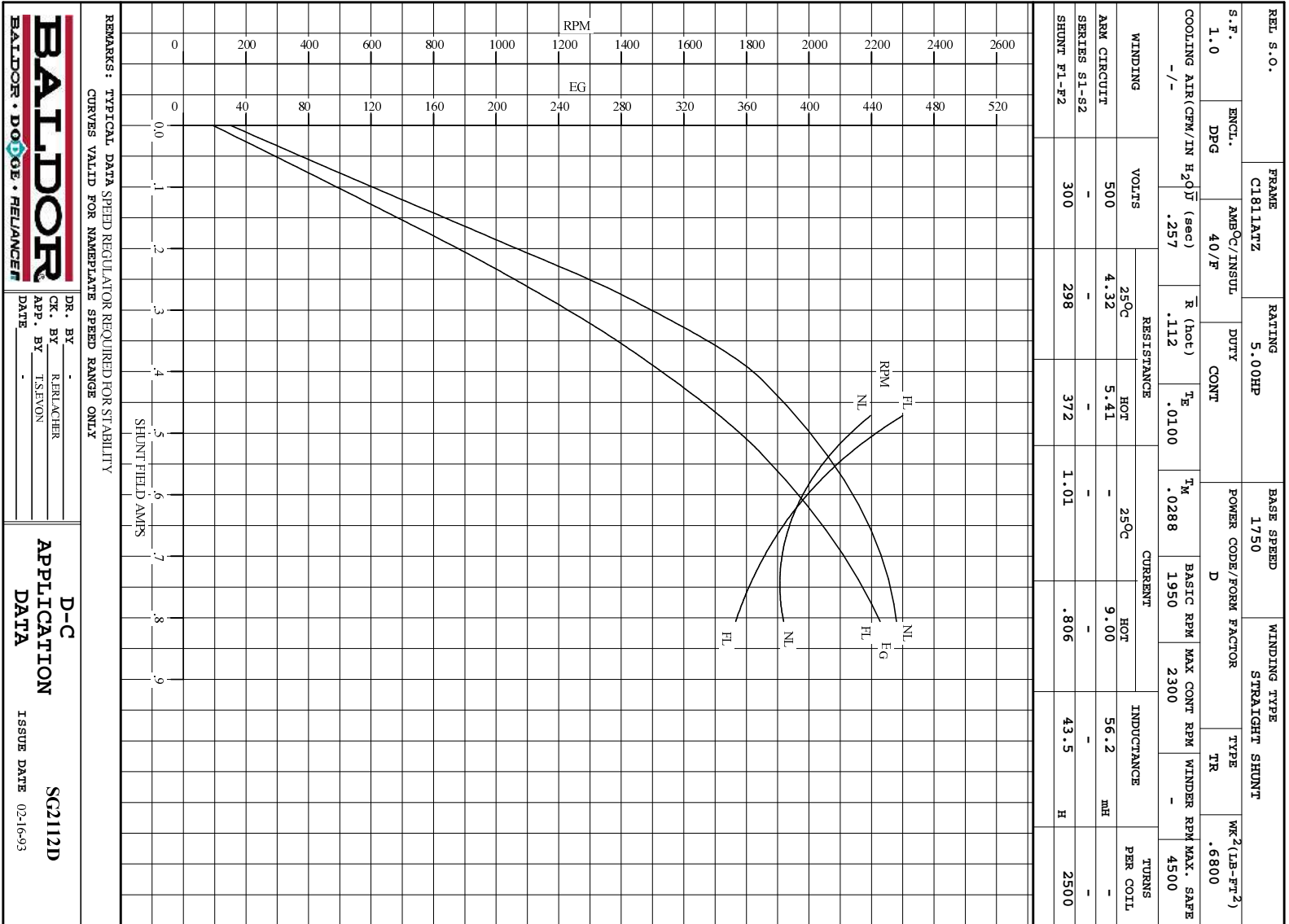


1. **CAUTION** — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND 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. _____

 RELIANCE ELECTRIC CLEVELAND, OHIO 44117 U.S.A.	REC 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



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

BALDOR • DOUGLASS • RELIANCE	DR. BY	D-C
BALDOR	CHK. BY	RELINCHER
DOUGLASS	APP. BY	T.S. HUNN
RELIANCE	DATE	
		APPLICATION DATA
		SC2112D
		ISSUE DATE 02-16-93

C/R


REL. S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	C1811ATZ	5.00HP	1750	500	9.00
WINDING TYPE	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STRAIGHT SHUNT	1.0	DRG	40/F	CONT	300
POWER CODE	TYPE	WK 2 (LB-FT 2)	HOT ARM. CIR. RES.	FLD. AMPS@25 °C	HOT FIELD RES
D	TR	.6800	5.41	1.00	372

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
56.2	43.5	-/-	2500/.00000	

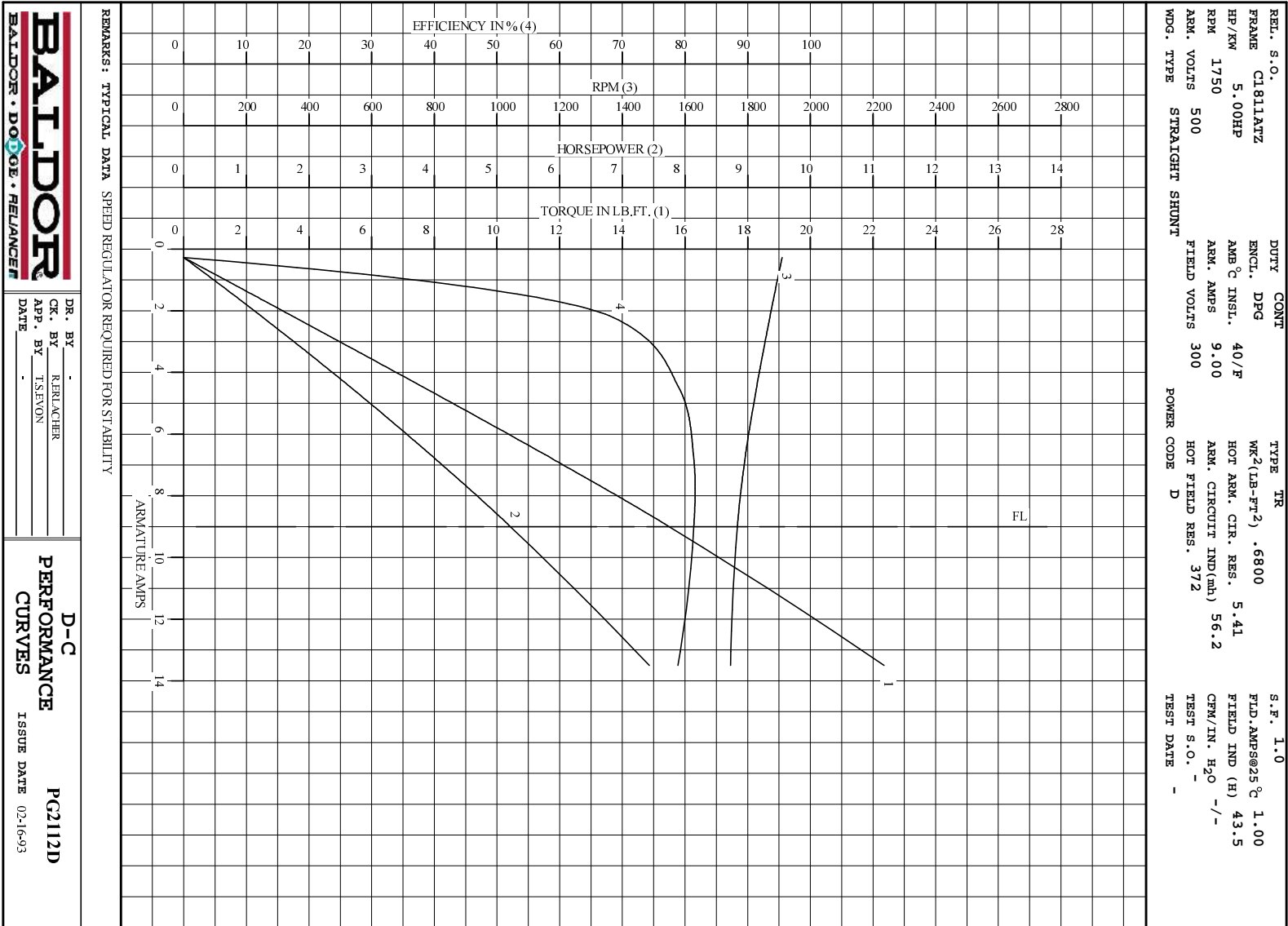
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.27	0	0	1910	0
1/4	2.2	3.61	1.29	1870	68.9
2/4	4.5	7.69	2.68	1828	79.0
3/4	6.8	11.7	3.99	1792	81.4
4/4	9.0	15.5	5.21	1767	81.4
O.L.	14	22.4	7.43	1745	78.9

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	
.805	1910	1767	455	445	
.722	1908	1834	449	429	
.638	1945	1934	438	406	
.554	2037	2080	421	378	
.471	2197	2300	395	342	

REMARKS: TYPICAL DATA
 MAXIMUM SAFE SPEED = 4500 RPM
 SPEED REGULATOR REQUIRED FOR STABILITY

	DR. BY _____	D-C MOTOR PERFORMANCE DATA DG2112D ISSUE DATE 02-16-93
	CK. BY R. BRÄGGER APP. BY T.S. EVON DATE _____	

C/R -



C/R



DR. BY _____
 CK. BY R.ELACHER
 App. BY T.SAYON
 DATE _____

D-C
PERFORMANCE
CURVES ISSUE DATE 02-16-93
PC2112D