

**BALDOR • RELIANCE**

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# Customer information packet

## D51125RR-BV

125HP, 1150RPM, DC, 3214ATZ, DPG-FV,

**Specifications**

<b>Enclosure</b>	DP
<b>Frame</b>	UC3214ATZ
<b>Frame Material</b>	Exposed Laminations
<b>Output Power</b>	125.000 HP
<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>	UC
<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>	G8386A B
<b>Layout</b>	616032-001
<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**

000613006GA					
<b>CAT.NO.</b>	D51125RR-BV	<b>SPEC NO.</b>	T32T1327		
<b>FRAME</b>	UC 3214ATZ	<b>HP</b>	125	<b>DUTY</b>	CONT
<b>ENCL.</b>	DP	<b>RPM</b>	1150/2000	<b>S.F.</b>	1.0
<b>ENCL MOD</b>	FORCE VENT	<b>ARM-VOLTS</b>	500	<b>INSUL</b>	F
<b>MAX SAFE SPEED</b>	3600	<b>AMPS</b>	204.00	<b>AMB.</b>	40
	<b>FIELD-DATA</b>	<b>SER.NO.</b>			
<b>WINDING</b>	STR. SHUNT	<b>POWER-CODE</b>	C		
<b>FLD-VOLTS</b>	300	<b>DRIVE END BEARING</b>	85RU02M30X		
<b>MAX AMPS @ 25 C</b>	8.37	<b>OPP D.E. BEARING</b>	65BC02J30X		
<b>HOT-AMPS</b>	5.96/2.80	<b>MIN. AMB.</b>	0	<b>TYPE</b>	TR
	BRUSH:419904052Z				

616032-001

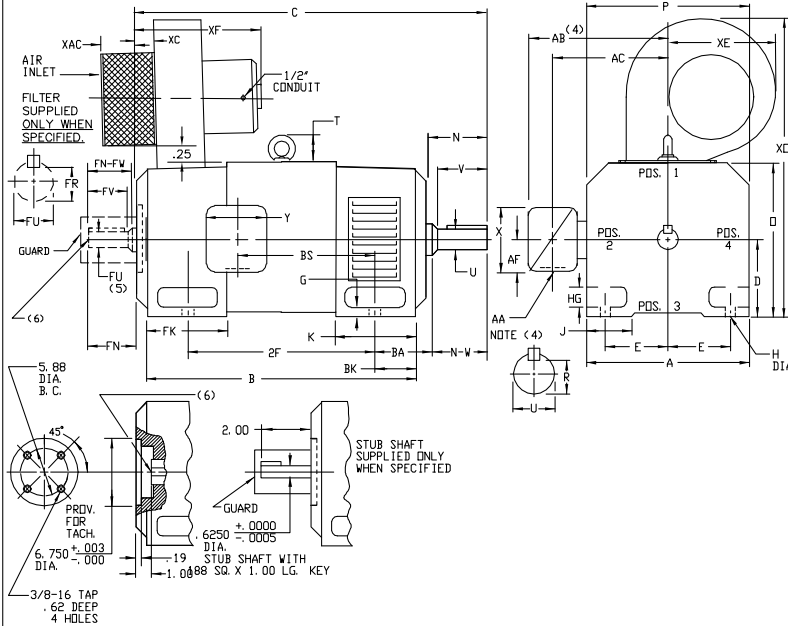
## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

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

COOLING: FORCE VENTILATED  
WITH INTEGRAL  
BLOWER AND MOTOR

ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

FRAMES SC3210ATZ THRU ULC3214ATZ



DIMENSIONS ARE IN INCHES

FRAME	XAC	XC	XE	XF	XO
SC3210ATZ-ULC3214ATZ	6.75	3.25	8.50	19.25	28.00

FRAME	A	B(1)	E	G	H	HG	J	O	P	T	BA	K	FK	LG(8)	BK
SC3210ATZ-ULC3214ATZ	15.50	8.00	6.25	.75	.69	2.25	3.00	15.81	15.62	3.54	5.25	6.75	7.94	10.44	4.00

FRAME	METHOD OF DRIVE	C(7)		B	BS	DRIVE END SHAFT AND KEY						OPPOSITE DRIVE END SHAFT AND KEY				WT. LBS.						
		STD.	LG.(8)			N	N-W	U(2)	V	R(3)	ISO.	LG.H.	FN	FN-FW	FU(2)		FV	FR(3)	SO.	LG.H.		
SC3210ATZ-ULC3210ATZ	COUPLED	36.25	38.75	28.31	30.81	13.38	20.00	5.50	5.25	2.625	5.00	2.275	6.25	4.00	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1115
ULC3210ATZ-ULC3210ATZ	BELTED	36.75	39.25	28.31	30.81	13.38	20.00	6.00	5.75	2.875	5.50	2.450	7.50	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1120
MC3212ATZ-UMC3212ATZ	COUPLED	39.25	41.75	31.31	33.81	16.38	25.00	5.50	5.25	2.625	5.00	2.275	6.25	4.00	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1210
ULC3212ATZ-ULC3212ATZ	COUPLED	41.25	43.75	33.31	35.81	18.38	25.00	5.50	5.25	2.625	5.00	2.275	6.25	4.00	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1290
ULC3212ATZ-ULC3212ATZ	BELTED	39.75	42.25	31.31	33.81	16.38	25.00	6.00	5.75	2.875	5.50	2.450	7.50	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1215
ULC3212ATZ-ULC3212ATZ	COUPLED	41.75	44.25	33.31	35.81	18.38	25.00	6.00	5.75	2.875	5.50	2.450	7.50	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1295
CS3214ATZ-ULC3214ATZ	COUPLED	46.25	48.75	38.31	40.81	23.38	32.00	5.50	5.25	2.625	5.00	2.275	6.25	4.00	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1470
ULC3214ATZ-ULC3214ATZ	BELTED	46.75	49.25	38.31	40.81	23.38	32.00	6.00	5.75	2.875	5.50	2.450	7.50	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1475

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 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. 609979-1, "X/P" 609979-2, MILL 609979-3)
  - (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 DPP DRIVE END, ADD .25 TO "C" DIM FOR BRACKET COVER.
  - (8) DIMENSION FOR FRAMES WITH PREFIX LSC, LMC, LLC, LC, ULSC, ULMC, ULLC OR ULC.
  - (9) "XE" DIMENSION IS NOT APPLICABLE TO "C3214ATZ" FRAMES (BLOWER MOTOR IS CENTERED ON SHAFT C/L).
- 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. DR 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: 000000578087
REV. LTR: -	FILE: \RGG\00016\040	BY: CONNAS
MTL: -	REVISED: 03: 36: 51 01/28/2011	

**BALDOR**

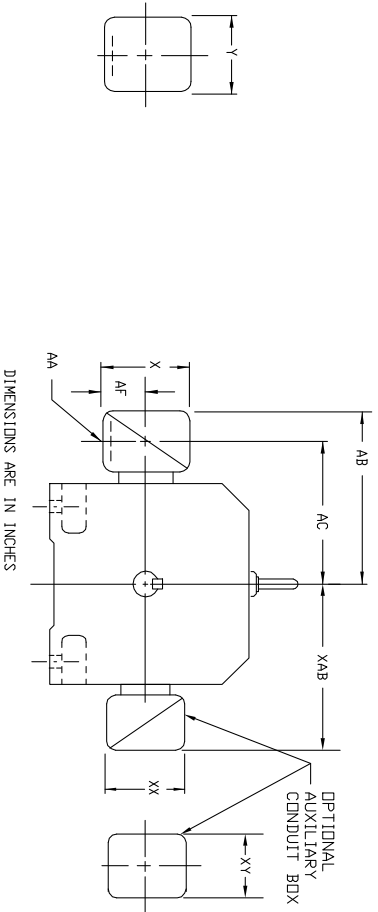
DIMENSION DRAWING, SC3210ATZ - ULC3214ATZ, DPP, FOOT MTG

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616032-001

# INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

STEEL AND CAST IRON TERMINAL BOX DIMENSIONS  
STANDARD SIZE AND ONE SIZE LARGER  
FRAMES C3210ATZ THRU C3613ATZ



STEEL TERMINAL BOX DIMENSIONS

FRAME SIZE	MAX AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(1)	AB	AC	AF	X	Y		AA(1)	AB	AC	AF	X	Y	
C3210ATZ	185	3	15.31	12.06	4.25	8.44	7.25	74874-R	3	15.31	12.06	4.25	8.44	7.25	74874-24-R
C3212ATZ	269	4	16.75	12.69	5.38	10.56	9.00	700308-3-R	4	16.75	12.69	5.38	10.56	9.00	700308-3-R
C3214ATZ	500	5	21.00	15.88	6.50	12.10	14.62	702658-1-C	5	21.00	15.88	6.50	12.10	14.62	702658-1-C
C3612ATZ	185	3	16.31	13.06	4.25	8.44	7.25	74874-R	3	16.31	13.06	4.25	8.44	7.25	74874-24-R
C3613ATZ	269	4	17.75	13.69	5.38	10.56	9.00	700308-3-R	4	17.75	13.69	5.38	10.56	9.00	700308-3-R
C3613ATZ	500	5	22.00	15.88	6.50	12.10	14.62	702658-1-C	5	22.00	15.88	6.50	12.10	14.62	702658-1-C

CAST IRON TERMINAL BOX DIMENSIONS

FRAME SIZE	MAX AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(2)	AB	AC	AF	X	Y		AA(2)	AB	AC	AF	X	Y	
C3210ATZ	185	3	15.31	11.19	3.00	6.00	7.00	75460-R	3	15.31	11.19	3.00	6.00	7.00	76700-RB
C3212ATZ	269	4	16.62	12.44	4.12	7.88	9.25	76700-RB	4	16.62	12.44	4.12	7.88	9.25	76700-RB
C3214ATZ	500	5	19.44	14.19	7.00	12.75	15.00	76870-S	5	19.44	14.19	7.00	12.75	15.00	76870-S
C3612ATZ	185	3	16.31	12.56	3.62	7.88	9.25	75460-R	3	16.31	12.56	3.62	7.88	9.25	76700-RB
C3613ATZ	269	4	17.62	13.44	4.12	9.50	10.50	76700-RB	4	17.62	13.44	4.12	9.50	10.50	76700-RB
C3613ATZ	500	5	20.44	15.19	7.00	12.75	15.00	76870-S	5	20.44	15.19	7.00	12.75	15.00	76870-S

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

FRAME SIZE	MAX AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(3)	AB	AC	AF	X	Y		AA(3)	AB	AC	AF	X	Y	
C320	400	19.02	15.28	6.20	14.39	14.39	706310-63-B	19.02	15.28	6.20	14.39	14.39	706310-63-B		
C320	800	19.02	15.28	6.20	14.39	14.39	706310-63-B	19.02	15.28	6.20	14.39	14.39	706310-63-B		
C360	400	20.00	15.28	6.20	14.39	14.39	706310-63-C	20.00	15.28	6.20	14.39	14.39	706310-63-C		
C360	800	20.00	15.28	6.20	14.39	14.39	706310-63-C	20.00	15.28	6.20	14.39	14.39	706310-63-C		
C360	1600	20.00	15.28	7.68	15.35	15.35	706310-63-C	20.00	15.28	7.68	15.35	15.35	706310-63-C		

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)

FRAME SIZE	MAX AMPS	STANDARD SIZE						PART NUMBER	ONE SIZE LARGER						PART NUMBER
		AA(3)	AB	AC	AF	X	Y		AA(3)	AB	AC	AF	X	Y	
C320	10.00	4.25	4.25	6.02	20.07	26-A	C320	13.50	8.00	8.00	8.00	8.00	706310-3-B		
C360	11.00	4.25	4.25	6.02	20.07	26-A	C360	14.50	8.00	8.00	8.00	8.00	706310-3-B		

- (1) \*AA\* CONDUIT.
- (2) \*AA\* PIPE TAP.
- (3) \*CUSTOMER TO PROVIDE HOLE FOR CONDUIT TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.
- FOR \*X/P\* TERMINAL BOX DIMENSIONS SEE 609979-2.
- FOR MILL TYPE TERMINAL BOX DIMENSIONS SEE 609979-3.

100-626609

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

REV. DESC: LOAD TO BUS	VERSION: 00	TDR: 000000958110
REV. LTR: -	REVISED: 08: 37: 45 12/17/2015	BY: RCGWT
FILE: \RGG\00026\318		
MTL: -		



DIM SHT,C3210ATZ THRU C3613ATZ,W/AUX C/BOX

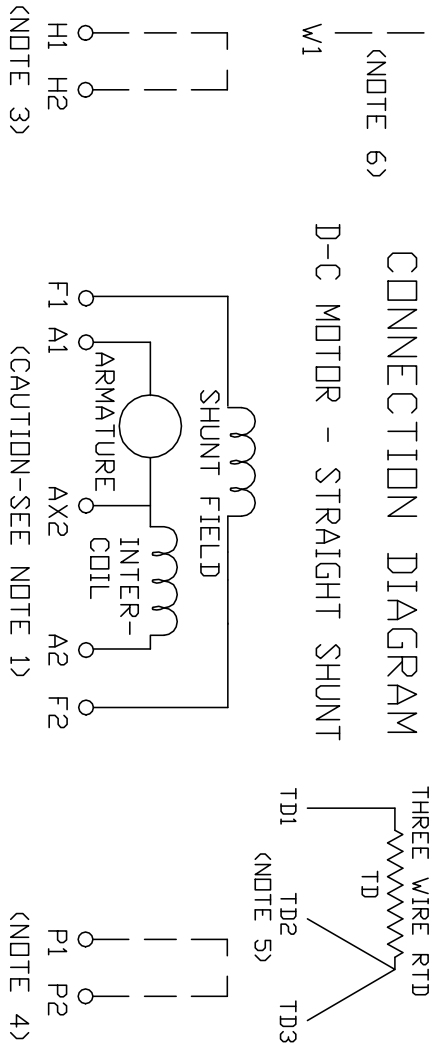
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**CONNECTION DIAGRAM**

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