

BALDOR® • RELIANCE

Product Information Packet

CD2003R-2

3 1750/2300 SPG TEXTILE RANGE DR

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	198
Frame Group:	C 1811ATCZ	Mounting Pos.:	F1
HP:	3	Enclosure:	DPG
RPM:	1750/2300	Wound:	STAB SHUNT
Service Factor:	1.0	Arm V:	240
Arm A:	11.00	Field V:	240
Field A:	.99	Field A Hot:	.74/.38
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	BK(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	.986	2.50	1.75	2.44	2.25	1.1250	2.00	.986	2.50	1.38	1215

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 "W/T" TERMINAL BOX DIMENSIONS SEE 609989-2. "R" AND "FR" VARY +.000, -.015

(4) "AA" CONDUIT, TERMINAL BOX PROVIDED WITH DOUBLE KNOCKOUT.

(5) AA PIPE TAP

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

(7) "AK" VARIES +.000, -.003.

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

(9) DRIVE END SHAFT DIMENSIONS PER 180T AC MOTOR SHAFT EXTENSION.

(10) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DPP, 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.

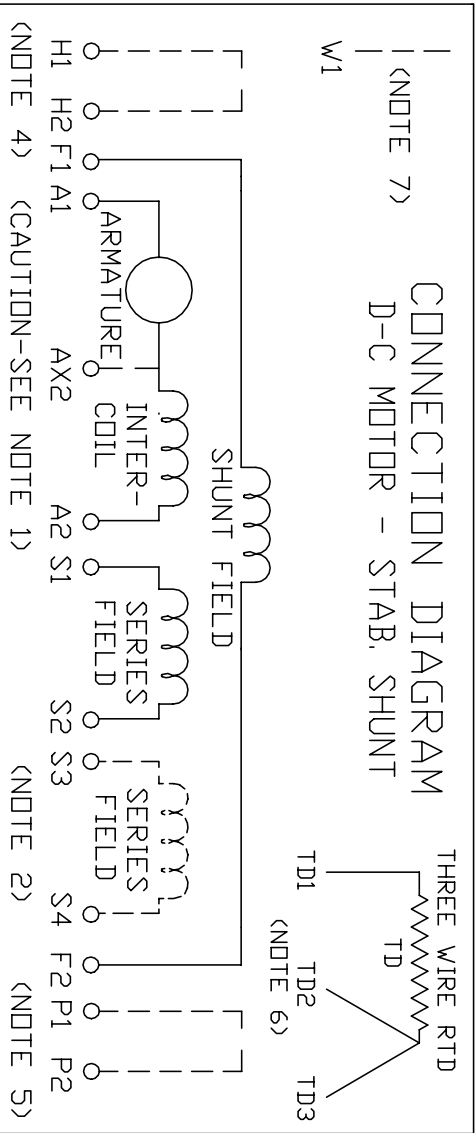
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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 MTG., 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> Ck. 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
	C1811AT	3.00HP	1750	240	11.0
WINDING TYPE					
S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS	
STAB. SHUNT	1.0	DPG	40/F	CONT	240
POWER CODE					
C	TYPE	WK 2 (LB-FT ²)	HOT ARM. CIR. RES.	FLD. AMPS@25 °C	HOT FIELD RES
	TR	.6800	1.86	.994	320

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
14.8	45.0	-/-	2100/9	-

LOAD PERFORMANCE


LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.54	0	0	1879	0
1/4	2.8	1.98	.693	1838	61.0
2/4	5.5	4.43	1.52	1795	75.0
3/4	8.2	6.86	2.30	1756	79.0
4/4	11	9.24	3.03	1723	80.0
O.L.	17	13.8	4.38	1668	78.8

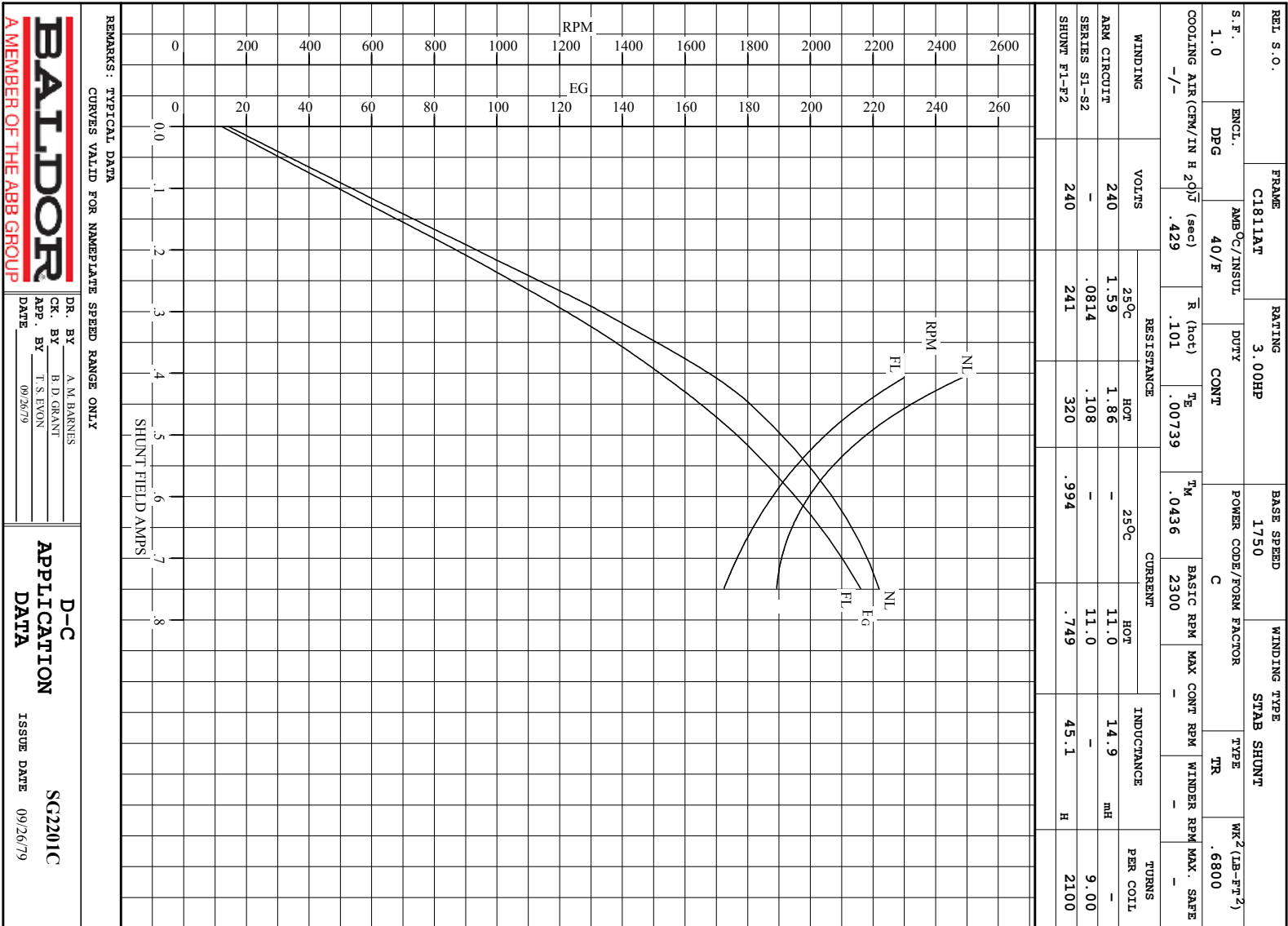
RPM VS. FIELD AMPS

FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED
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.749	1879	1723	221	216
.663	1929	1802	216	205
.577	2026	1910	206	191
.492	2198	2065	190	174
.406	2485	2300	168	153

REMARKS: TYPICAL DATA

 <p>A MEMBER OF THE ABB GROUP</p>	DR. BY A. M. BARNES	<p>D-C MOTOR PERFORMANCE DATA</p> <p>ISSUE DATE 09/26/79</p>
	CK. BY B. D. GRANT	
	APP. BY T. S. EVON	
	DATE 09/26/79	

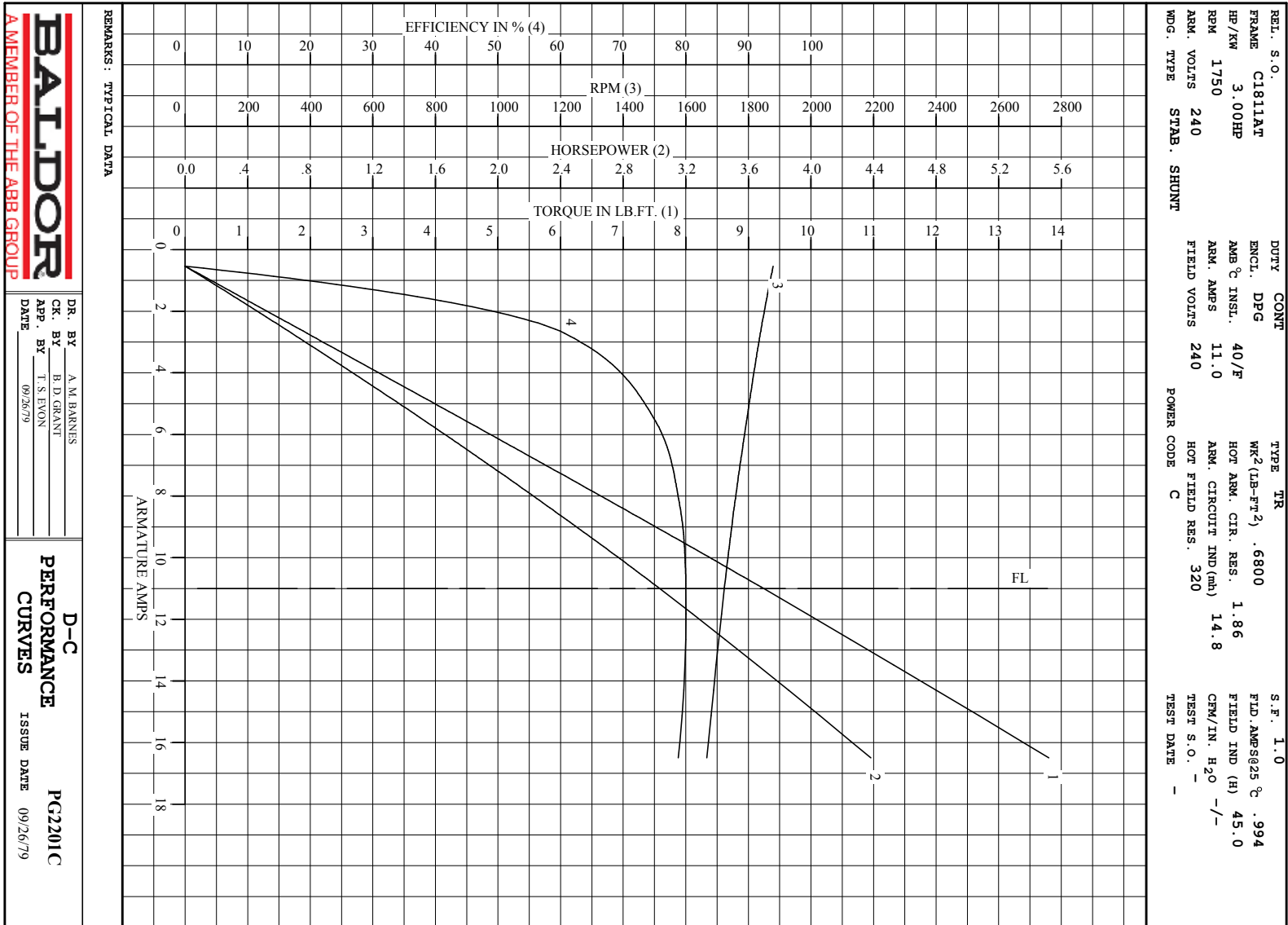


BALDOR
A MEMBER OF THE ABB GROUP

DR. BY A.M. BARNES
CK. BY B.D. GRANT
APP. BY T.S. EVON
DATE 09/26/79

D-C
APPLICATION DATA

SG2201C
ISSUE DATE 09/26/79



DR. BY A.M. BARNES
CK. BY B.D. GRANT
APP. BY T.S. EVON
DATE 09/26/79

D-C
PERFORMANCE
CURVES ISSUE DATE 09/26/79
PG2201C