

**BALDOR • RELIANCE**

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# Customer information packet

## D50150RE-BV

150HP, 1750RPM, DC, 2815ATZ, DPG-FV,

**Specifications**

<b>Enclosure</b>	DP
<b>Frame</b>	C2815ATZ
<b>Frame Material</b>	Exposed Laminations
<b>Output Power</b>	150.000 HP
<b>Agency Approvals</b>	CCSA US
<b>Ambient Temperature</b>	40 °C
<b>Bearing Grease Type</b>	Polyrex EM (-20F +300F)
<b>Drip Cover</b>	No Drip Cover
<b>Feedback Device</b>	NO FEEDBACK
<b>Field Winding Type</b>	STR. SHUNT
<b>Frame Prefix</b>	C
<b>Heater Indicator</b>	No Heater
<b>Lifting Lugs</b>	Standard Lifting Lugs
<b>Motor Standards</b>	NEMA
<b>Mounting Arrangement</b>	F2
<b>Overall Length</b>	47.00 IN
<b>Shaft Extension Location</b>	Pulley End
<b>Shaft Ground Indicator</b>	No Shaft Grounding
<b>Shaft Slinger Indicator</b>	No Slinger

**Part detail**

<b>Revision</b>	-
<b>Type</b>	DC
<b>Mech. spec.</b>	
<b>Base</b>	
<b>Status</b>	PRD/A
<b>Elec. spec.</b>	G9776A A
<b>Layout</b>	616022-001
<b>Eff. date</b>	04-13-2015
<b>CD Diagram</b>	406770-006
<b>Poles</b>	00
<b>Leads</b>	
<b>Proprietary</b>	False
<b>Created date</b>	04-09-2015

**Nameplate**

**000613006HP**

<b>CAT.NO.</b>	D50150RE-BV	<b>SPEC NO.</b>	T28T1352		
<b>FR</b>	C 2815ATZ	<b>HP</b>	150	<b>DUTY</b>	CONT
<b>ENCL.</b>	DP	<b>RPM</b>	1750/ 2000	<b>S.F.</b>	1.00
<b>ENCL MOD</b>	FORCE VENT	<b>VOLTS</b>	500	<b>INSUL</b>	F
<b>MAX SAFE SPEED</b>	3400	<b>AMPS</b>	250.00	<b>AMB.</b>	40
	<b>FIELD DATA</b>	<b>SER.NO.</b>			
<b>WINDING</b>	STR. SHUNT	<b>POWER CODE</b>	C		
<b>VOLTS</b>	300	<b>D.E. BRG.</b>	75BC02J30X		
<b>MAX AMPS @ 25 C</b>	10.64	<b>O.D.E. BRG.</b>	55BC02J30X		
<b>HOT AMPS</b>	7.18/ 6.25	<b>MIN. AMB.</b>	0	<b>TYPE</b>	TR
	BRUSH:419904051AF				

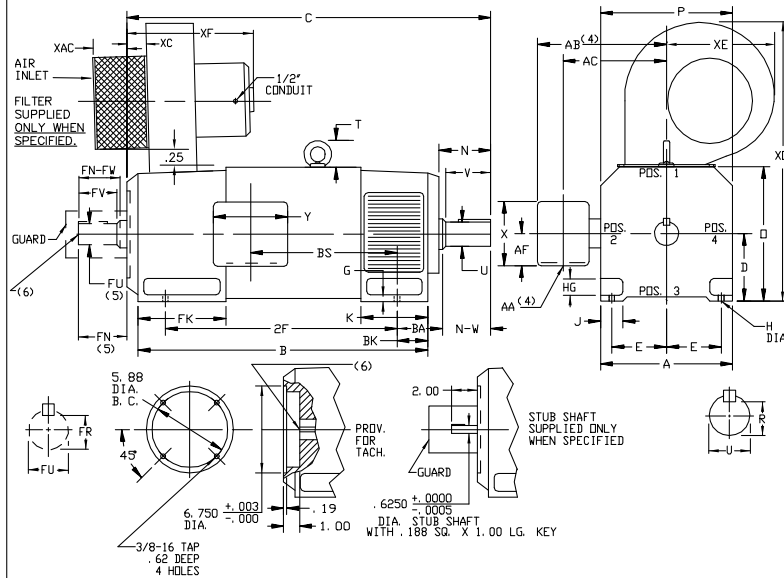
616022-001

## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED,  
SPLASHPROOF  
MOUNTING: FOOT

COOLING: FORCE VENTILATED  
WITH INTEGRAL  
BLOWER AND MOTOR

ACCESSORIES: PROVISION FOR  
TACHOMETER MOUNTING  
FRAMES MC2812ATZ THRU UC2815ATZ  
ONLY WHEN SPECIFIED



DIMENSIONS ARE IN INCHES

FRAME	XAC	XC	XE	XF	XO
MC2812ATZ-UC2815ATZ	6.38	4.00	9.25	19.00	26.25

FRAME	METHOD OR DRIVE	DRIVE END SHAFT AND KEY													OPPOSITE DRIVE END SHAFT AND KEY(S)					WT. LBS.
		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.	
MC2812ATZ	COUPLED	37.38	29.94	14.25	22.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	810
UMC2812ATZ	BELTED	37.88	29.94	14.25	22.00	5.50	5.25	2.625	5.00	2.275	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	815
LC2812ATZ	COUPLED	39.62	32.19	16.50	22.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	885
ULC2812ATZ	BELTED	40.12	32.19	16.50	22.00	5.50	5.25	2.625	5.00	2.275	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	890
C2813ATZ	COUPLED	41.25	33.81	18.12	25.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	940
UC2813ATZ	BELTED	41.75	33.81	18.12	25.00	5.50	5.25	2.625	5.00	2.275	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	945
C2815ATZ	COUPLED	46.75	39.31	23.62	32.00	5.00	4.75	2.375	4.50	2.021	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	1125
UC2815ATZ	BELTED	47.25	39.31	23.62	32.00	5.50	5.25	2.625	5.00	2.275	.625	3.50	4.50	4.25	2.125	4.00	1.845	.500	3.00	1130

- (1) "B" 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 - .015
- (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 COPPER DRIVE END, ADD .25 TO ".0" 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.

616022-001

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\00016\005	REVISED: 01:13:50 01/28/2011	BY: CONNAS
MTL: -		

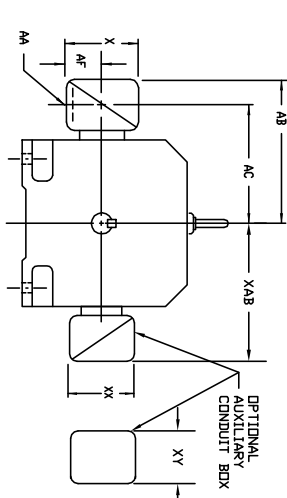
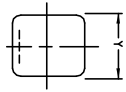
**BALDOR**

DIMENSION DRAWING, MC2812ATZ - UC2815ATZ, DPP, FOOT MTG

SH 1 of 1

609959-001

INDUSTRIAL DIRECT CURRENT MOTORS  
AND GENERATORS - RPM III  
STANDARD SIZE AND ONE SIZE LARGER  
TERMINAL BOX DIMENSIONS  
FRAMES C2113ATZ THRU C2815ATZ



DIMENSIONS ARE IN INCHES

FRAME SIZE	MAX. AMPS	STANDARD SIZE						STEEL TERMINAL BOX DIMENSIONS						ONE SIZE LARGER						
		AK(1)	AB	AC	AF	X	Y	AK(1)	AB	AC	AF	X	Y	AK(1)	AB	AC	AF	X	Y	
C2113ATZ	40	3/4 & 1"	8.97	7.47	1.94	4.38	5.00	705028-1-R	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	705029-1-R					
C2115ATZ	96	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	705029-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R					
C2115ATZ (C)	208	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	705030-1-R					
C2815ATZ	40	3/4 & 1"	10.03	8.53	1.94	4.38	5.00	705028-1-R	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	705029-1-R					
C2815ATZ (C)	208	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	705029-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R					
C2815ATZ (C)	208	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	705030-1-R					
C2815ATZ	188	2"	14.03	10.53	4.25	8.44	7.25	7487-4-R	3"	14.47	11.22	4.25	8.44	7.25	7487-4-R					
C2815ATZ	188	3"	14.47	11.22	4.25	8.44	7.25	7487-4-R	3"	15.91	11.84	5.38	9.00	7.00	706308-3-R					
C2815ATZ	259	4"	15.91	11.84	5.38	9.00	7.00	706308-3-R	5" (4)	18.59	13.34	7.00	12.75	15.00	706589-1-C					

FRAME SIZE	MAX. AMPS	STANDARD SIZE						CAST IRON TERMINAL BOX DIMENSIONS						ONE SIZE LARGER						
		AK(3)	AB	AC	AF	X	Y	AK(3)	AB	AC	AF	X	Y	AK(3)	AB	AC	AF	X	Y	
C2113ATZ	18	3/4	10.03	8.03	2.50	5.00	5.75	705028-2-S	1"	10.03	8.03	2.50	5.00	5.75	705028-2-T					
C2113ATZ	40	1"	10.03	8.03	2.50	5.00	5.75	705028-2-T	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-S					
C2115ATZ	96	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-S	2"	10.97	8.53	3.00	6.00	7.00	705029-2-S					
C2115ATZ	208	2"	10.97	8.53	3.00	6.00	7.00	705029-2-S	2-1/2	12.66	8.91	3.62	7.88	9.25	705030-2-R					
C2815ATZ	18	3/4	11.09	9.09	2.50	5.00	5.75	705028-2-S	1"	11.09	9.09	2.50	5.00	5.75	705028-2-T					
C2815ATZ	40	1"	11.09	9.09	2.50	5.00	5.75	705028-2-T	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R					
C2815ATZ	96	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S					
C2815ATZ	208	2"	12.78	10.34	3.00	6.00	7.00	75460-T	2-1/2	13.72	9.97	3.62	7.88	9.25	705030-2-S					
C2815ATZ	188	3"	14.47	10.72	3.62	7.88	9.25	76700-4R	4"	14.47	10.72	3.62	7.88	9.25	76700-4R					
C2815ATZ	188	3"	14.47	10.72	3.62	7.88	9.25	76700-4R	4"	15.78	11.59	4.12	9.50	10.50	76708-RR					
C2815ATZ	259	4"	15.78	11.59	4.12	9.50	10.50	76708-RR	5" (4)	18.59	13.34	7.00	12.75	15.00	76870-S					

FRAME SIZE	AMPS	STANDARD SIZE						OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (IEC TYPE BOX)					
		AB	AC	AF	X	AA	Y	PART NUMBER	AB	AC	AF	X	Y
C210	100	10.71	8.98	2.72	7.48	---	7.48	706310-25-A	10.88	8.00	8.00	7.00	706310-3-B
	200	11.66	9.25	3.35	8.82	---	8.82	706310-56-B	11.88	8.00	8.00	7.00	706310-3-B
	100	11.30	9.57	2.72	7.48	---	7.48	706310-56-A	11.88	8.00	8.00	7.00	706310-3-B
	200	11.85	9.84	3.35	8.82	---	8.82	706310-56-B	12.62	8.00	8.00	7.00	706310-3-B
C250	400	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-63C	17.48	12.75	6.20	14.39	706310-63-B & 706310-63C
	800	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-63C	17.48	12.75	6.20	14.39	706310-63-B & 706310-63C
	200	12.60	10.59	3.76	8.82	---	8.82	706310-56-B	12.60	10.59	3.76	8.82	706310-56-B
	400	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-63C	18.27	13.54	6.20	14.39	706310-63-B & 706310-63C
C280	800	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-63C	18.27	13.54	6.20	14.39	706310-63-B & 706310-63C
	1600	18.27	13.54	7.68	15.35	---	15.35	706310-63-C	18.27	13.54	7.68	15.35	706310-63-C

FRAME SIZE	YAB	XY	PART NUMBER		YAB	XY	XY	PART NUMBER
			762007-26-A	C250				
C210	7.38	4.25	762007-26-A	C210	10.88	8.00	706310-3-B	
C250	8.44	4.25	762007-26-A	C250	11.88	8.00	706310-3-B	
C280	9.12	4.25	762007-26-A	C280	12.62	8.00	706310-3-B	

- (1) 44" CONDUIT
- (2) 44" CONDUIT
- (3) 44" PIPE
- (4) TERMINAL BOX 76870-S AND 76870-9R EXTENDS BELOW MOTOR FEET

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

REV. DESC: ADD 706310-63G C/BOX TO C250 AND C280 FRAMES	VERSION: 01	TDR: 00000816512
REV. LTR: A		
FILE: \RGG\00021\153		REVISED: 03: 09: 09 09/06/2013
MTL: -		BY: RGGWT



DIMENSION SHEET  
SH 1 of 1

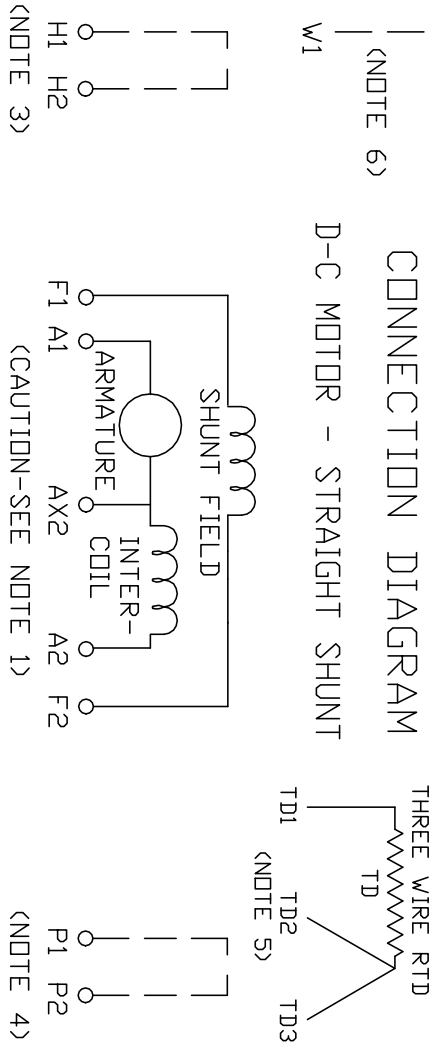
609959-001

406770-006

406770-006

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 \_\_\_\_\_ ORDER NO. \_\_\_\_\_

RELIANCE \_\_\_\_\_ S.D. NO. \_\_\_\_\_

REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS		
REV. LTR: -	VERSION: 00	TDR: 000000781086
FILE: \RSN\00026\515	REVISED: 02: 41: 08 02/01/2013	
MTL: -	BY: MGHPC	

**BALDOR**

D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT

SH 1 of 1