

BALDOR® • RELIANCE

Product Information Packet

D5007R

7.5 1750 DPG C1811ATZ STRT SHUNT

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	D	Weight:	197
Frame Group:	C 1811ATZ	Mounting Pos.:	F1
HP:	7.5	Enclosure:	DPG
RPM:	1750/2300	Wound:	STR SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	13.50	Field V:	300
Field A:	1.29	Field A Hot:	.92/.61
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	40BC02J30X
ODE Bearing:	30BC02J30X	Brushes:	419904-51F
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(B)	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	.250	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	.250	1.38	175

FRAME	MAX AMPS	AA(6)	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. FOR 'X/P' TERMINAL BOX DIMENSIONS SEE 609989-1 FOR WULF TYPE TERMINAL BOX DIMENSIONS SEE 609989-2

(4) 'R' AND 'FR' VARY +.000, -.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.

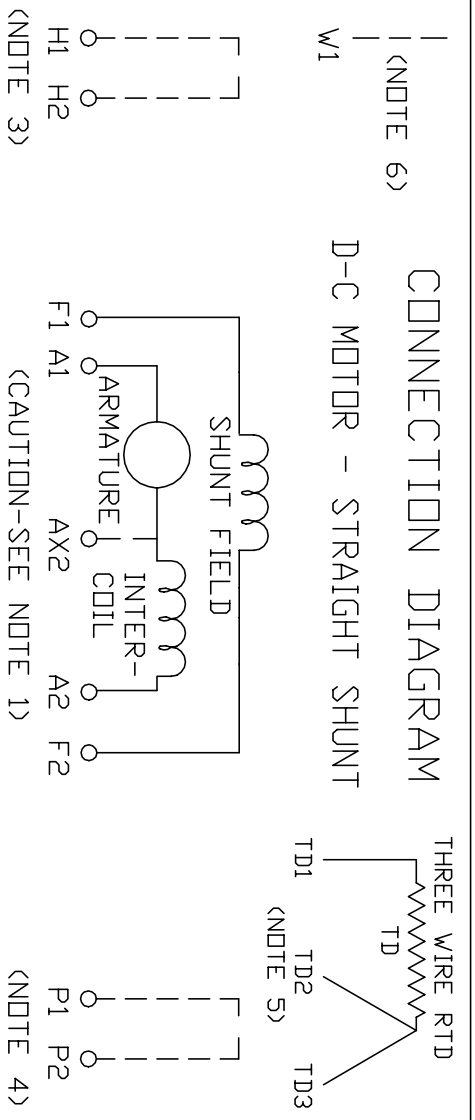
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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.

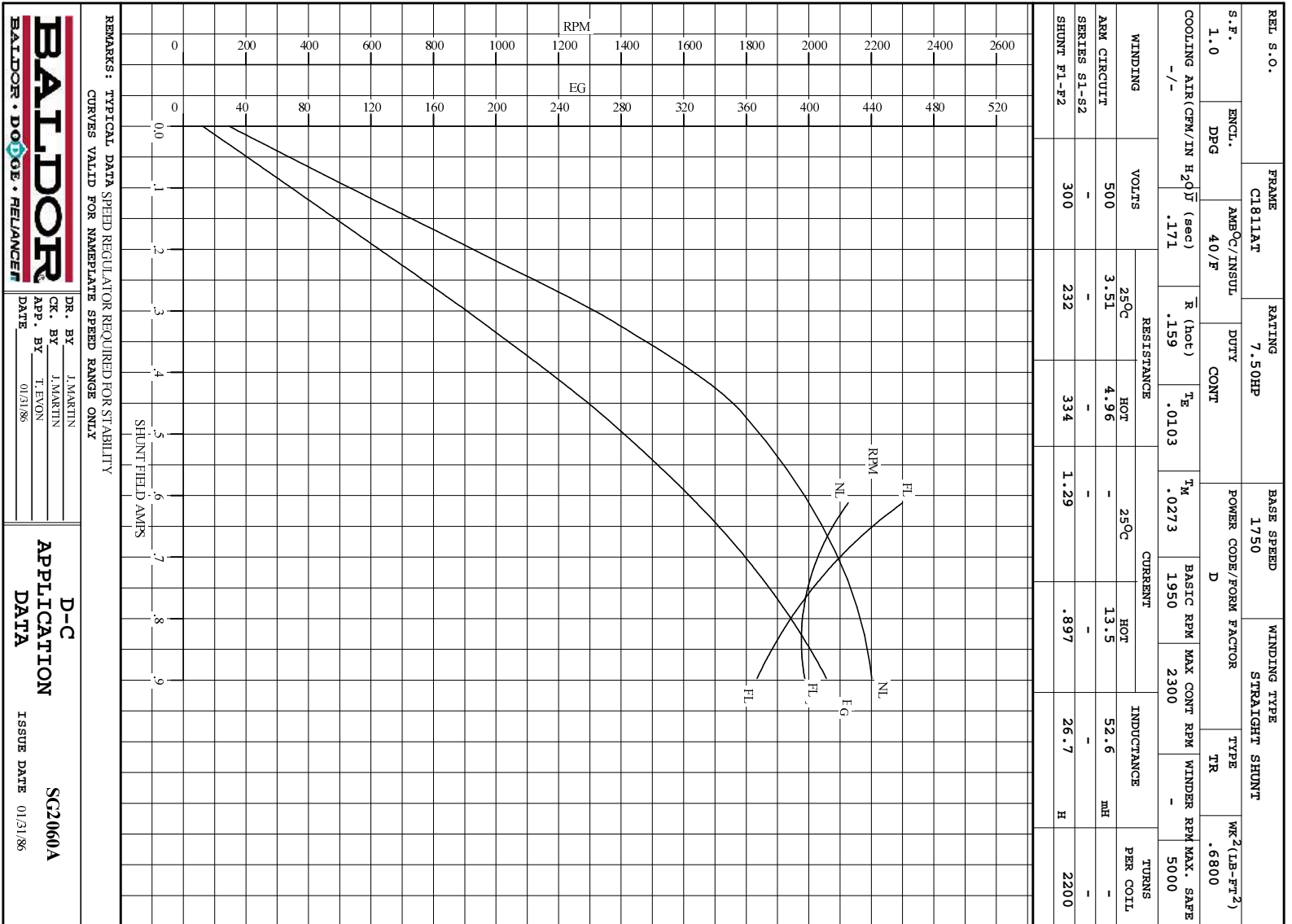
CUSTOMER _____ RELIANCE _____
 ORDER NO. _____ S.O. NO. _____

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




REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	C1811AT	7.50HP	1750	500	13.5
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
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	4.96	1.29	334

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
52.5	26.6	-/-	2200/.00000	

LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.29	0	0	1975	0
1/4	3.4	5.42	1.98	1921	74.2
2/4	6.8	11.2	4.00	1870	81.1
3/4	10	16.7	5.86	1841	81.4
4/4	14	21.6	7.56	1834	79.9
O.L.	20	29.2	10.4	1877	74.7

RPM VS. FIELD AMPS			Eg VS. FIELD AMPS		
FIELD AMPS	RPM N.L.L.	RPM F.L.L.	Eg N.L.L. @ BASE SPEED	Eg F.L.L. @ BASE SPEED	
.897	1975	1834	440	411	
.825	1977	1909	435	395	
.754	1994	2006	428	376	
.683	2043	2132	418	353	
.611	2126	2300	404	328	

REMARKS: TYPICAL DATA
 MAXIMUM SAFE SPEED = 5000 RPM
 SPEED REGULATOR REQUIRED FOR STABILITY

	DR. BY J. MARTIN	D-C MOTOR PERFORMANCE DATA DG2060A ISSUE DATE 01/31/86
	CK. BY T. EVON	
	APP. BY 01/31/86	

