BALDOR
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BALDOR • RELIANCE

Product Information Packet

CD2015R-BV

15HP,1750RPM,DC,2113ATCZ,DPG-FV,

For Baldor Sales and Support, Please Contact: Walker EMD • http://www.walkeremd.com • Toll-Free: (800) 876-4444 • Phone: (203) 426-7700 • Fax: (203) 426-7800

Part Detail			
Type:	DC	**Prod. Type:**	TR
Power Code:	C	**Weight:**	345
Frame Group:	SC 2113ATCZ	**Mounting Pos.:**	F1
HP:	15	**Enclosure:**	DPFV
RPM:	1750/2300	**Wound:**	STR SHUNT
Service Factor:	1.0	**Arm V:**	240
Arm A:	56.00	**Field V:**	150
Field A:	4.73	**Field A Hot:**	3.41/2.24
Insulation Class:	F	**Ambient:**	40
Duty:	CONT	**DE Bearing:**	50BC03J30X
ODE Bearing:	45BC02J30X	**Brushes:**	419904-51AD
Brush Qty.:			

616002-023

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED, SPLASHPROOF

MOUNTING:FOOT, NEMA "C" FACE

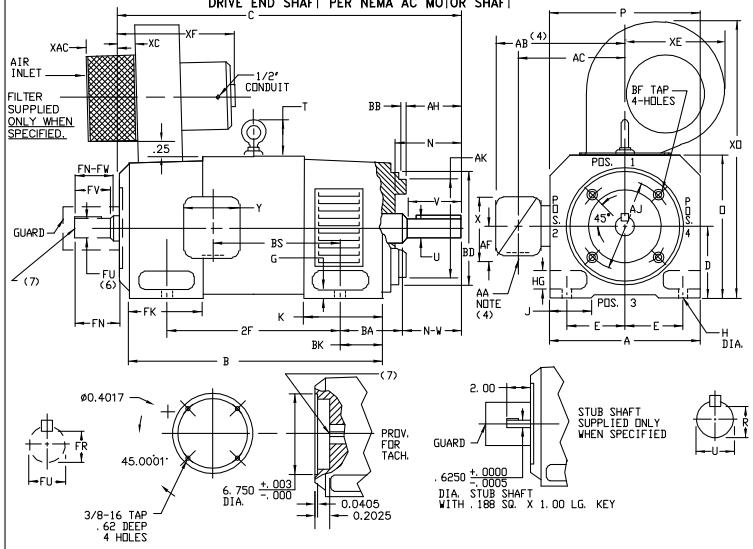
METHOD OF DRIVE:COUPLED OR BELTED

COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR

ACCESSORIES: PROVISIONS FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

FRAMES SC2113ATCZ THRU LC2115ATCZ

DRIVE END SHAFT PER NEMA AC MOTOR SHAFT



DIMENSIONS ARE IN INCHES

FRAME	A	D(1)	E	G	H	HG	J	O	P	T	BA	K	FK	BK
SC2113ATCZ–LC2115ATCZ	10.25	5.25	4.25	.44	.44	1.38	1.75	10.44	10.31	2.08	3.50	5.19	6.81	2.38

FRAME	C(8)	B	BS	2F	DRIVE END SHAFT AND KEY								OPPOSITE DRIVE END SHAFT AND KEY(6)							WT.
					N	N–W	U(2)	AH	V	R(3)	SQ.	LGTH.	FN	FN–FW	FU(2)	FV	FR(3)	SQ.	LGTH.	LBS.
SC2113ATCZ	28.00	22.50	11.38	18.00	3.62	3.38	1.3750	3.12	3.12	1.201	.312	2.38	3.50	3.25	1.625	3.00	1.416	.375	2.25	355
MC2113ATCZ	29.25	23.75	12.62	18.00	3.62	3.38	1.3750	3.12	3.12	1.201	.312	2.38	3.50	3.25	1.625	3.00	1.416	.375	2.25	380
LC2113ATCZ	30.88	25.38	14.25	18.00	3.62	3.38	1.3750	3.12	3.12	1.201	.312	2.38	3.50	3.25	1.625	3.00	1.416	.375	2.25	410
MC2115ATCZ	32.12	26.62	15.50	22.00	3.62	3.38	1.3750	3.12	3.12	1.201	.312	2.38	3.50	3.25	1.625	3.00	1.416	.375	2.25	435
LC2115ATCZ	34.88	29.38	18.25	22.00	3.62	3.38	1.3750	3.12	3.12	1.201	.312	2.38	3.50	3.25	1.625	3.00	1.416	.375	2.25	490

FRAME	BB	BD	BF TAP	BF TAP DEPTH	AJ	AK(5)
SC2113ATCZ–LC2115ATCZ	.25	8.75	1/2–13	.75	7.25	8.500

FRAME	XAC	XC	XE	XF	XO
SC2113ATCZ–LC2115ATCZ	7.75	2.25	10.00	16.00	22.75

(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 –.0005 UP TO 1.625 DIA----+.000 –.001 1.625 DIAAND LARGER
(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) 'AK' VARIES +.000, –.003----FACE RUNOUT AND ECCENTRICITY .004 MAX T. I. R.
(6) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
(7) MOTOR SHAFT TAPPED FOR SCREW-IN STUB SHAFT.
(8) 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, W-4, W-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		
REV. LTR: –	VERSION: 00	TDR: 000000578087
FILE: \RGG\00015\950	REVISED: 08:46:01 01/28/2011	BY: CONNAS
MTL: –		

BALDOR

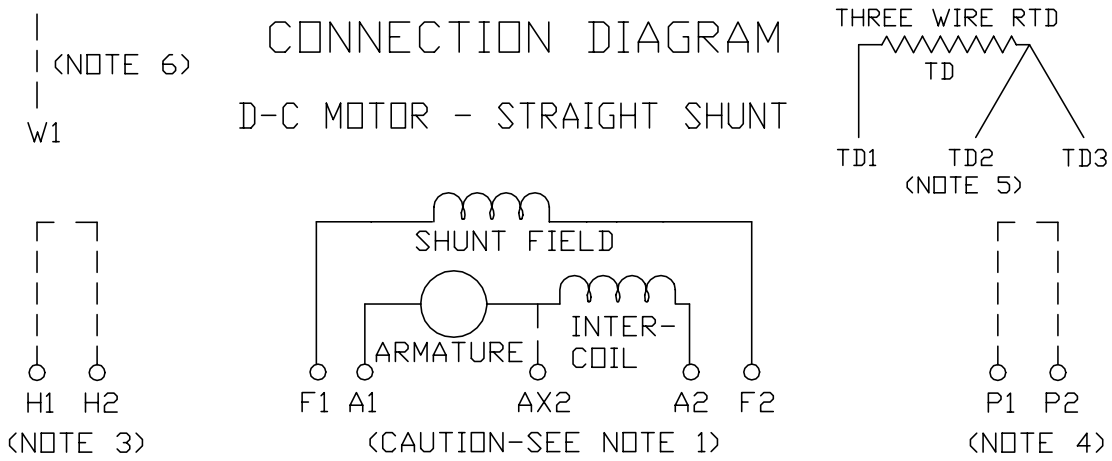
DIMENSION DRAWING,SC2113ATCZ – LC2115ATCZ,DPP,FOOT MTG

SH 1 of 1

616002-023

CONNECTION DIAGRAM

D-C MOTOR - STRAIGHT SHUNT



ARMATURE AND FIELD EXTERNAL CONNECTIONS
WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS

ROTATION FACING COMMUTATOR END

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 LEADS MARKED TD1, TD2, &TD3.
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 _____ CUSTOMER ORDER NO. _____ RELIANCE S.O. NO. _____

RELIANCE ELECTRIC CLEVELAND, OHIO 44117 U. S. A.	DR. BY N. L. EVANS CK. BY N. JUESCHKE APP. BY E. J. HINGER DATE 5-5-69	CONNECTION DIAGRAM	406770-6 ORIGINAL AT RRC

C/R 244907, 290048, 354478, 354480

REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	SC2113AT	15.0HP	1750	240	56.0

WINDING TYPE	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STRAIGHT SHUNT	1.0	DPFV	40/F	CONT	150

POWER CODE	TYPE	WK^2 (LB-FT^2)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C	HOT FIELD RES
6/3 F 230-50-0	TR	2.329	.501	4.73	43.8

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H_2O)	TURNS PER COIL SHUNT/SERIES	TEST DATE
4.58	4.58	300/2.25	600/.00000	-

LOAD PERFORMANCE

LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	1.7	0	0	1911	0
1/4	14	10.7	3.81	1865	70.8
2/4	28	22.7	7.87	1824	78.3
3/4	42	34.2	11.6	1788	79.8
4/4	56	45.2	15.1	1755	79.1
O.L.	84	65.1	21.2	1709	75.3

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
3.42	1911	1755	218	208
3.12	2009	1852	208	197
2.82	2121	1965	197	186
2.53	2272	2109	184	173
2.23	2474	2300	169	159

REMARKS: TYPICAL DATA

MAXIMUM SAFE SPEED = 4500 RPM
SPEED REGULATOR REQUIRED FOR STABILITY

RELIANCE ELECTRIC

DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. EVON
DATE 8-16-85

D-C MOTOR PERFORMANCE DATA

DG6207C

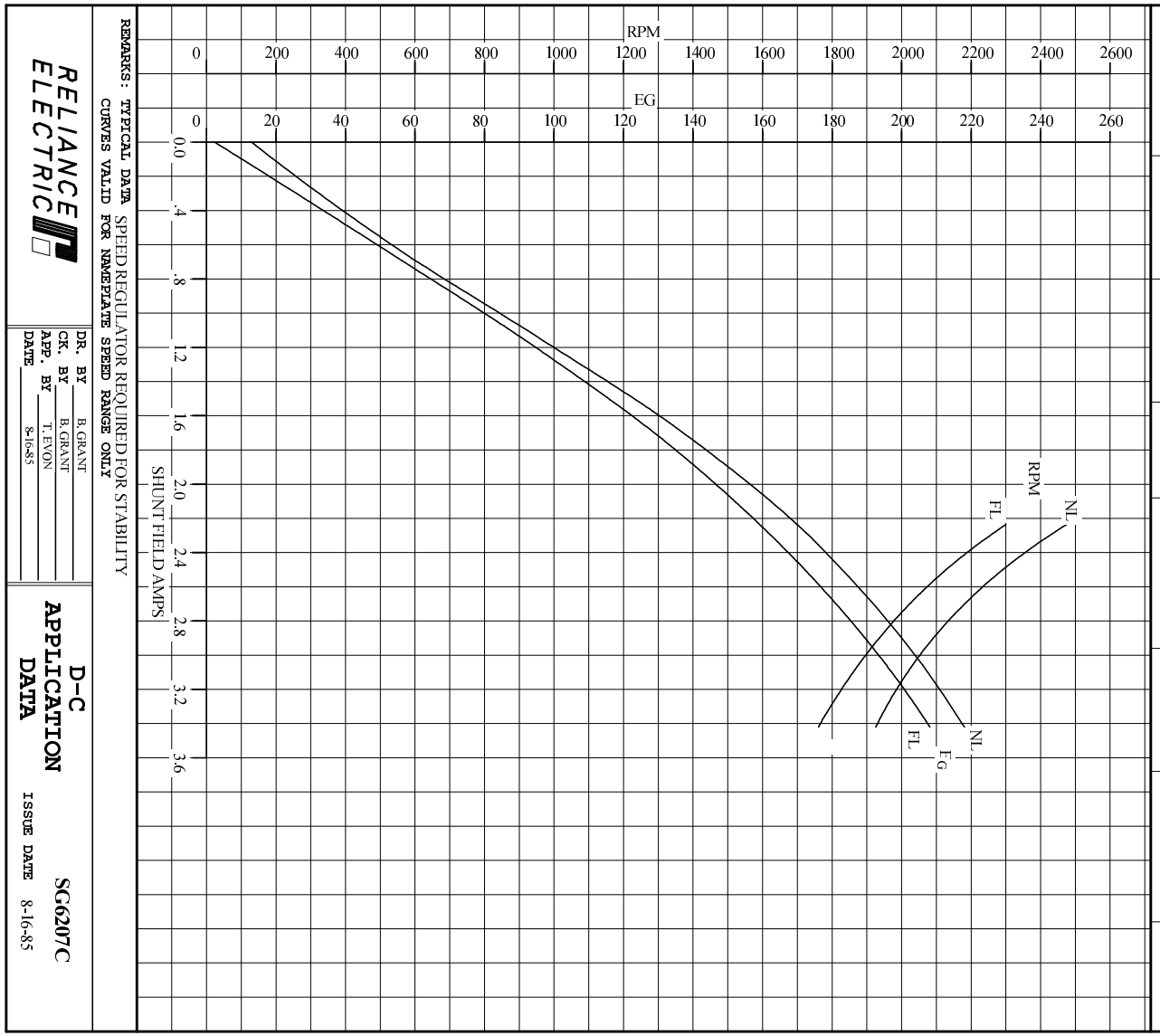
ISSUE DATE 8-16-85

REL S.O.		FRAME	RATING	BASE SPEED	WINDING TYPE
		SC2113AT	15.0HP	1750	STRAIGHT SHUNT

S.F.	ENCL.	AMB °C/INSUL	DUTY	POWER CODE/FORM FACTOR	TYPE	WK^2 (LB-FT^2)
1.0	DPFV	40/F	CONT	6/3 F 230-50-0	TR	2.329

COOLING AIR (CFM/IN H $_2$O)	$\overline{T}$ (sec)	$\overline{R}$ (hot)	T_E	T_M	BASIC RPM	MAX CONT RPM	WINDER RPM	MAX. SAFE
300/2.25	.294	.146	.00840	.0429	1950	2300	-	4500

WINDING	VOLTS	RESISTANCE		CURRENT		INDUCTANCE	TURNS
		25°C	HOT	25°C	HOT		PER COIL
ARM CIRCUIT	240	.375	.501	-	56.0	4.58 mH	-
SERIES S1-S2	-	-	-	-	-	-	-
SHUNT F1-F2	150	31.7	43.8	4.74	3.42	4.59 H	600



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

RELIANCE ELECTRIC

DR. BY B. GRANT
CK. BY B. GRANT
APP. BY T. EVON
DATE 8-16-85

D-C APPLICATION DATA

SG6207C

ISSUE DATE 8-16-85