

BALDOR® • RELIANCE

Product Information Packet

CD2005R-2

5HP, 1750RPM, DC, 1811ATCZ, SPG,

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	209
Frame Group:	C 1811ATCZ	Mounting Pos.:	F1
HP:	5	Enclosure:	DPG
RPM:	1750/2300	Wound:	STAB SHUNT
Service Factor:	1.0	Arm V:	240
Arm A:	18.10	Field V:	240
Field A:	1.11	Field A Hot:	.79/.40
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	40BC02J30X
ODE Bearing:	30BC02J30X	Brushes:	419904-51AB
Brush Qty.:			

609980-023

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED COOLING: SELF-VENTILATED
 SPLASHPROOF, TOTALLY ENCLOSED NON-VENTILATED

MOUNTING: FOOT,NEMA AC "C" FACE ACCESSORIES: PROVISION FOR
 METHOD OF DRIVE:COUPLED OR BELTED TACHOMETER MOUNTING
 ONLY WHEN SPECIFIED

FRAMES C180ATCZ
 DRIVE END SHAFT PER NEMA AC MOTOR SHAFT

DIMENSIONS ARE IN INCHES

FRAME	A	B(1)	E	G	H	J	D	P	T	BA	K	FK	BK	BB	BD	BF TAP	BF TAP "DEPTH"	AJ	AK(8)
C1811ATCZ-C1812ATCZ	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	.25	8.75	1/2-13	.88	7.25	8.500

FRAME	C(10)	B	BS	2F	AH	N	N-W	UK(2)	V	RC(4)	SO	L6TH	FN	FN-FW	FU(2)	FV	FR(4)	SO	L6TH	WT.
C1811ATCZ	24.06	14.00	11.00	12.50	2.62	3.12	2.88	1.1250	2.62	.986	2.50	1.75	2.44	2.25	1.1250	2.00	.986	2.50	1.38	180
C1812ATCZ	25.56	15.50	12.50	14.00	2.62	3.12	2.88	1.1250	2.62	1.986	2.50	1.75	2.44	2.25	1.1250	2.00	.986	2.50	1.38	215

FRAME	MAX AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(5)	AB	AC	AF	X	Y		AA(5)	AB	AC	AF	X	Y	
C180ATCZ	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

FRAME	MAX AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(6)	AB	AC	AF	X	Y		AA(6)	AB	AC	AF	X	Y	
C180ATCZ	40	1	9.38	7.38	2.50	5.00	5.75	705028-2-S	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) '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 +.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 'WILL 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) 'AK' VARIES +.000, -.003.

(9) FACE ROUNDT AND ECCENTRICITY .004 MAX. T. I. R.

(10) 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, V-1, W-4, V-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.

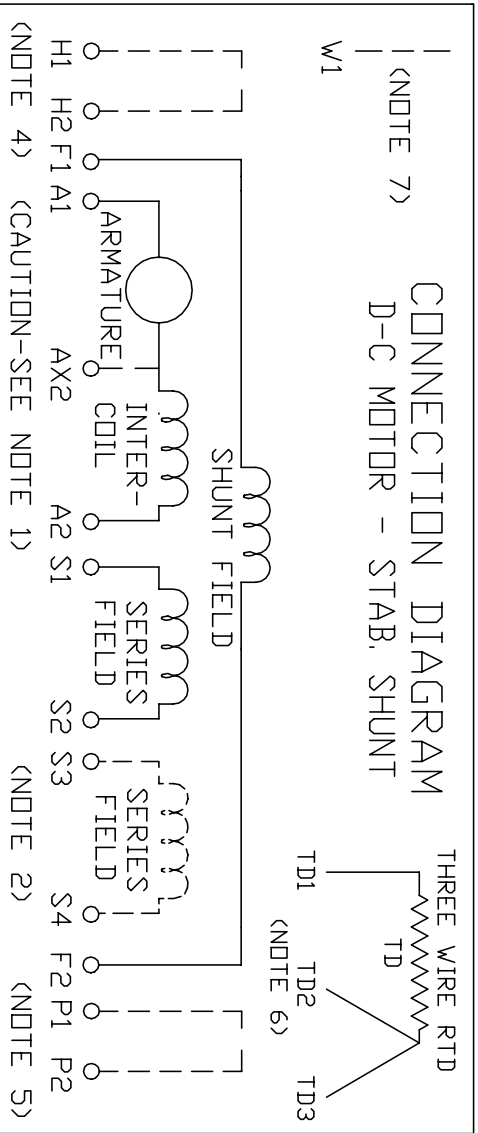
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: LOADED TO BUS	VERSION: 00	TDR: 000000577407
REV. LTR: -	REVISED: 01:55:14 01/26/2011	BY: CONNAS
FILE: \RGG\00015\689		
MTL: -		

DIMENSION DRAWING,C180ATCZ,TENV,DPP,FOOT MTC,NEMA AC C-FACE

SH 1 of 1

609980-023



ARMATURE AND FIELD EXTERNAL CONNECTIONS
WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS



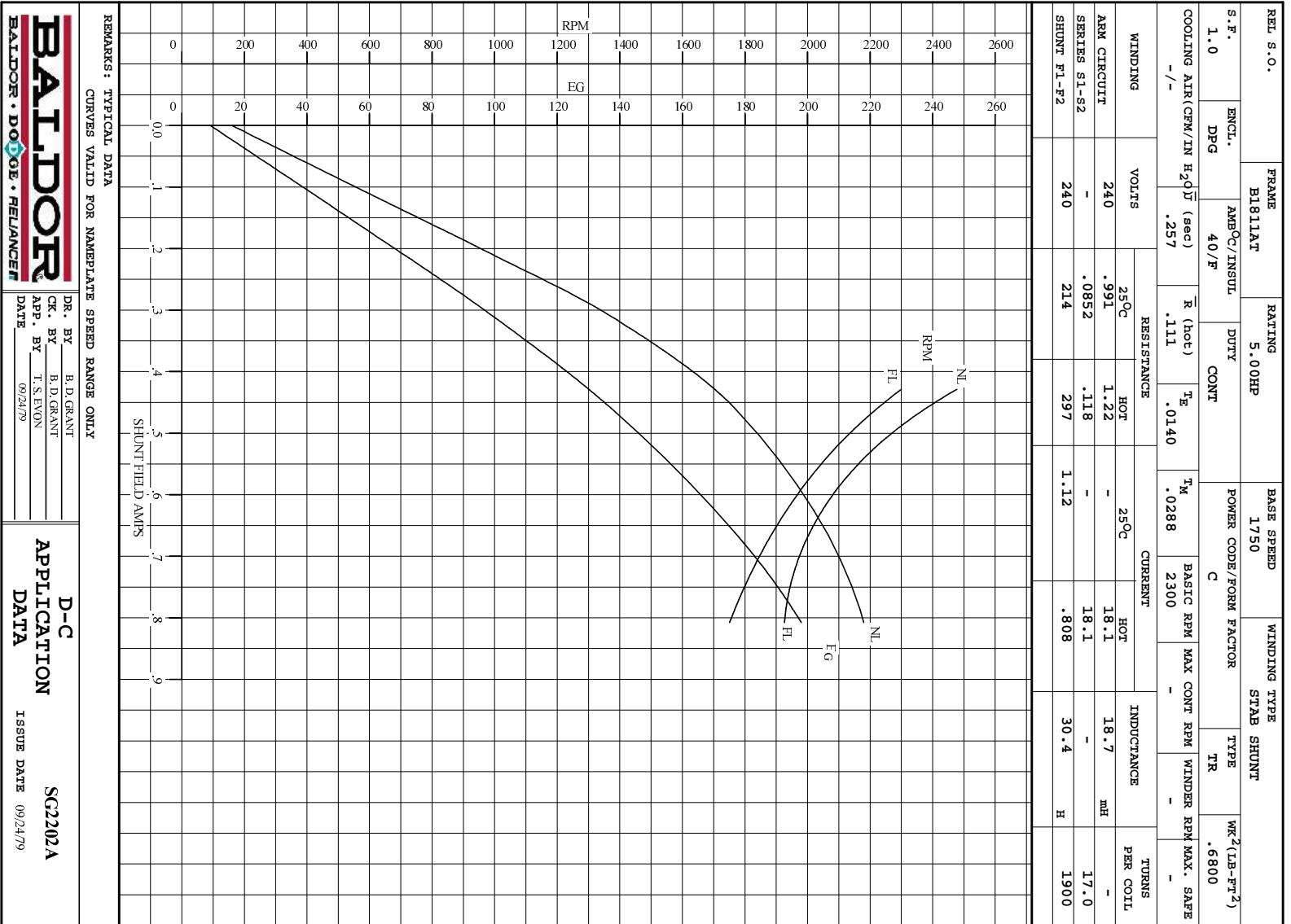
ROTATION FACING COMMUTATOR END

1. **CAUTION** — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL SERIES FIELD IS MARKED S3 AND S4. FOR CUMULATIVE SERIES FIELD, CONNECT S3 TO S2 AND CONNECT S4 TO NEGATIVE. FOR DIFFERENTIAL SERIES FIELD CONNECT S4 TO S2 AND S3 TO NEGATIVE.
3. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
4. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
5. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
6. WINDING RTDS, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3
7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
8. **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.D. NO. _____

<p>RELIANCE ELECTRIC</p> <p>CLEVELAND, OHIO 44117 U.S.A.</p>	<p>Rev. by <u>N.L. EVANS</u> Chk. by <u>N. JESCHKE</u> App. by <u>E. J. HINER</u> DATE <u>5-5-69</u></p>
<p>CONNECTION DIAGRAM</p> <p>406770-1</p> <p>ORIGINAL AT RCC</p>	

C/R 290048, 354478, 354480




REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	B1811AT	5.00HP	1750	240	18.1
WINDING TYPE					
S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS	
1.0	DRG	40/F	CONT	240	
STAB. SHUNT					
POWER CODE					
TYPE	WK ² (LB-FT ²)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C	HOT FIELD RES	
C	TR	.6800	1.21	1.11	
297					

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
18.7	30.3	-/-	1900/17	-

LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.55	0	0	1912	0
1/4	4.5	3.50	1.24	1861	72.1
2/4	9.1	7.48	2.58	1813	81.3
3/4	14	11.4	3.85	1773	83.0
4/4	18	15.1	5.04	1751	82.7
O.L.	27	21.9	7.18	1722	79.8

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	
.807	1912	1750	217	198	
.713	1964	1833	210	184	
.618	2056	1942	200	169	
.523	2216	2090	188	151	
.428	2477	2300	170	130	

REMARKS: TYPICAL DATA

	DR. BY B. D. GRANT	D-C MOTOR PERFORMANCE DATA DG2202A ISSUE DATE 09/24/79
	CK. BY T. S. EVON	
	APP. BY T. S. EVON DATE 09/24/79	

