

# **BALDOR® • RELIANCE**

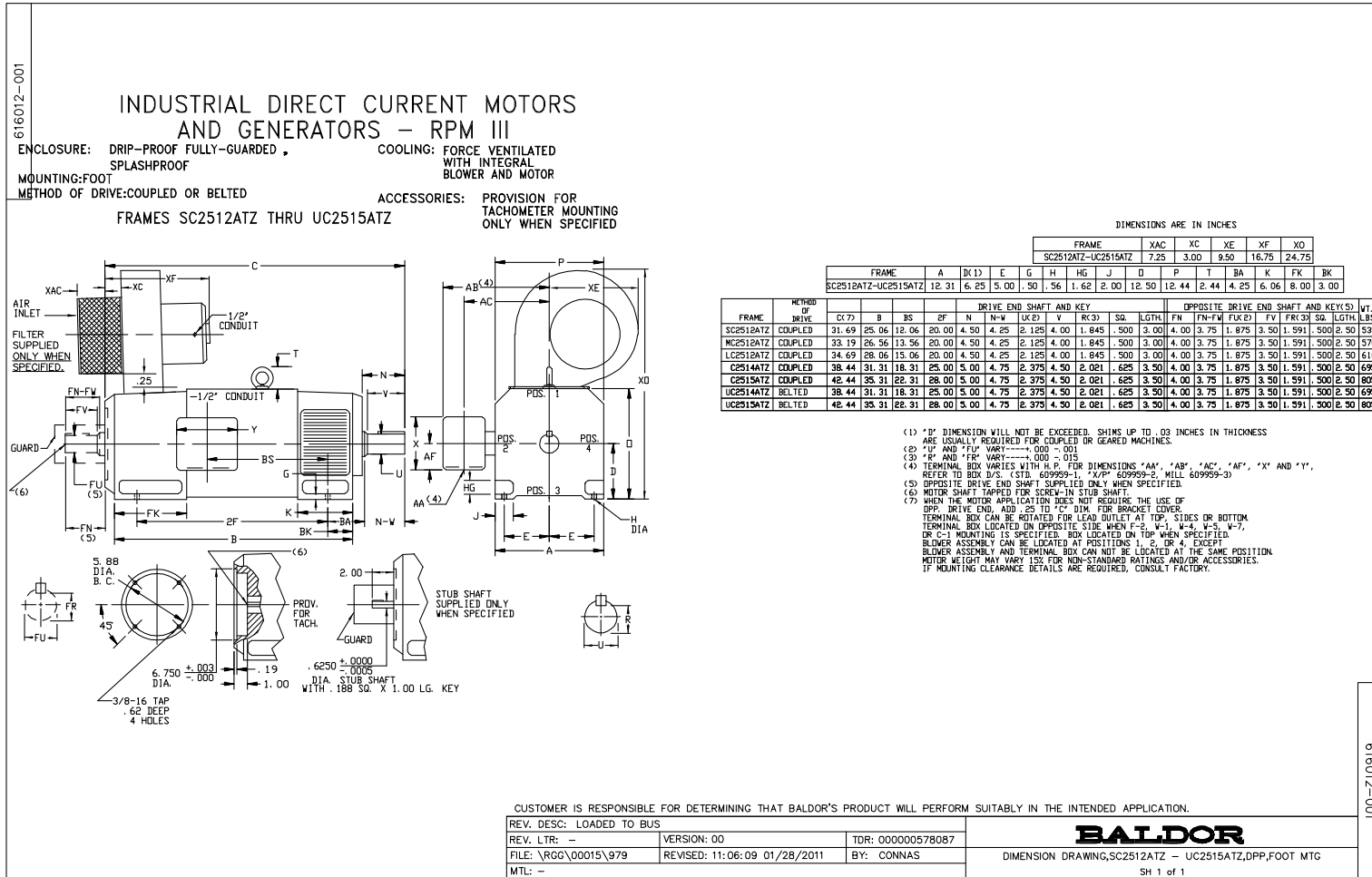
## **Product Information Packet**

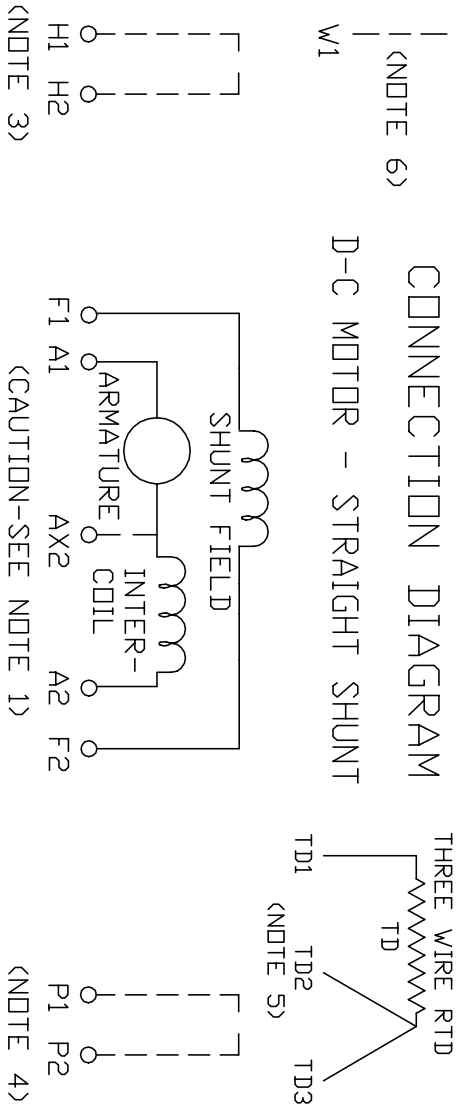
### **D5150R-BV**

**50HP, 1150RPM, DC, 2514ATZ, DPG-FV,**

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	695
Frame Group:	C 2514ATZ	Mounting Pos.:	F2
HP:	50	Enclosure:	DPFV
RPM:	1150/1935	Wound:	STR. SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	87.00	Field V:	300
Field A:	4.06	Field A Hot:	3.11/1.55
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	65BC03J30X
ODE Bearing:	50BC02J30X	Brushes:	419904-51AC
Brush Qty.:			



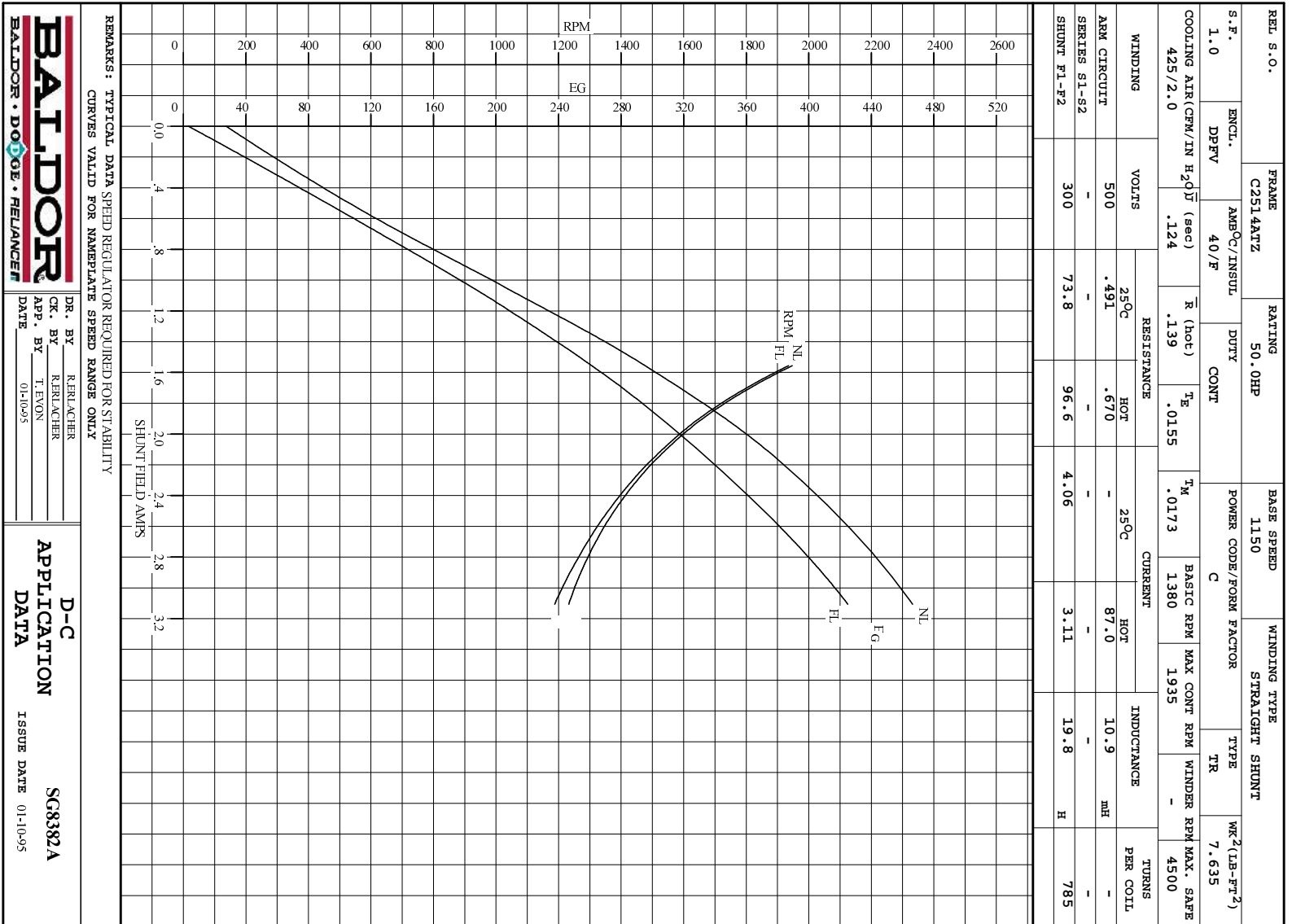


1. **CAUTION** — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
4. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
5. WINDING 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 <u>N.L. EVANS</u> CK. BY <u>N. JESCHKE</u> APP. BY <u>E. J. HINER</u> DATE <u>5-5-69</u>
<b>CONNECTION DIAGRAM</b> <span style="font-size: 2em; font-weight: bold;">406770-6</span> ORIGINAL AT RCC	

C/R 244907, 290048, 354478, 354480



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

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DR. BY R. REILACHER  
CK. BY R. REILACHER  
APP. BY T. EYON  
DATE 01-10-95

**D-C APPLICATION DATA**  
SC8382A  
ISSUE DATE 01-10-95


REL. S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	C2514ATZ	50.0HP	1150	500	87.0
WINDING TYPE	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STRAIGHT SHUNT	1.0	DPFV	40/F	CONT	300
POWER CODE	TYPE	WK 2 (LB-PT 2)	HOT ARM. CIR. RES.	FLD. AMPS@25 °C	HOT FIELD RES
C	TR	7.635	.670	4.06	96.5

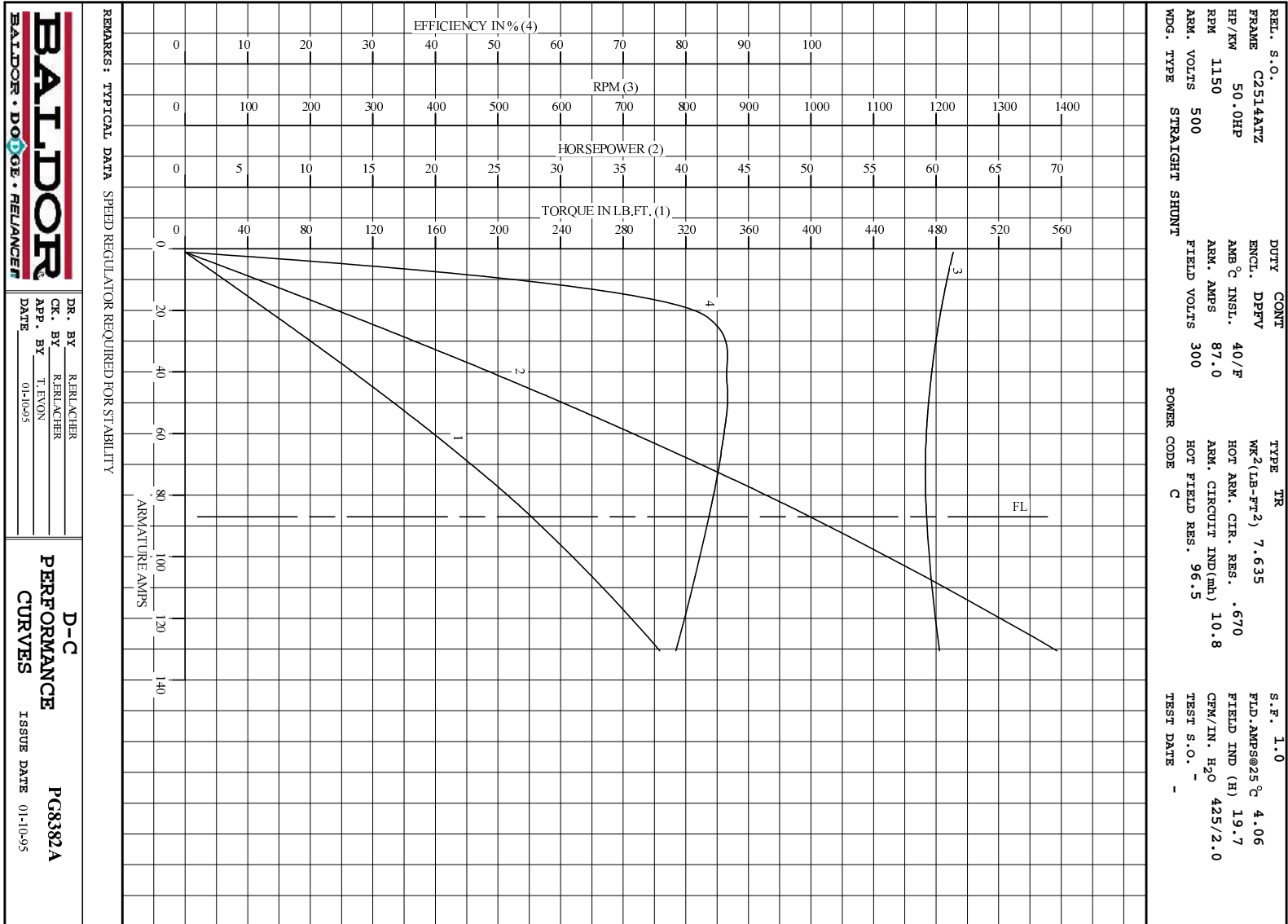
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
10.8	19.7	425/2.0	785/.00000	-

LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	1.1	0	0	1227	0
1/4	22	57.6	13.2	1206	83.1
2/4	44	116	26.4	1191	86.6
3/4	65	171	38.6	1183	85.7
4/4	87	221	49.9	1185	83.7
O.L.	131	303	69.7	1205	78.4

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	
3.10	1227	1184	466	425	
2.71	1313	1287	436	392	
2.33	1439	1423	398	354	
1.94	1633	1621	352	311	
1.55	1947	1935	295	261	

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

	DR. BY R. BRÄGGER	<b>D-C MOTOR PERFORMANCE DATA</b> D68382A ISSUE DATE 01-10-95
	CK. BY R. BRÄGGER APP. BY T. EVON DATE 01-10-95	



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DR. BY R.RELACHER  
 CK. BY R.RELACHER  
 APP. BY T. ENON  
 DATE 01-10-95

**D-C**  
**PERFORMANCE**  
**CURVES** ISSUE DATE 01-10-95  
**PG8382A**