



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

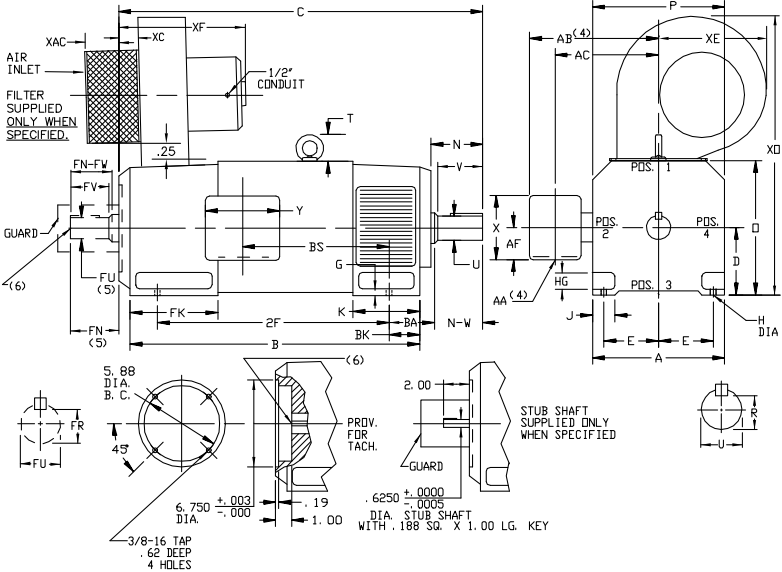
Nameplate

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									

616022-001

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS – RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED, COOLING: FORCE VENTILATED
WITH INTEGRAL
SPLASHPROOF BLOWER AND MOTOR
MOUNTING: FOOT 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																				
		A	DK(1)	E	G	H	HG	J	D	P	T	BA	K	FK	BK							
		MC2812ATZ	UC2815ATZ	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 DRIVE	C(7)	B	BS	2F	DRIVE END SHAFT AND KEY								OPPOSITE DRIVE END SHAFT AND KEYS								LBS.
						N	N-W	UK(2)	V	RK(3)	SQ	LGTH.	FN	FN-FW	FK(2)	FV	FR(3)	SQ	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	4.00	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	4.00	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	4.00	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	4.00	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 - .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. 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 COP DRIVE END, ADD .25 TO "C" 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.

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: -		

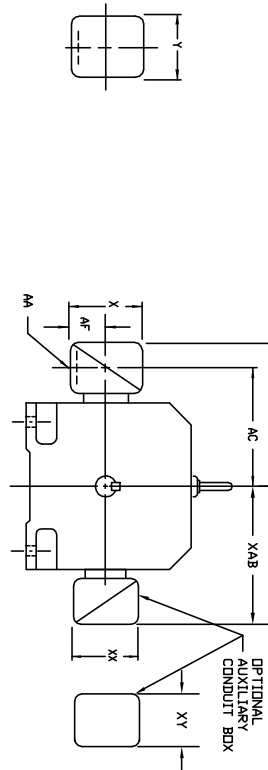
BALDOR
DIMENSION DRAWING, MC2812ATZ - UC2815ATZ, DPP, FOOT MTG
SH 1 of 1

616022-001

609959-001

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III TERMINAL BOX DIMENSIONS STANDARD SIZE AND ONE SIZE LARGER 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	NUMBER	AK(1)	AB	AC	AF	X	Y	NUMBER	AK(1)	AB	AC	AF
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	1-1/4 & 1-1/2	10.03	8.03	2.50
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	2" & 2-1/2	11.16	8.41	3.19
(2)	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	2" & 2-1/2	11.16	8.41	3.19
C2516ATZ	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	1-1/4 & 1-1/2	11.09	9.09	2.50
C2514ATZ	96	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	2" & 2-1/2	12.22	9.47	3.19
(2)	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	2" & 2-1/2	12.22	9.47	3.19
C2816ATZ	155	2"	14.03	10.53	4.23	8.44	7.23	74874-R	3"	14.47	11.22	4.23	8.44	7.23	74874-24-R	3"	14.47	11.22	4.23
C2815ATZ	259	3"	14.47	11.22	4.23	8.44	7.23	74874-24-R	3"	15.91	11.84	5.38	10.56	9.00	706308-3-R	3"	15.91	11.84	5.38
(2)	259	4"	15.91	11.84	5.38	10.56	9.00	706308-3-R	3"	15.91	11.84	5.38	10.56	9.00	706308-3-R	3"	15.91	11.84	5.38

FRAME SIZE	MAX. AMPS	STANDARD SIZE						CAST IRON TERMINAL BOX DIMENSIONS						ONE SIZE LARGER					
		AK(3)	AB	AC	AF	X	Y	NUMBER	AK(3)	AB	AC	AF	X	Y	NUMBER	AK(3)	AB	AC	AF
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	1"	10.03	8.03	2.50
C2115ATZ	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-R	1-1/2	10.97	8.53	3.00
C2115ATZ	96	1-1/2	10.97	8.53	3.00	6.00	7.00	705029-2-R	2"	12.66	8.91	3.62	7.88	9.25	705030-2-R	2"	12.66	8.91	3.62
(2)	208	2"	12.66	8.91	3.62	7.88	9.25	705030-2-R	2-1/2	11.09	9.09	2.50	5.00	5.75	705028-2-S	2-1/2	11.09	9.09	2.50
C2516ATZ	40	3/4	11.09	9.09	2.50	5.00	5.75	705028-2-S	1"	12.03	9.59	3.00	6.00	7.00	705029-2-R	1-1/2	12.03	9.59	3.00
C2514ATZ	96	1-1/2	12.03	9.59	3.00	6.00	7.00	705029-2-R	2"	13.72	9.97	3.62	7.88	9.25	705030-2-R	2"	13.72	9.97	3.62
C2514ATZ	208	2"	12.78	10.34	3.00	6.00	7.00	75460-T	2-1/2	14.47	10.72	3.62	7.88	9.25	705030-2-R	2-1/2	14.47	10.72	3.62
C2813ATZ	155	3"	14.47	10.72	3.62	7.88	9.25	76700-8R	3"	15.78	11.59	4.12	9.50	10.50	76700-8R	3"	15.78	11.59	4.12
C2815ATZ	259	4"	15.78	11.59	4.12	9.50	10.50	76700-8R	3"	18.59	13.34	7.00	12.75	15.00	76870-S	3"	18.59	13.34	7.00

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

FRAME SIZE	AMPS	STANDARD SIZE						ONE SIZE LARGER					
		AB	AC	AF	X	AA	Y	AB	AC	AF	X	Y	AA
C210	100	10.71	8.98	2.72	7.48	---	7.48	10.71	8.98	2.72	7.48	---	7.48
	200	11.66	9.23	3.33	8.82	---	8.82	11.66	9.23	3.33	8.82	---	8.82
	400	11.30	9.57	2.72	7.48	---	7.48	11.30	9.57	2.72	7.48	---	7.48
C250	200	11.85	9.84	3.35	8.82	---	8.82	11.85	9.84	3.35	8.82	---	8.82
	400	17.48	12.75	6.20	14.39	---	14.39	17.48	12.75	6.20	14.39	---	14.39
	800	17.48	12.75	6.20	14.39	---	14.39	17.48	12.75	6.20	14.39	---	14.39
	200	12.60	10.59	3.76	8.82	---	8.82	12.60	10.59	3.76	8.82	---	8.82
	400	18.27	13.54	6.20	14.39	---	14.39	18.27	13.54	6.20	14.39	---	14.39
	800	18.27	13.54	6.20	14.39	---	14.39	18.27	13.54	6.20	14.39	---	14.39
C280	1600	18.27	13.54	7.68	15.35	---	15.35	18.27	13.54	7.68	15.35	---	15.35

FRAME SIZE	XAB	XY	PART NUMBER		FRAME SIZE	XAB	XY	PART NUMBER	
			C210	C250				C210	C250
C210	7.38	4.25	602007-26-A	C250	11.88	8.00	706310-3-B	7.38	4.25
C250	8.44	4.25	602007-26-A	C280	12.62	8.00	706310-3-B	8.44	4.25
C280	9.12	4.25	602007-26-A					9.12	4.25

(1) 1/4" CONDUIT.
(2) RACEWAYS PROVIDED WITH DOUBLE KNUCKLE.
(3) 1/4" PIPE CAP.

(4) TERMINAL BOX 76870-S AND 76870-98 EXTENDS BELOW MOTOR FEET.
TERMINAL BOX 76870-S AND 76870-98 EXTENDS BELOW MOTOR FEET.
DR - C-1 MOUNTING IS SPECIFIED. BOX LOCATED IN TOP WHEN SPECIFIED.
FOR "X"/TERMINAL BOX DIMENSIONS SEE 609959-2.
FOR MILL TYPE TERMINAL BOX DIMENSIONS SEE 609959-3.

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

609959-001

406770-006

CONNECTION DIAGRAM

D-C MOTOR - STRAIGHT SHUNT

W1

<NOTE 6>

H1

H2

<NOTE 3>

F1

A1

AX2

A2

F2

F2

P1

P2

<NOTE 4>

SHUNT FIELD

INTER-COIL

ARMATURE

TD1

TD2

TD3

TD

<NOTE 5>

CCW ROTATION

CW ROTATION

A1

A2

F1

F2

A1

A2

F1

F2

ROTATION FACING COMMUTATOR END

ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS

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

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

406770-006

G8290A B: Electrical Design

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