

# **BALDOR® • RELIANCE**

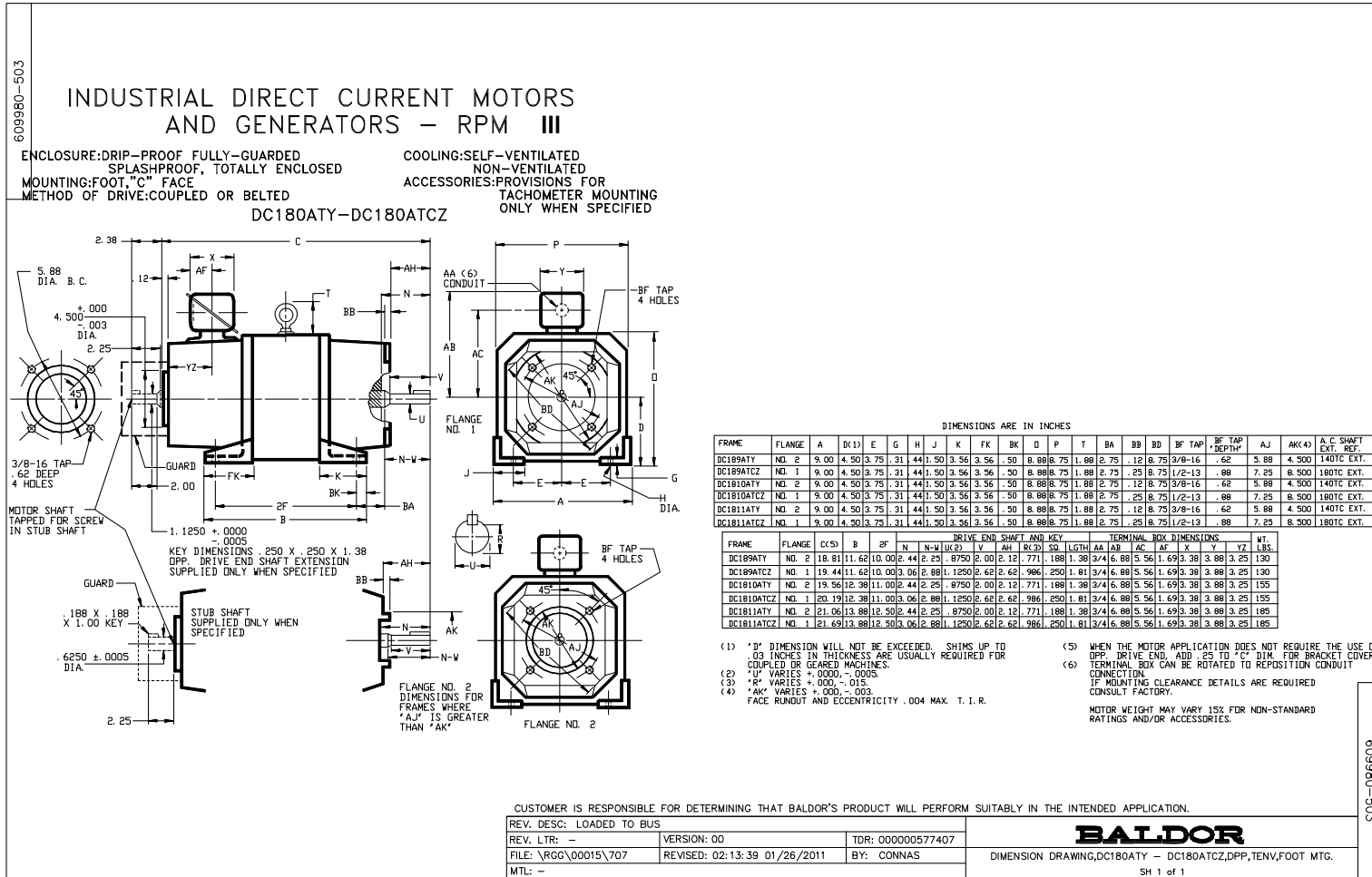
## **Product Information Packet**

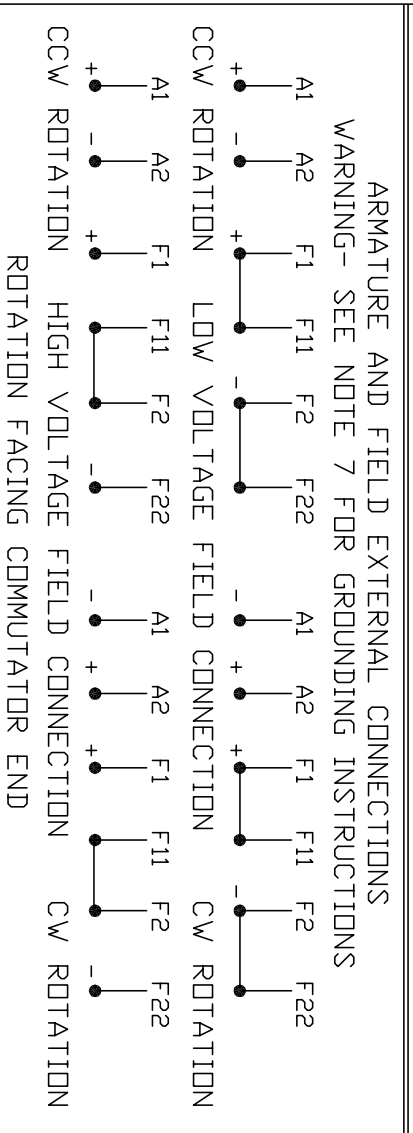
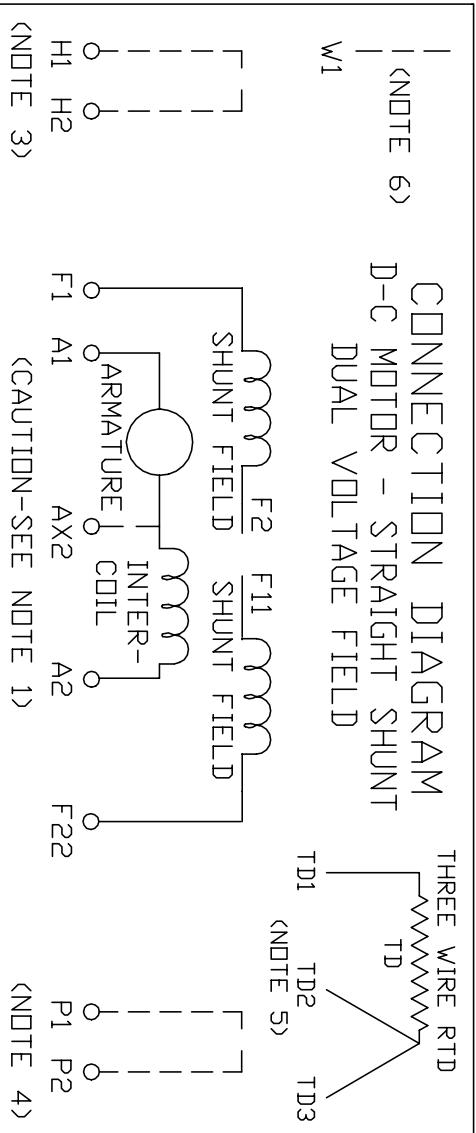
# **CD1805R**

**5HP, 1750RPM, DC, 1810ATCZ, DPG,**

Copyright © All product information within this document is subject to Baldor Electric Company copyright © protection, unless otherwise noted.

Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	2/2-230-60-0	Weight:	175
Frame Group:	DC 1810ATCZ	Mounting Pos.:	F3
HP:	5	Enclosure:	DPG
RPM:	1750	Wound:	STR. SHUNT
Service Factor:	1.0	Arm V:	180
Arm A:	24.00	Field V:	200
Field A:	1.68	Field A Hot:	1.30
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	30BC02JPP30A
ODE Bearing:	30BC02JPG30A	Brushes:	419904-50A
Brush Qty.:			





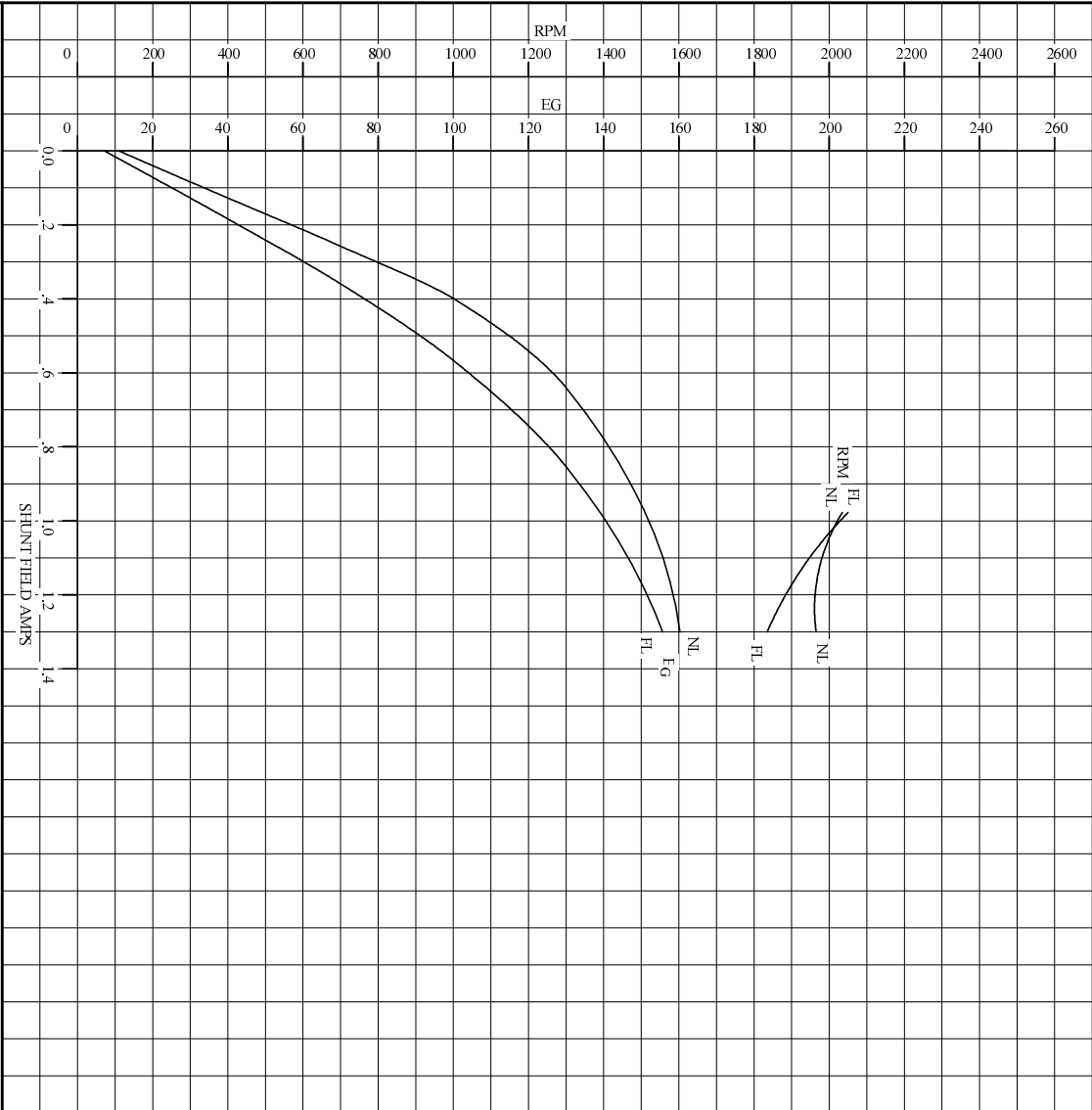
1. **CAUTION** — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
4. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
5. WINDING WEAR SENSORS, 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.D. NO. \_\_\_\_\_

<p>RELIANCE ELECTRIC CLEVELAND, OHIO 44117 U.S.A.</p>	<p>DR. BY N.L. EVANS CHK. BY N. JESCHKE APP. BY E.J. HINER DATE 5-5-69</p>
<p>CONNECTION DIAGRAM</p> <p style="font-size: 2em; font-weight: bold;">406770-7</p> <p>ORIGINAL AT RCC</p>	

C/R 244907, 290048, 354478, 354480

REF. S.O.	FRAME DC1810ATZ	RATING 5.00HP	BASE SPEED 1750	WINDING TYPE STRAIGHT SHUNT
S.F. 1.0	ENCL. DPG	AMB°C/INSUL 40/F	DUTY CONT	POWER CODE/FORM FACTOR 2/2 230-60-0
COOLING AIR (CFM/IN H <sub>2</sub> O) (sec)		R̄ (hot) .102	T <sub>e</sub> .0125	T <sub>m</sub> .0264
-/-		BASIC RPM 1950		
WINDING		CURRENT		INDUCTANCE
	VOLTS	25°C	HOT	PER COIL
ARM CIRCUIT	180	.461	.592	24.0
SERIES S1-S2	-	-	-	-
SHUNT F1-F2	200	119	154	1.68
				1.30
				14.1
				H
				1600



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

<b>BALDOR</b> BALDOR • DOUG • RELIANCE	DR. BY	R. RELANCHER	D-C APPLICATION DATA SC4611A ISSUE DATE 03-10-92
	APP. BY	T. SIMON	
	DATE	08-05-88	

C/R


REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	DC1810ATZ	5.00HP	1750	180	24.0
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
STRAIGHT SHUNT		1.0	DRG	40/F	CONT
					200
POWER CODE	TYPE	WK 2 (LB-FT 2)	HOT ARM. CIR. RES.	FLD. AMPS@25 °C	HOT FIELD RES
2/2 230-60-0	TR	.6800	.591	1.67	153

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
8.76	14.1	-/-	1600/.00000	

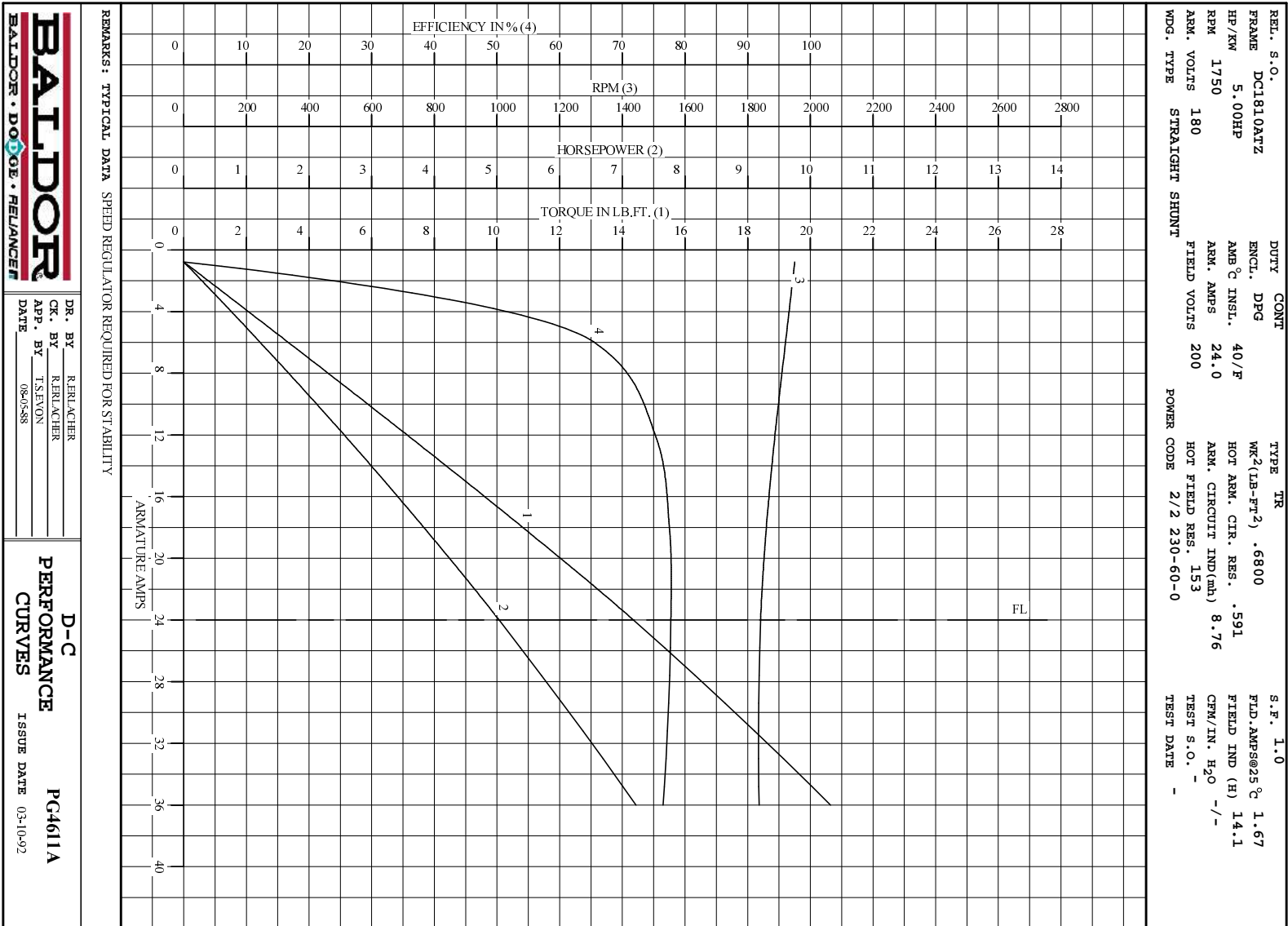
LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	.77	0	0	1950	0
1/4	6.0	3.34	1.22	1921	65.6
2/4	12	7.13	2.56	1887	75.3
3/4	18	10.8	3.83	1860	77.5
4/4	24	14.4	5.03	1841	77.7
O.L.	36	20.6	7.22	1836	76.5

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	
1.30	1950	1841	160	155	
1.21	1961	1873	156	152	
1.13	1971	1920	153	148	
1.05	1995	1979	149	144	
.977	2034	2050	146	139	

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

	DR. BY R. BRÄGGER	<b>D-C MOTOR PERFORMANCE DATA</b> DG4611A ISSUE DATE 03-10-92
	CK. BY R. BRÄGGER APP. BY T.S. EVON DATE 08-05-88	

C/R -



C/R



DR. BY RERLACHER  
 CK. BY RERLACHER  
 APP. BY T.S.MON  
 DATE 08-05-88

**D-C**  
**PERFORMANCE**  
**CURVES** ISSUE DATE 03-10-92  
**PG4611A**