

# **BALDOR® • RELIANCE**

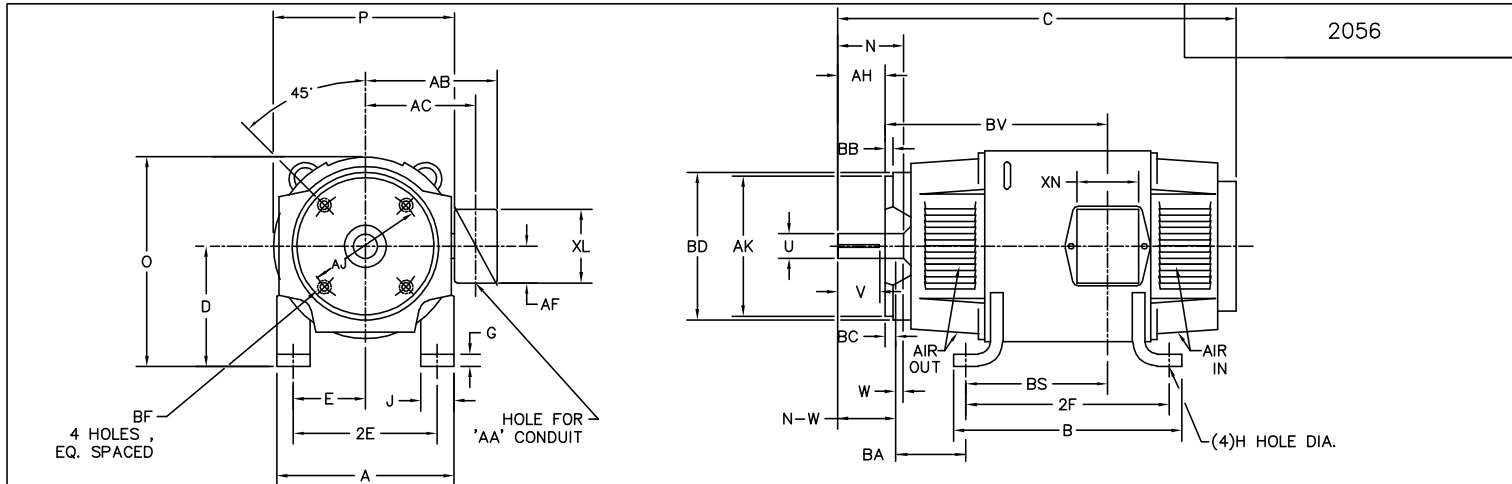
## **Product Information Packet**

# **CDMG2333**

**33KW,1750RPM,DC,328ATC,DPFG,F2**

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Part Detail			
Type:	DC	Prod. Type:	T
Power Code:	A	Weight:	880
Frame Group:		Mounting Pos.:	F2
HP:	33	Enclosure:	DPFG
RPM:	1750	Wound:	COMPOUND
Service Factor:	1.0	Arm V:	230
Arm A:	144.00	Field V:	230
Field A:	3.16	Field A Hot:	2.13-1.30/1.11-
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	6211
ODE Bearing:	6210	Brushes:	28610-1
Brush Qty.:			



FRAME	FOOT MOUNTING							D.E. SHAFT EXTENSION										DRIVE KEY		FRAME							
	BA	E	2F	G	H	J	AH	AJ	AK	BB MIN.	BC	BD	THREAD	BF DEEP	N	N-W	U	V	W	KEY-SQ.	KEY-LONG	A	B	C	D	O	P
1810ATC	2.75	3.75	11.00	.38	.406	1.50	2.125	7.250	8.500	.16	—	8.69	1/2-13	.75	2.90	2.77	1.125 <sup>1</sup>	2.13 <sup>4</sup>	.13	.250	1.38	8.81	12.25	21.46	4.50 <sup>3</sup>	9.00	9.00
219ATC	3.50	4.25	11.00	.50	.406	2.00	2.50	7.250	8.500	.24	.25	8.75	1/2-13	1.00	3.00	2.75	1.375 <sup>1</sup>	2.50 <sup>4</sup>	.25	.312	1.75	10.38	12.00	24.50	5.25 <sup>3</sup>	10.47	10.44
258ATC	4.25	5.00	12.50	.69	.531	2.25	3.00	7.250	8.500	.27	.25	8.75	1/2-13	.97	3.44	3.25	1.625 <sup>1</sup>	3.00 <sup>4</sup>	.19	.375	2.31	12.38	14.00	26.50	6.25 <sup>3</sup>	12.47	12.44
259ATC	4.25	5.00	14.00	.69	.531	2.25	3.00	7.250	8.500	.27	.25	8.75	1/2-13	.97	3.44	3.25	1.625 <sup>1</sup>	3.00 <sup>4</sup>	.19	.375	2.31	12.38	15.50	28.00	6.25 <sup>3</sup>	12.47	12.44
288ATC	4.75	5.50	14.00	.69	.531	2.50	3.50	9.000	10.500	.25	.25	10.75	1/2-13	.75	3.91	3.75	1.875 <sup>1</sup>	3.50 <sup>4</sup>	.16	.500	2.50	13.81	15.62	32.00	7.00 <sup>3</sup>	13.88	13.75
328ATC	5.25	6.25	16.00	.81	.656	3.00	4.00	11.000	12.500	.25	.25	13.02	5/8-11	.88	4.40	4.25	2.125 <sup>1</sup>	4.00 <sup>4</sup>	.15	.500	3.12	15.88	17.75	34.63	8.00 <sup>3</sup>	15.94	15.88
329ATC	5.25	6.25	18.00	.81	.656	3.00	4.00	11.000	12.500	.25	.25	13.02	5/8-11	.88	4.40	4.25	2.125 <sup>1</sup>	4.00 <sup>4</sup>	.15	.500	3.12	15.88	19.75	36.63	8.00 <sup>3</sup>	15.94	15.88
3212ATC	5.25	6.25	25.00	.81	.656	3.00	4.00	11.000	12.500	.25	.25	13.02	5/8-11	1.12	4.40	4.25	2.125 <sup>1</sup>	4.00 <sup>4</sup>	.15	.500	3.12	15.88	26.75	43.63	8.00 <sup>3</sup>	15.94	15.88

FRAME	CONDUIT BOX							APPROXIMATE WEIGHT	
	AA	AB	AC	AF	BS	BV	XL		
1810ATC	3/4-NPT	INTEGRAL WITH ENDPLATE						200	
219ATC	3/4-1	7.91	6.44	2.44	9.38	13.13	3.81	3.12	263
258ATC	1 1/4	9.35	7.72	2.94	9.75	14.25	4.94	4.00	377
259ATC	1 1/4	9.35	7.72	2.94	11.25	15.75	4.94	4.00	422
288ATC	1 1/4	11.88	9.25	5.00	12.64	17.64	7.88	5.25	579
328ATC	2	12.94	10.32	5.00	13.68	19.18	7.88	5.25	800
329ATC	2	12.94	10.32	5.00	15.68	21.18	7.88	5.25	904
3212ATC	2	12.94	10.32	5.00	22.68	28.18	7.88	5.25	937

- 1) SHAFT DIAMETERS TO 1.500 TOLERANCE +.000 -.0005  
SHAFT DIAMETERS ABOVE 1.500 TOLERANCE +.000 -.0010  
SHAFT DIAMETERS TO 1.625 RUNOUT .002 T.I.R. MAX.  
SHAFT DIAMETERS ABOVE 1.625 RUNOUT .003 T.I.R. MAX.
- 2) 'AK' DIMENSION UNDER 12.000 - DIAMETER TOLERANCE + .000 - .003  
CONCENTRIC WITH SHAFT .004 T.I.R. MAX.  
FACE RUNOUT WITHSHAFT .004 T.I.R. MAX.  
'AK' DIMENSION 12.0 & OVER - DIAMETER TOLERANCE +.000 -.005  
CONCENTRIC WITH SHAFT .007 T.I.R. MAX.  
FACE RUNOUT WITH SHAFT .007 T.I.R. MAX.
- 3) 'D' DIMENSION TOLERANCE +.000 -.060
- 4) 'V' DIMENSION IS MAX. HUB LENGTH ON SHAFT
- 5) CONDUIT BOX CAN BE ROTATED IN 90° STEPS ON ITS OWN AXIS.
- 6) ALL DIMENSIONS NOT NOTED ARE NOMINAL DIMENSIONS CONSULT FACTORY FOR TOLERANCES.

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

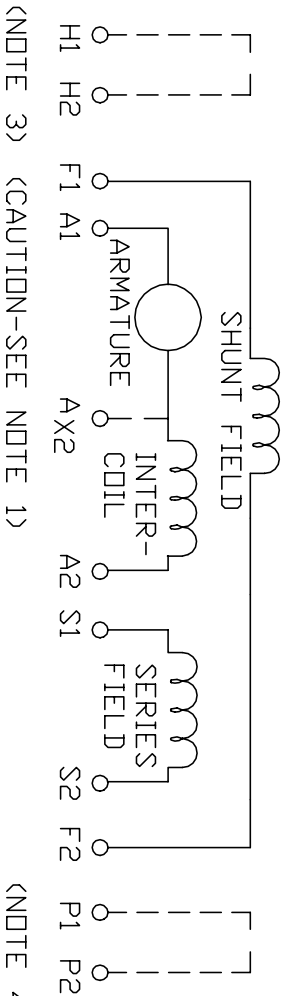
REV. DESC: REV. "D" DIM NEGATIVE TOL. FROM -.030 TO -.060	TDR: 000000738871
REV. LTR: E	VERSION: 05
FILE: \RGG\00018\330	REVISED: 03:01:26 03/19/2012
MTL: -	BY: RGGNAS

**BALDOR**

DIM SHEET,1810ATC THRU 3212ATC GENERATORS,F2 MTG  
SH 1 of 1

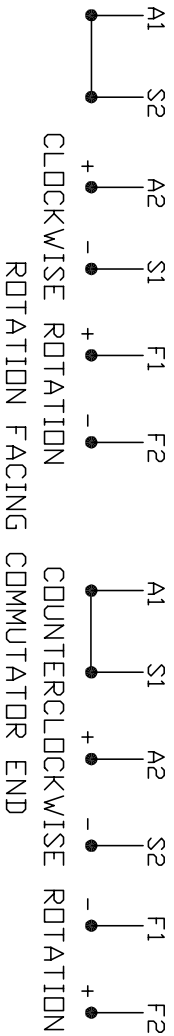
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### CONNECTION DIAGRAM D-C GENERATOR - COMPOUND



#### ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING-- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS



1. **CAUTION** — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD 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. FIELD POLARITIES ARE SHOWN FOR CUMULATIVE EXCITATION.
6. FOR SELF-EXCITATION OF SHUNT FIELDS, CONNECT THROUGH CONTROL DEVICE TO ARMATURE LEADS OF DESIRED POLARITY.
7. **WARNING** — GENERATOR MUST BE GROUNDED TO PREVENT SERIOUS INJURIES TO PERSONNEL. GROUND THE GENERATOR 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 DRIVE END BRACKET ADJACENT TO TERMINAL BOX FOR GENERATOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER \_\_\_\_\_ RELIANCE  
ORDER NO. \_\_\_\_\_ S.D. NO. \_\_\_\_\_

**RELIANCE ELECTRIC**  
CLEVELAND, OHIO 44117 U.S.A.

DR. BY N.L. EVANS  
CHK BY N.E. JUESCHKE  
APP. BY E.J. HINER  
DATE 5/25/69

**CONNECTION DIAGRAM**  
**413430-1**  
ISSUE DATE NOV. 1, 1978

C/R 244907, 354465

(SHEET 1 - FOR CONNECTION DIAGRAM LABEL SEE SHEET 2)

REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	328	33.0HP	1750	230	144
WINDING TYPE		S.F.	ENCL.	AMB °C/INSUL	DUTY
		1.0	DBG	40/F	CONT
STAB. SHUNT					230
POWER CODE		TYPE	WK 2 (LB-FT <sup>2</sup> )	HOT ARM. CIR. RES.	FLD. AMPS@25 °C
A		T	7.377	.126	3.16
HOT FIELD RES		107			
ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR (CFM/IN H 20)		TURNS PER COIL SHUNT/SERIES	TEST DATE
2.27	104	-/-		2000/3	-

LOAD PERFORMANCE


LOAD	AMPERES	TORQUE IN OZ.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	474	0	0	1529	0
1/4	36	0	0	1491	0
2/4	72	0	0	1451	0
3/4	108	0	0	1416	0
4/4	144	0	0	1385	0
O.L.	216	0	0	1326	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
2.13	1529	1384	261	258
1.92	1570	1699	256	250
1.71	1637	1750	246	239
1.49	1751	1828	230	225
1.28	1931	1950	208	205

REMARKS: TYPICAL DATA

	DR. BY E. H. GILLOT	<b>D-C MOTOR PERFORMANCE DATA</b> DK0087A ISSUE DATE 05-14-09
	CK. BY B. GRANT APP. BY R. BRANCHER DATE 05-14-09	