

ABB BALDOR RELIANCE III

Customer information packet D5525R

25 1750/2300 MC2812ATZ TEFC 500V

Specifications

Enclosure	TEFC
Frame	MC2812ATZ
Frame Material	Exposed Laminations
Output Power	25.000 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	STAB SHUNT
Frame Prefix	MC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	41.62 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.	G6316A A
Layout	609951-013
Eff. date	04-13-2015
CD Diagram	406770-002
Poles	00
Leads	
Proprietary	False
Created date	04-10-2015

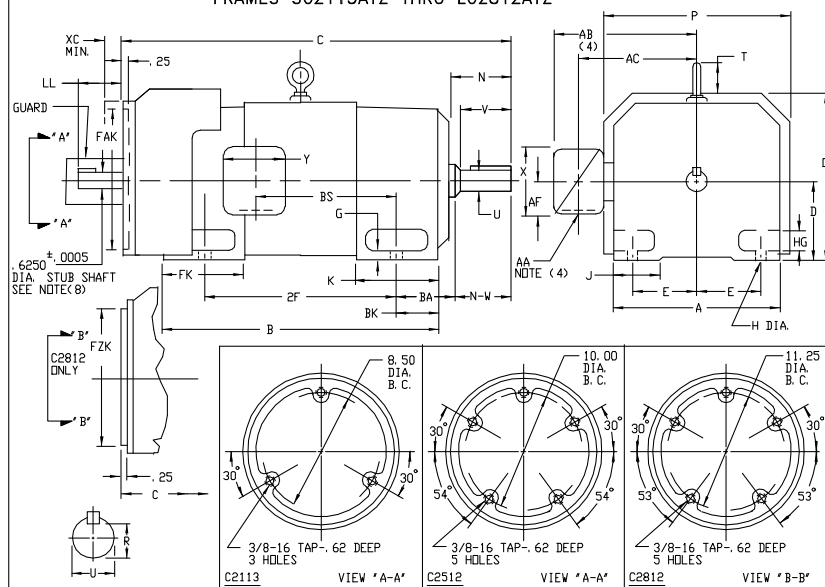
Nameplate

000613006HP									
CAT.NO.		SPEC NO.	T28S0302						
FR	MC 2812ATZ	HP	25	DUTY		CONT			
ENCL.	TEFC	RPM	1750/ 2300		S.F.	1.0			
ENCL MOD		VOLTS	500		INSUL		F		
MAX SAFE SPEED	4500	AMPS	41.00		AMB.	40			
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE	C						
VOLTS	300	D.E. BRG.	65BC03J30X						
MAX AMPS @ 25 C	2.23	O.D.E. BRG.	55BC02J30X						
HOT AMPS	1.50/ 1.10	MIN. AMB.	0		TYPE		TR		
BRUSH:419904051AB; FLD. DATA									
FOR HIGH VOLTS; F.V. 150/300									

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT
METHOD OF DRIVE: COUPLED OR BELTED

COOLING: FAN COOLED
ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAMES SC2113ATZ THRU LC2812ATZ



DIMENSIONS ARE IN INCHES

FRAME	A	B(1)	E	G	H	HG	J	D	P	T	BA	K	FK	BK	FAK(6)	FZK(7)	XC
SC2113ATZ-LC2113ATZ	10.25	5.25	4.25	.44	.44	1.38	1.75	11.62	12.75	1.38	3.50	5.19	6.81	2.38	9.750	N/A	1.25
SC2512ATZ-LC2512ATZ	12.31	6.25	5.00	.50	.56	1.62	2.00	13.62	14.75	1.94	4.25	6.06	8.00	3.30	11.250	N/A	1.25
MC2812ATZ-LC2812ATZ	13.78	7.00	5.50	.62	.56	1.88	2.75	15.06	16.12	2.31	4.75	6.75	9.19	3.50	N/A	12.500	1.25

FRAME	C	B	BS	2F	DRIVE END SHOT AND KEY							WT. BS
					N	N - W	U(K2)	Y	R	SH	LD	
SC2113A72	32.19	22.50	11.38	18.00	4.00	3.75	1.875	3.50	591	590	2.50	355
C2113A72	33.44	23.75	12.62	18.00	4.00	3.75	1.875	3.50	591	590	2.50	380
LC2113A72	35.06	25.38	14.25	18.00	4.00	3.75	1.875	3.50	591	590	2.50	410
C2113A72	36.25	26.50	12.06	20.00	4.00	4.50	2.25	1.250	845	590	3.00	555
SC2512A72	37.44	26.56	13.56	20.00	4.00	4.50	2.25	1.250	845	590	3.00	590
LC2512A72	38.74	28.06	15.05	20.00	4.00	4.50	2.25	1.250	845	590	3.00	630
SC2812A72	41.62	29.14	14.25	22.00	5.00	4.75	3.75	4.50	621	625	3.50	835
LC2812A72	43.98	31.19	16.50	22.00	5.00	4.75	3.75	4.50	621	625	3.50	900

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEAR MACHINES.
- (2) "U" VARIES-----, 000 - .015
- (3) "V" VARIES-----, 000 - .001
- (4) TERMINAL "AA" VARIES WITH "P" FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". SEE DRAWING NUMBER 609595-1.
- (5) WALLS OR OBSTRUCTIONS MUST NOT ENCRUCH ON AIR INLET SPACE "XC".
- (6) "FAK" VARIES +.005 - .000-----FACE ROUNDT AND ECCENTRICITY .007 MAX. T.I.R. .001 MAX. PER .001" OF FACE. SEE DRAWING NUMBER 609595-1.
- (7) "F" VARIES-----, 000 - .001
- (8) SUB SHAFT SUPPLIED ONLY WHEN SPECIFIED. KEY SIZE .188 X .188 X 1.00
- (9) FOR RE-045 OR 5PY PROVISIONS ON "C8212" ADD 1.00 TO "L" DIMENSION.
- (10) "B" BOX BE LOCATED FOR LEAD OUTLET AT THE END OF THE SHAFT.
- (11) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, F-4, W-4, W-5, W-7, OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.
- (12) WEIGHT MAY BE OBTAINED FOR LEAD OUTLET AND ACCESSORIES.
- (13) MINIMUM CLEARANCE DETAILS ARE REQUIRED. CONSULT FACTORY.

TACHOMETER	LU
BC-42	
BC-46	
RD-11	
RD-12	4.
RD-51	
RD-61	
RD-62	
RE-210	
M627, M628	
M727, M737	
M738	
DYNAPAR 74S	
RE-045	3. 8
SPY	1. 1
	SEE NOTES (9)

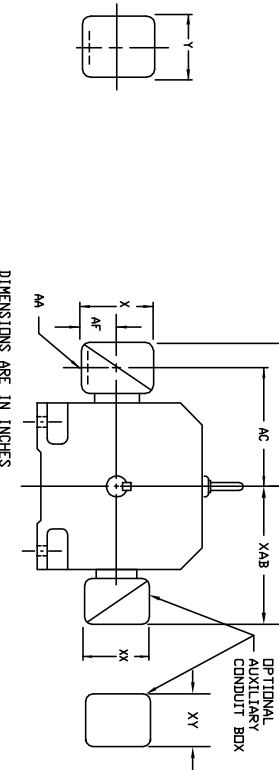
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. LTR: -	VERSION: 00	TDR: 000000577407
FILE: \RGG\00015\557	REVISED: 11:02:01 01/26/2011	BY: CONNAS
MTL: -		

DIMENSION DRAWING,SC2113ATZ - LC2812ATZ,TEFC,FOOT MTG

SH 1 of 1

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

STEEL TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	STANDARD SIZE						ONE SIZE LARGER							
		AA(1)	AB	AC	AF	X	Y	AA(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
(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
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
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)	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
C2816ATZ	128	2"	14.03	10.53	4.25	8.44	7.25	74874-R	3"	14.47	11.22	4.25	8.44	7.25	74874-24-R
C2815ATZ	195	3"	14.47	11.22	4.25	8.44	7.25	74874-24-R	4"	15.91	11.84	5.38	10.56	9.00	706308-3-R
(2)	269	4"	15.91	11.84	5.38	10.56	9.00	706308-3-R	5" (4)	18.72	13.47	7.00	12.75	15.00	706589-1-C

CAST IRON TERMINAL BOX DIMENSIONS															
FRAME SIZE	MAX. AMPS	STANDARD SIZE						ONE SIZE LARGER							
		AK(3)	AB	AC	AF	X	Y	NUMBER	AK(3)	AB	AC	AF	X	Y	NUMBER
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-R
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
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)	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
C2512ATZ	18	3/4	11.09	9.09	2.50	5.00	5.75	705028-2-T	1"	11.09	9.09	2.50	5.00	5.75	705028-2-T
C2514ATZ	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
C2514ATZ	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
(2)	208	2"	12.03	9.59	3.00	6.00	7.00	705029-2-S	2-1/2	13.72	9.97	3.62	7.88	9.25	705030-2-R
C2812ATZ	128	2"	12.78	10.34	3.00	6.00	7.00	75460-T	3"	14.47	10.72	3.62	7.88	9.25	76700-R
C2815ATZ	195	3"	14.47	10.72	3.62	7.88	9.25	76700-R	4"	15.78	11.59	4.12	9.50	10.50	76700-R
C2815ATZ	269	4"	15.78	11.59	4.12	9.50	10.50	76700-R	5" (4)	18.59	13.34	7.00	12.75	15.00	76870-S

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

CONDUIT BOX DIMENSIONS WITH THERMAL BREAKS (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	11.66	9.25	3.35	8.82	--	8.82	706310-56-B	706310-226-R
	300	11.30	9.57	2.72	7.48	--	7.48	706310-56-A	706310-225-R
	400	11.85	9.84	3.35	8.82	--	8.82	706310-56-B	706310-226-R
C250	400	17.48	12.75	6.20	14.39	--	14.39	706310-63-B & 706310-63G	706310-63-B & 706310-63G
	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
C280	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	7.68	15.35	--	15.35	706310-63-C	706310-63-C

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)							
FRAME SIZE	XAB	XY	PART NUMBER	FRAME SIZE	XAB	XY	PART NUMBER
C210	7.38	4.25	602007-26-A	C210	10.88	8.00	706310-3-B
C250	8.44	4.25	602007-26-A	C250	11.88	8.00	706310-3-B
C280	9.12	4.25	602007-26-A	C280	12.62	8.00	706310-3-B

(1) MAX CONDUIT
(2) RATES PROVIDED WITH DOUBLE KNUCKLE
(3) MAX PIPE LAP(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 ON 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	VERSION: 01	TDR: 000000816512
REV. LTR: A		
FILE: \RGG\00021\153		REVISED: 03: 09: 09 09/06/2013
MTL: -		BY: RGGWT

BALDOR

DIMENSION SHEET

SH 1 of 1

609959-001

406770-002			406770-002	
CONNECTION DIAGRAM D-C MOTOR - STAB. SHUNT DUAL VOLTAGE FIELD W1 (NOTE 7) SHUNT FIELD F2 INTER-COIL AX2 ARMATURE H1 H2 F1 A1 SHUNT FIELD F11 SERIES FIELD S2 S3 SERIES FIELD S4 F22 P1 P2 TD1 TD2 TD3 (NOTE 6) (NOTE 4) (CAUTION-SEE NOTE 1) (NOTE 2) (NOTE 5) ARMATURE AND FIELD EXTERNAL CONNECTIONS WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS CCW ROTATION LOW VOLTAGE FIELD CONNECTION CW ROTATION CCW ROTATION HIGH VOLTAGE FIELD CONNECTION CW ROTATION ROTATION FACING COMMUTATOR END 1. CAUTION — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER. 2. OPTIONAL SERIES FIELD IS MARKED S3 AND S4. FOR CUMULATIVE SERIES FIELD, CONNECT S3 TO S2 AND CONNECT S4 TO NEGATIVE. FOR DIFFERENTIAL SERIES FIELD CONNECT S4 TO S2 AND S3 TO NEGATIVE. 3. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C. 4. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC. 5. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC. 6. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3 7. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1. 8. 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 STAB. SHUNT, DUAL VOLTAGE FIELD	
FILE: \RSN\00026\434		REVISED: 02: 35: 07 02/01/2013	SH 1 of 1	
MTL: -		BY: MGHPC		