

# **BALDOR® • RELIANCE**

## **Product Information Packet**

### **D5060R-BV**

**60HP, 1750RPM, DC, 2512ATZ, DPG-FV,**

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	610
Frame Group:	LC 2512ATZ	Mounting Pos.:	F1
HP:	60	Enclosure:	DPFV
RPM:	1750/2300	Wound:	STR. SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	102.00	Field V:	300
Field A:	4.61	Field A Hot:	3.19/2.26
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	60BC03J30X
ODE Bearing:	50BC02J30X	Brushes:	419904-51AD
Brush Qty.:			

616012-001

### INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS — RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED, COOLING: FORCE VENTILATED  
SPLASHPROOF WITH INTEGRAL BLOWER AND MOTOR

MOUNTING: FOOT ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

METHOD OF DRIVE: COUPLED OR BELTED

FRAMES SC2512ATZ THRU UC2515ATZ

DIMENSIONS ARE IN INCHES

FRAME		XAC	XC	XE	XF	XO
SC2512ATZ-UC2515ATZ		7.25	3.00	9.50	16.75	24.75

FRAME	A	B(1)	E	G	H	HG	J	D	P	T	BA	K	FK	BK
SC2512ATZ-UC2515ATZ	12.31	6.25	5.00	.50	1.56	2.00	12.50	12.44	2.44	4.25	6.06	8.00	3.00	

FRAME	METHOD OF DRIVE	C(7)	B	BS	2F	N	N-W	UK(2)	V	RC(3)	SD	LGTH	FN	FN-FW	FK(2)	FV	FR(3)	SD	LGTH	LB.S.
SC2512ATZ	COUPLED	31.69	26.06	12.06	20.00	4.50	4.25	2.125	4.00	1.845	.500	3.00	4.00	3.75	1.875	3.50	1.591	.500	2.50	535
MC2512ATZ	COUPLED	33.19	26.56	13.56	20.00	4.50	4.25	2.125	4.00	1.845	.500	3.00	4.00	3.75	1.875	3.50	1.591	.500	2.50	570
LC2512ATZ	COUPLED	34.69	28.06	15.06	20.00	4.50	4.25	2.125	4.00	1.845	.500	3.00	4.00	3.75	1.875	3.50	1.591	.500	2.50	610
C2514ATZ	COUPLED	38.44	31.31	18.31	25.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	695
C2515ATZ	COUPLED	42.44	35.31	22.31	28.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	805
UC2514ATZ	BELTED	38.44	31.31	18.31	25.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	695
UC2515ATZ	BELTED	42.44	35.31	22.31	28.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.00	3.75	1.875	3.50	1.591	.500	2.50	805

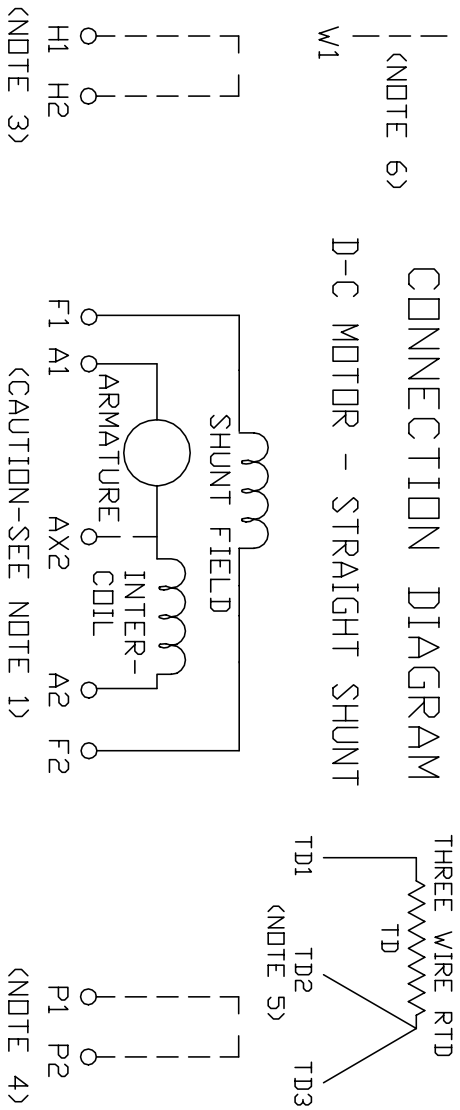
(1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.  
 (2) "U" AND "FU" VARY—.000—.001  
 (3) "R" AND "FR" VARY—.000—.015  
 (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". REFER TO BOX D/S. (STD. 609959-1, "X/P" 609959-2, MILL 609959-3)  
 (5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.  
 (6) MOTOR SHAFT TAPPED FOR SCREW-IN STUB SHAFT.  
 (7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF OPP. DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER. TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, V-4, J-5, W-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED. BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, OR 4, EXCEPT BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION. 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: 0000005780087
REV. LTR: -	REVISED: 11:06:09 01/28/2011	BY: CONNAS
FILE: \RGG\00015\979		
MTL: -		

DIMENSION DRAWING, SC2512ATZ - UC2515ATZ, DPG, FOOT MTG  
SH 1 of 1

616012-001



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.O. NO. \_\_\_\_\_



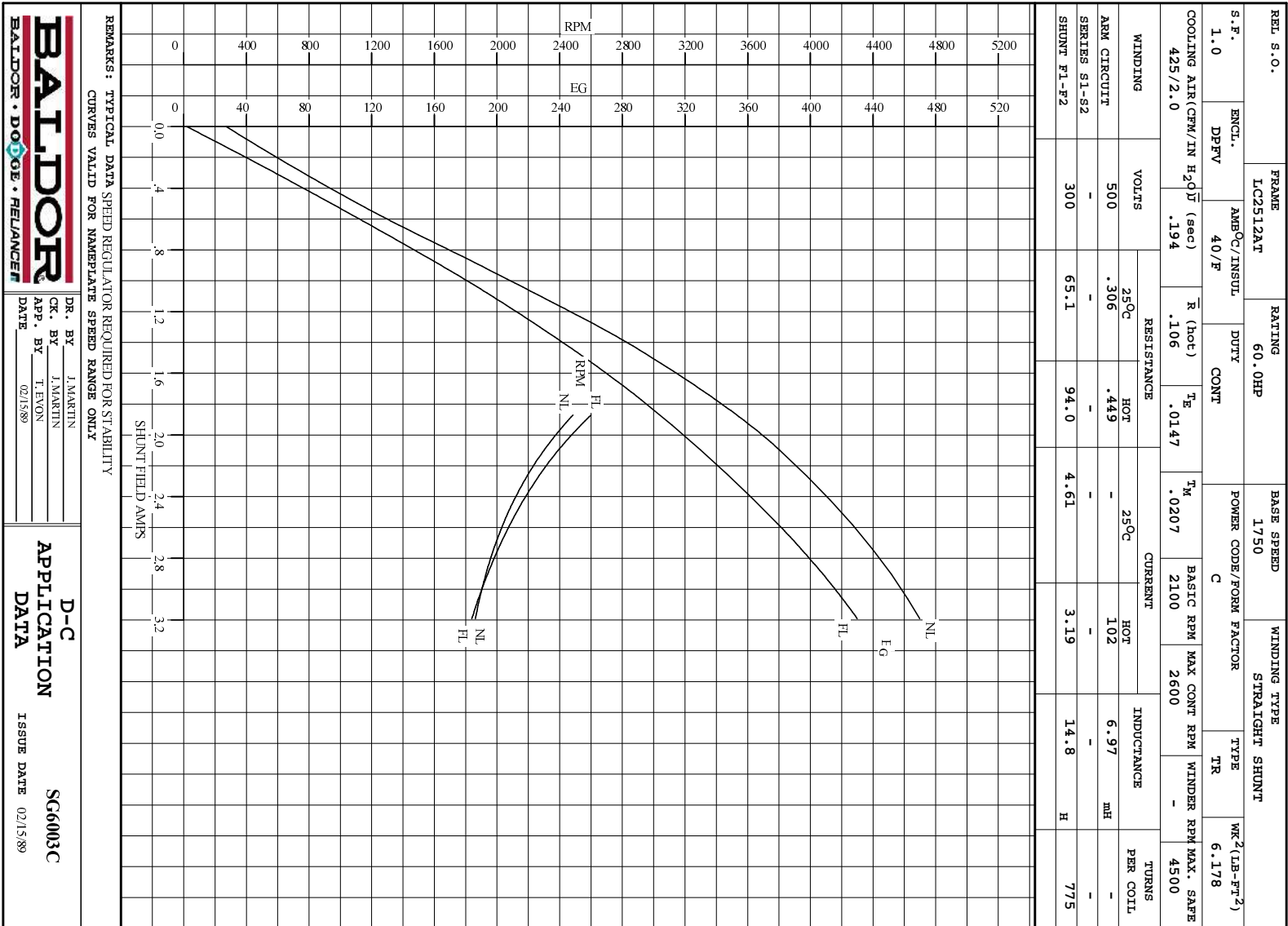
Rev. by N.L. EVANS  
 CK. BY N. JESCHKE  
 App. BY E.J. HINER  
 DATE 5-5-69

**CONNECTION DIAGRAM**

**406770-6**

ORIGINAL AT RCC

C/R 244907, 290048, 354478, 354480




REL. S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	LC2512AT	60.0HP	1750	500	102
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
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
C		TR	6.178	.449	4.60
					HOT FIELD RES
					94.0

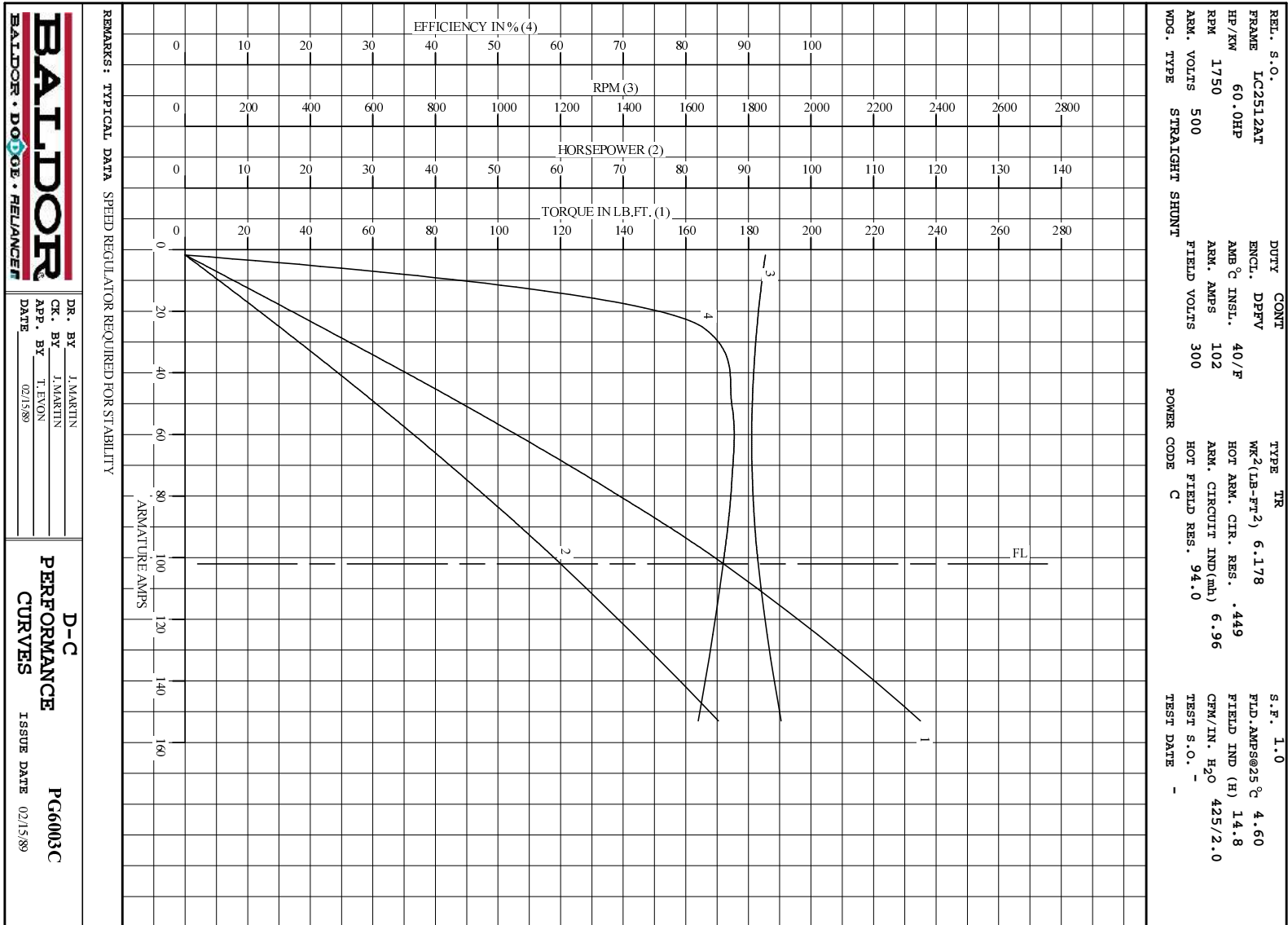
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
6.96	14.8	425/2.0	775/.00000	-

LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	1.8	0	0	1854	0
1/4	26	44.2	15.4	1827	82.9
2/4	51	90.2	31.1	1812	87.4
3/4	77	133	46.0	1814	87.3
4/4	102	172	60.0	1832	86.0
O.L.	153	235	85.2	1905	82.0

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	
3.19	1854	1831	469	429	
2.86	1940	1956	448	404	
2.53	2059	2109	422	374	
2.20	2232	2313	391	341	
1.87	2485	2600	353	304	

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

	DR. BY J. MARTIN	<b>D-C MOTOR PERFORMANCE DATA</b> DG6003C ISSUE DATE 02/15/89
	CK. BY T. EVON	
	APP. BY 02/15/89	



DR. BY J. MARTIN  
 CK. BY J. MARTIN  
 APP. BY T. EYON  
 DATE 02/15/89

**D-C**  
**PERFORMANCE**  
**CURVES** ISSUE DATE 02/15/89  
**PG6003C**