

ABB BALDOR RELIANCE III

Customer information packet

D50125UR-BV

125HP, 1750RPM, DC, 2813ATZ, DPG-FV,

Specifications

Enclosure	DP
Frame	UC2813ATZ
Frame Material	Steel
Output Power	125.000 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	UC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F2
Overall Length	41.75 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

Part Detail

Revision	-
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G8290A B
Layout	616022-001
Eff. date	04-13-2015
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006HP									
CAT.NO.	D50125UR-BV	SPEC NO.		T28T1349					
FR	UC 2813ATZ	HP	125		DUTY		CONT		
ENCL.	DP	RPM	1750/ 2000			S.F.	1.0		
ENCL MOD	FORCE VENT	VOLTS		500		INSUL		F	
MAX SAFE SPEED	4000	AMPS		204.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STR. SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		75RU02M30X					
MAX AMPS @ 25 C	6.93	O.D.E. BRG.		55BC02J30X					
HOT AMPS	4.87/ 4.24	MIN. AMB.		0		TYPE		TR	
BRUSH:419904051AF									

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



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

FRAME		A	D(1)	E	G	H	HG	J	D	P	T	B	A	K	FK	BK				
MC2B12AT2-UC2B15AT2		13	78	7.00	5.50	62	.56	1.88	2.75	14.00	13.94	2.80	4.75	6.75	9.19	3.50				
FRAME	METHOD OF DRIVE	C(7)	B	BS	DRIVE END SHAFT AND KEY				OPPOSITE DRIVE END SHAFT AND KEY(S)				L(10)				WT.			
					N-H	U	W	LC(2)	30	30	LGTH.	FN	FN(2)	FN(2)	FN(2)	30	30			
MC2B12AT2	COUPLED	37.38	29.94	14.25	22.00	5.00	4.75	2.375	4.50	2.01	625	3.50	4.50	4.25	1.125	4.00	1.845	.500	3.00	810
UC2B12AT2	BELTED	37.88	29.94	14.25	22.00	5.00	5.25	2.625	5.00	2.275	625	4.00	4.50	4.25	1.125	4.00	1.845	.500	3.00	815
UC2B12AT2	COUPLED	39.62	32.19	16.50	22.00	5.00	4.75	2.375	4.50	2.01	625	3.50	4.50	4.25	1.125	4.00	1.845	.500	3.00	885
ULC2B12AT2	BELTED	40.12	32.19	16.50	22.00	5.00	5.25	2.625	5.00	2.275	625	4.00	4.50	4.25	1.125	4.00	1.845	.500	3.00	890
C2B13AT2	COUPLED	41.25	33.81	18.12	25.00	5.00	4.75	2.375	4.50	2.01	625	3.50	4.50	4.25	1.125	4.00	1.845	.500	3.00	940
UC2B13AT2	BELTED	41.75	33.81	18.12	25.00	5.00	5.25	2.625	5.00	2.275	625	4.00	4.50	4.25	1.125	4.00	1.845	.500	3.00	945
C2B15AT2	COUPLED	46.75	39.31	23.62	32.00	5.00	4.75	2.375	4.50	2.01	625	3.50	4.50	4.25	1.125	4.00	1.845	.500	3.00	1125
UC2B15AT2	BELTED	47.25	39.31	23.62	32.00	5.00	5.25	2.625	5.00	2.275	625	4.00	4.50	4.25	1.125	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) "L" AND "T" VARIES 1.000 - 1.015
- (3) "M" AND "R" VARIES 1.000 - 0.015
- (4) "A", "B", "C", "D", "E", "F", "G", "H", "I", "J", "K", "L", "M", "N", "O", "P", "Q", "R", "S", "T", "U", "V", "W", "X", "Y", "Z" REFER TO BOX D/S. (S/N 609959-1) "X/P" 609959-2 "Y/P" 609959-3
- (5) DIMENSIONS "A" THROUGH "Z" ARE NOT TO BE EXCEEDED UNLESS SPECIFIED
- (6) MOTOR CAN BE TAPPED FOR SCREW IN STUD SHAFT
- (7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF APP. DRIVE END AND GO TO C-1
- (8) TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM
- (9) BOX LOCATED ON TOP OF MOTOR WHEN C-1 IS LOCATED ON TOP OF MOTOR, C-2, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN BOTTOM MOUNTING IS SPECIFIED.
- (10) MOTOR CAN BE LOCATED ON TOP OF BLINDER ASSEMBLY WHEN C-1 IS LOCATED ON TOP OF BLINDER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION.
- (11) MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR APPLICATIONS.
- (12) MOUNTING CLEARANCE DETAILS ARE NOT TO BE EXCEEDED

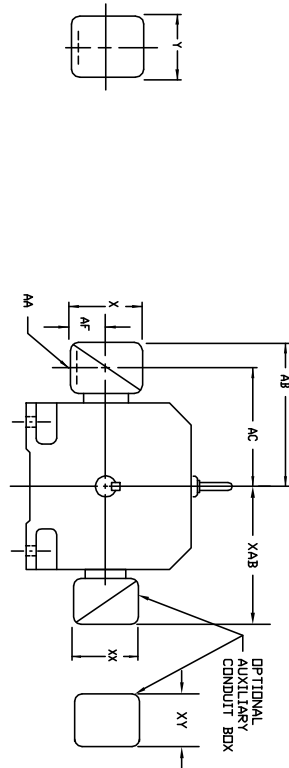
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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: -		

DIMENSION DRAWING,MC2812ATZ – UC2815ATZ,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 C2113A1Z THRU C2815A1Z



DIMENSIONS ARE IN INCHES

[illegible]

CAST IRON TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	STANDARD SIZE					ONE SIZE LARGER								
		AB	AC	AF	X	Y	NUMBER	AB	AC	AF	X	Y	NUMBER		
18	3/4	10.03	8.03	2.50	5.00	5.75	705068-2-5	1"	10.03	8.03	2.50	5.00	5.75	705068-2-1	
23119A7	40	10.03	8.03	2.50	5.00	5.75	705068-2-1	1-1/2	10.97	8.53	3.00	6.00	7.00	705069-2-R	
23119A7	1-1/2	10.97	8.53	3.00	6.00	7.00	705069-2-R	2"	10.97	8.53	3.00	6.00	7.00	705069-2-5	
23119A7	96	10.97	8.53	3.00	6.00	7.00	705069-2-5	2-1/2	12.66	8.51	3.62	7.88	9.25	705069-2-5	
208	2"	10.97	8.53	3.00	6.00	7.00	705069-2-5	1"	11.09	9.09	2.50	5.00	5.75	705068-2-1	
18	3/4	11.09	9.09	2.50	5.00	5.75	705068-2-1	1-1/2	12.03	9.59	3.00	6.00	7.00	705069-2-R	
2512A12	40	11.09	9.09	2.50	5.00	5.75	705068-2-1	2"	12.03	9.59	3.00	6.00	7.00	705069-2-5	
2514A12	96	1-1/2	12.03	9.59	3.00	6.00	7.00	705069-2-5	2-1/2	13.72	9.57	3.62	7.88	9.25	705069-2-5
2514A12	208	2"	12.03	9.59	3.00	6.00	7.00	705069-2-5	3"	14.47	10.72	3.62	7.88	9.25	705069-2-5
2514A12	3"	12.78	10.72	3.62	7.88	9.25	705069-2-5	4"	15.78	11.59	4.12	8.50	10.50	705069-2-5	
2514A12	665	4"	15.78	11.59	4.12	8.50	10.50	705069-2-5	5" (4)	18.59	13.34	5.75	13.50	15.50	705069-2-5

CONDUIT BOX DIMENSIONS WITH TERMINAL BORDERS (IEC TYPE BOX)										
STANDARD SIZE										
FRAME SIZE	AMPS	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	706310-225-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	706310-225-R	
C250	400	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
	800	17.48	12.75	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
	200	12.60	10.99	3.76	8.82	---	8.82	706310-56-B	706310-225-R	
	400	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
C280	800	18.27	13.54	6.20	14.39	---	14.39	706310-63-B & 706310-636	706310-63-B & 706310-636	
	1600	18.27	13.54	7.68	15.35	---	15.35	706310-63-C	706310-63-C	

FRAME SIZE		X-Y		PART NUMBER	
C310	7.98	4.25	4.25	602007-26-A	C310
C350	8.44	4.23	4.23	602007-26-A	C350
C380	9.12	4.23	4.23	602007-26-A	C380

- (1) STEEL CONDUIT.
(2) "AA" TERMINAL BOX FOR CELL13A17 AND C5512A17
(3) FRAMES PROVIDED WITH DOUBLE KNOCKOUT.
(4) "AA" PIPE TAP.
- (4) TERMINAL BOX 76870-05 AND 76870-0R EXTENDS BELOW MOTOR FEET.
TERMINAL BOX CAN BE ROUTED FOR LEAD OUTLET AT TOP, SIZES 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.
FOR "X"PP TERMINAL BOX DIMENSIONS SEE 609393-2
FOR "LL" TYPE TERMINAL BOX DIMENSIONS SEE 609393-3.

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

BALDOIR

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> TD1 TD2 TD3 TD <NOTE 5> THREE WIRE RTD 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 D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT SH 1 of 1			
REV. LTR: -	VERSION: 00				TDR: 000000781086
FILE: \RSN\00026\515	REVISED: 02: 41:08 02/01/2013				
MTL: -	BY: MGHPC				