



Customer information packet

D5150R-BV

50HP, 1150RPM, DC, 2514ATZ, DPG-FV,

Specifications

Enclosure	DP
Frame	C2514ATZ
Frame Material	Exposed Laminations
Output Power	50.000 HP
Agency Approvals	CCSA US
Ambient Temperature	40 °C
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Feedback Device	NO FEEDBACK
Field Winding Type	STR. SHUNT
Frame Prefix	C
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F2
Overall Length	38.44 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

Part detail

Revision	C
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G8382A B
Layout	616012-001
Eff. date	10-21-2015
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	04-22-2015

Nameplate

000613006HP

CAT.NO.	D5150R-BV	SPEC NO.	T25T1359		
FR	C2514ATZ	HP	50	DUTY	CONT
ENCL.	DP	RPM	1150/1935	S.F.	1.0
ENCL MOD	FORCE VENT	VOLTS	500	INSUL	F
MAX SAFE SPEED		AMPS	87.00	AMB.	40
	FIELD DATA	SER.NO.			
WINDING	STR. SHUNT	POWER CODE	C		
VOLTS	300	D.E. BRG.	65BC03J30X		
MAX AMPS @ 25 C	4.06	O.D.E. BRG.	50BC02J30X		
HOT AMPS	3.11/1.55	MIN. AMB.	0	TYPE	TR
	BRUSH:419904051AC				

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED.

SPLASHPROOF

MOUNTING:FOOT

METHOD OF DRIVE:COUPLED OR BELTED

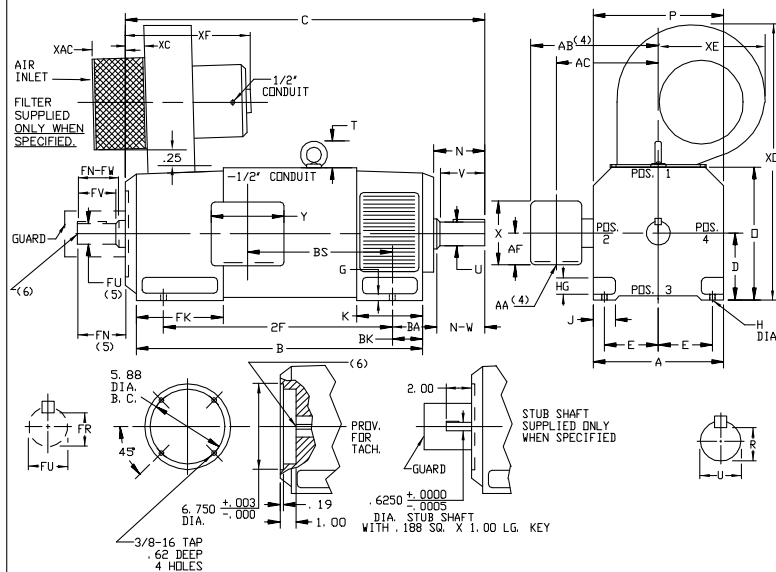
COOLING: FORCE VENTILATED

WITH INTEGRAL
FLIGHT LINE MOTOR

BLOWER AND MOTOR

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES SC2512ATZ THRU UC2515ATZ



DIMENSIONS ARE IN INCHES

													FRAME		XAC	XC	XE	XF	XO							
													SC2512ATZ-UC251SATZ		7.25	3.00	9.50	16.75	24.75							
FRAME													A	D(1)	E	G	H	IG	J	O	P	T	BA	K	FK	BK
SC2512ATZ-UC251SATZ													12.31	6.25	5.00	5.00	.56	1.62	2.00	12.50	12.44	2.44	2.5	6.06	8.00	3.00
FRAME	METHOD OF DRIVE	DRIVE END SHAFT AND KEY										OPPOSITE DRIVE END SHAFT AND KEY										WT. LBS.				
		C(7)	B	BS	2F	N	N-W	U	U2	R	R-CO	S	LGTH	FN	FN-W	FUK(2)	FV	FR(3)	SD	S	LGTH					
SC2512ATZ	COUPLED	31.69	25.06	12.06	20.00	4.50	4.25	1.25	4.20	1.845	5.00	3.00	3.00	4.00	3.75	1.675	3.50	1.991	5.00	2.90	5.35					
UC2512ATZ	COUPLED	33.19	26.56	13.56	20.00	4.50	4.25	1.25	4.00	1.845	5.00	3.00	4.00	4.00	3.75	1.675	3.50	1.991	5.00	2.90	5.70					
UC2512ATZ	COUPLED	34.44	26.06	15.06	20.00	4.50	4.25	1.25	4.00	1.845	5.00	3.00	4.00	4.00	3.75	1.675	3.50	1.991	5.00	2.90	6.10					
CG514ATZ	COUPLED	38.44	34.31	18.31	25.00	5.00	4.75	2.375	4.50	2.021	6.625	3.50	4.00	4.00	3.75	1.675	3.50	1.991	5.00	2.90	6.995					
CG515ATZ	COUPLED	38.44	35.31	22.31	28.00	5.00	4.75	2.375	4.50	2.021	6.625	3.50	4.00	4.00	3.75	1.675	3.50	1.991	5.00	2.90	8.005					
UC2514ATZ	BELTED	38.44	34.31	18.31	25.00	5.00	4.75	2.375	4.50	2.021	6.625	3.50	4.00	4.00	3.75	1.675	3.50	1.991	5.00	2.90	6.995					
UC2515ATZ	BELTED	38.44	35.31	22.31	28.00	5.00	4.75	2.375	4.50	2.021	6.625	3.50	4.00	4.00	3.75	1.675	3.50	1.991	5.00	2.90	8.005					

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR DRIVEN MACHINES.
- (2) "L" AND "C" MAY VARY +.000 TO -.005
- (3) "E" AND "F" MAY VARY -1.000 TO -.015
- (4) "A" AND "B" MAY VARY -1.000 TO -.015
- (5) REFER TO BOX D/S. (DST. 609959-1) AND "A" DIMENSIONS "A", "AB", "AC", "AF", "X" AND "Y".
- (6) REFER TO BOX D/S. (DST. 609959-1) AND "B" DIMENSIONS "B" AND 609959-3
- (7) OPPOSITE DRIVE AND SHAFT SUPPLIED UNLESS WHEN SPECIFIED.
- (8) MOTOR SHAFT TAPPED FOR SCREW IN TOP OF SHAFT.
- (9) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF A DRIVE END AND 25 TO 30 INCHES OF LEAD INLET AT TOP, THE TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP. SIDES OR BOTTOM OF TERMINAL BOX LOCATED ON BOTTOM OF MOTOR. (SEE FIGURE 1-7, D/C 1 MOUNTING IS SPECIFIED. BOX LOCATED AT TOP WHEN BOTTOM OF TERMINAL BOX CAN BE LOCATED AT TOP.)
- (10) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF A BLOWER ASSEMBLY, THE TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION. MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
- (11) MOUNTING CLEARANCE DETAILS ARE SHOWN IN FIGURE 1-7.

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\979	REVISED: 11:06:09 01/28/2011	BY: CONNAS
MTL: -		

BALDOR

DIMENSION DRAWING.SC2512ATZ - UC2515ATZ.DPP.FOOT MTG

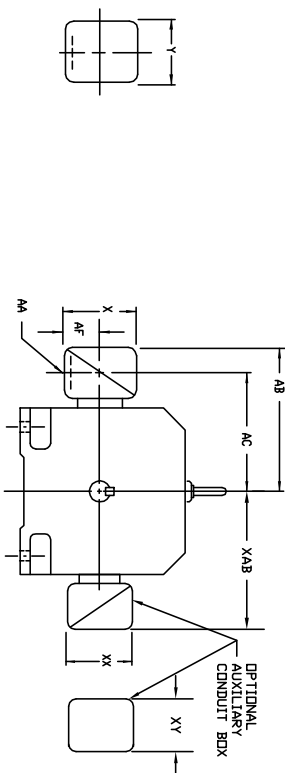
SH 1 of 1

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III

TERMINAL BOX DIMENSIONS

STANDARD SIZE AND ONE SIZE LARGER
FRAMES C2113A17 THRU C2815A17

DIMENSIONS ARE IN INCHES



FRAME SIZE	MAX. AMS	AK(1)	STANDARD SIZE						STEEL TERMINAL BOX DIMENSIONS						ONE SIZE LARGER						PART NUMBER					
			AB	AC	AF	X	Y	NUMBER	AK(1)	AB	AC	AF	X	Y	NUMBER	AK(1)	AB	AC	AF	X	Y	NUMBER				
C21.3A1Z	9/4	3/4 & 1"	8.97	7.47	1.94	4.38	5.00	705028-1-R	1-1/4	& -1/2	11.03	8.43	5.50	5.50	6.12	705030-1-R	1-1/4	& -1/2	11.03	8.43	5.50	5.50	6.12	705030-1-R		
C21.3A1Z	9/4	1-1/4 & -1/2	10.03	8.03	2.52	5.50	6.12	705029-1-R	2"	& -2-1/2	11.06	6.31	3.19	7.00	7.62	705030-1-R	2"	& -2-1/2	11.06	6.31	3.19	7.00	7.62	705030-1-R		
C21.3A1Z (2)	208	2" & 2-1"	11.16	8.43	3.19	7.00	7.62	705030-1-R	2"	& -2-1/2	11.16	6.48	3.19	7.00	7.62	705030-1-R	2"	& -2-1/2	11.16	6.48	3.19	7.00	7.62	705030-1-R		
C23.1A1Z	40	3/4 & 1"	10.03	8.53	1.94	4.38	5.00	705028-1-R	1-1/4	& -1/2	11.09	9.09	5.50	5.50	6.12	705030-1-R	1-1/4	& -1/2	11.09	9.09	5.50	5.50	6.12	705030-1-R		
C23.1A1Z (2)	96	1-1/4 & -1/2	11.09	9.09	2.19	5.00	6.12	705029-1-R	2"	& -2-1/2	12.82	9.47	3.19	7.00	7.62	705030-1-R	2"	& -2-1/2	12.82	9.47	3.19	7.00	7.62	705030-1-R		
C23.1A1Z (2)	208	2" & 2-1/2	12.82	10.53	3.19	7.00	7.62	705030-1-R	2"	& 2-1/2	14.47	11.22	4.23	8.44	7.62	705030-1-R	2"	& 2-1/2	14.47	11.22	4.23	8.44	7.62	705030-1-R		
C28.1A1Z	185	3"	14.47	11.82	4.23	8.44	7.62	704874-2-R	3"		15.91	11.84	5.38	10.56	9.47	704874-2-R	3"		15.91	11.84	5.38	10.56	9.47	704874-2-R		
C28.1A1Z	269	4"	15.91	11.82	5.38	10.56	9.47	704876-3-R	5"	(4)	18.72	13.47	7.00	12.75	11.50	704876-3-R	5"	(4)	18.72	13.47	7.00	12.75	11.50	704876-3-R		

CAST IRON TERMINAL BOX DIMENSIONS															
FRAME SIZE	STANDARD SIZE					PART	DME SIZE LARGER					PART			
	AK33	AB	AC	AF	X		Y	NUMBER	AK33	AB	AC		AF	X	Y
C213A1Z 18	3/4	10.03	8.03	8.50	5.00	5.75	705028-2-S	1*	10.03	8.03	8.50	5.00	5.75	705028-2-T	
C213A1Z 40	1*	10.03	8.03	8.50	5.00	5.75	705028-2-T	1*-1/2	10.97	8.53	9.00	6.00	7.00	705029-2-S	
C213A1Z 96	1-1/2	10.97	8.53	9.00	6.00	7.00	705029-2-R	2*	10.97	8.53	9.00	6.00	7.00	705029-2-S	
C213A1Z 208	2*	10.97	8.53	9.00	6.00	7.00	705029-2-S	2*-1/2	12.66	9.81	9.32	6.86	9.25	705030-2-R	
C253A1Z 18	3/4	11.09	9.09	9.50	5.00	5.75	705028-2-S	1*	11.09	9.09	9.50	5.00	5.75	705028-2-T	
C253A1Z 40	1*	11.09	9.09	9.50	5.00	5.75	705028-2-S	1*-1/2	12.03	9.59	9.00	6.00	7.00	705029-2-S	
C253A1Z 96	1-1/2	12.03	9.59	9.00	6.00	7.00	705029-2-R	2*	12.03	9.59	9.00	6.00	7.00	705029-2-S	
C253A1Z 208	2*	12.03	9.59	9.00	6.00	7.00	705029-2-S	2*-1/2	13.72	9.97	9.32	7.88	9.25	705030-2-R	
C283A1Z 128	2*	12.78	10.34	9.00	6.00	7.00	754501-T	3*	14.47	11.39	9.32	7.88	9.25	767000-R	
C283A1Z 185	3*	14.47	10.72	9.32	7.88	9.25	767000-8R	3*-1/2	15.78	11.59	9.42	8.75	10.50	767008-R	
C283A1Z 269	4*	15.78	11.59	9.42	8.75	10.50	767008-R	5* (4)	18.59	13.94	10.40	12.75	15.00	768700-R	

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)									
STANDARD SIZE									
FRAME SIZE	AMP'S	AB	AC	AF	X	AA	Y	PART NUMBER	PART NUMBER
C210	100	10.71	8.98	2.72	7.48	--	7.48	706310-56-A	706310-225-R
	200	11.26	9.25	3.35	8.82	--	8.82	706310-56-B	706310-226-R
	100	11.30	9.57	2.72	7.48	--	7.48	706310-56-A	706310-225-R
	200	11.85	9.84	3.35	8.82	--	8.82	706310-56-B	706310-226-R
	400	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-63G	706310-63-B & 706310-63G
C250	800	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-63G	706310-63-B & 706310-63G
	200	12.60	10.59	3.76	8.82	--	8.82	706310-56-B	706310-226-R
	400	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-63G	706310-63-B & 706310-63G
	800	18.27	13.54	6.20	14.39	--	14.39	706310-63-B & 706310-63G	706310-63-B & 706310-63G
	1600	18.27	13.54	6.20	14.39	--	15.35	706310-63-C	706310-63-C

POTENTIAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)							
FRAME SIZE	XAD	XY	PART NUMBER	FRAME SIZE	XAD	XY	PART NUMBER
C210	7.38	4.25	602007-26-A	C210	10.88	8.00	706310-3-8
C230	8.44	4.25	602007-26-A	C230	11.88	8.00	706310-3-8
C280	9.12	4.25	602007-26-A	C280	12.62	8.00	706310-3-8

- (1) STEEL CONDUIT.
(2) STEEL TERMINAL BOX FOR C2113A1Z AND C2512A1Z.
(3) FRAMES PROVIDED WITH DOUBLE KNUCKOUT.
(4) 1/2" PIPE TAP.
(5) TERMINAL BOX 76870-5 AND 76870-9R EXTENDS BELOW MOTOR FEET.
(6) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM.
(7) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, F-4, W-5, W-7, DR - C-1, MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.
(8) 1/2" TERMINAL BOX DIMENSIONS SEE 609593-2.
(9) FOR MILL TYPE TERMINAL BOX DIMENSIONS SEE 609593-3.

609959-001

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		
REV. LTR: A	VERSION: 01	TDR: 000000816512
FILE: \RGG\00021\153		REVISED: 03:09:09 09/06/2013
MTL: -		BY: RGGWT

BALDOR

DIMENSION SHEET
SH 1 of 1

406770-006			406770-006	
CONNECTION DIAGRAM D-C MOTOR - STRAIGHT SHUNT W1 <NOTE 6> H1 H2 SHUNT FIELD INTER-COIL ARMATURE F1 A1 AX2 A2 F2 <NOTE 3> <CAUTION-SEE NOTE 1> <NOTE 4> THREE WIRE RTD TD1 TD2 TD3 <NOTE 5> ARMATURE AND FIELD EXTERNAL CONNECTIONS WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS A1 A2 F1 F2 - + - + CCW ROTATION ROTATION FACING COMMUTATOR END A1 A2 F1 F2 - + + - CW ROTATION 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 MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN. CUSTOMER _____ CUSTOMER ORDER NO. _____ RELIANCE S.D. NO. _____				
REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS		BALDOR		
REV. LTR: -	VERSION: 00	TDR: 000000781086	D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT	
FILE: \RSN\00026\515		REVISED: 02: 41:08 02/01/2013	SH 1 of 1	
MTL: -		BY: MGHPC		