

ABB BALDOR RELIANCE III

Customer information packet

D50100RS-BV

100HP, 1750RPM, DC, 3212ATZ, DPG-FV,

Specifications

Enclosure	DP
Frame	MC3212ATZ
Frame Material	Exposed Laminations
Output Power	100.000 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	F2
Overall Length	39.50 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

Part Detail

Revision	A
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G6169B C
Layout	609972-368
Eff. date	02-07-2024
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006LP									
CAT.NO.	D50100RS-BV	SPEC NO.		T32T1314					
FR	MC 3212ATZ	HP	100		DUTY		CONT		
ENCL.	DP	RPM	1750/2000		S.F.		1.0		
ENCL MOD	FORCE VENT	VOLTS		500		INSUL		F	
MAX SAFE SPEED	03600	AMPS		162.00		AMB.		40	
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		70BC03J30X					
MAX AMPS @ 25 C	3.34	O.D.E. BRG.		60BC02J30X					
HOT AMPS	2.44/1.91	MIN. AMB.		0		TYPE		TR	
BRUSH:419904052AB									
AIR BAFFLED									

609972-368

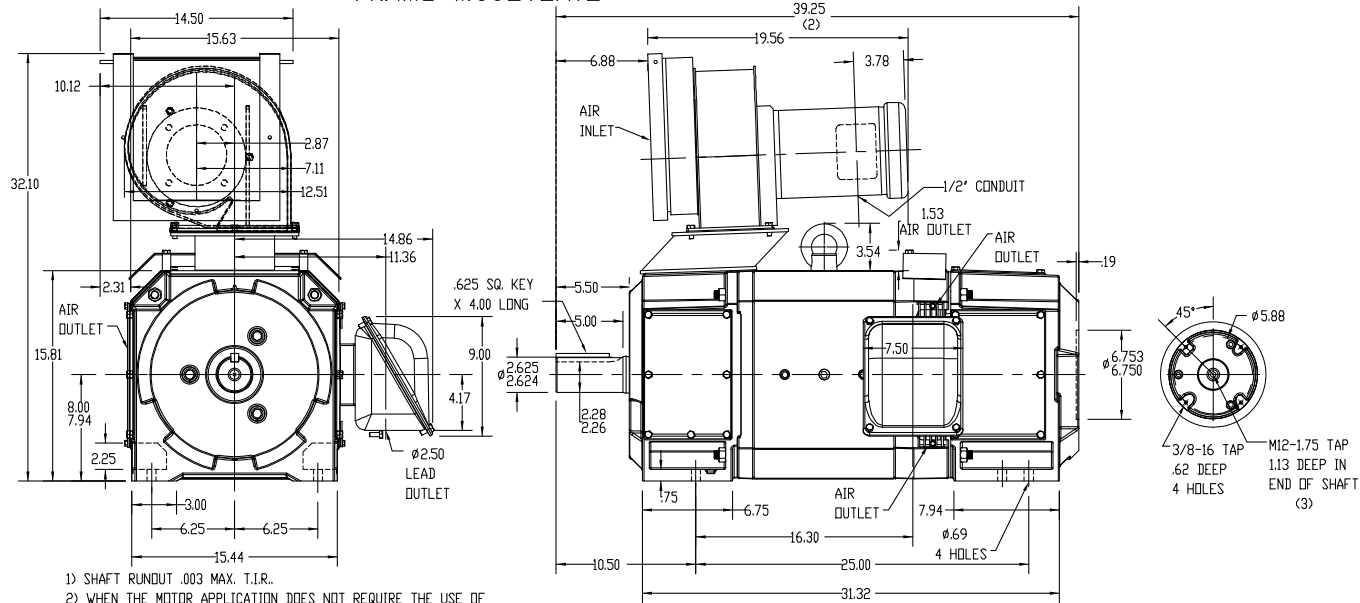
INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

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

COOLING: FORCE VENTILATED WITH
INTEGRAL BLOWER AND
MOTOR AIR FILTERED-
SPECIAL BAFFLE

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED

FRAME MC3212ATZ



- 1) SHAFT ROUNDT .003 MAX. T.I.R.
- 2) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF OPPOSITE DRIVE END, ADD .25 TO THIS DIMENSION.
- 3) MOTOR TAPPED FOR SCREW-IN STUB SHAFT AT ODE END.
- 4) TERMINAL BOX CAN BE ROTATED WITH LEAD OUTLET AT TOP, SIDES OR BOTTOM. BOX IS RATED 128 A.
- 5) MOTOR WEIGHT APPROX. 1150 LBS.
- 6) HORIZONTAL APPLICATIONS ONLY.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

REF. 5075RS-1BV (SPEC. D32-A000-0075)

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

REV. DESC: REVISE DRAWING	VERSION: 01	TDR: 000001241447
REV. LTR: A	FILE: \RGG\00033\332	REVISD: 03:42:52 09/23/2024
MTL: -	BY: USNISC2	

BALDOR - RELIANCE®

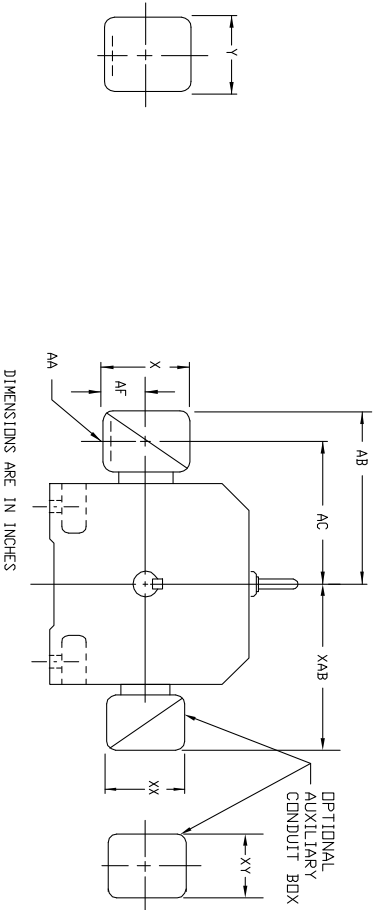
DIM DRAWING, MC3212ATZ, DPP. FOOT MTG, BAFFLED, AIR FILTER

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609972-368

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



DIMENSIONS ARE IN INCHES

STEEL TERMINAL BOX DIMENSIONS																	
FRAME		STANDARD SIZE						PART		ONE SIZE LARGER						PART	
AMPS	AA(1)	AB	AC	AF	X	Y	NUMBER	AA(1)	AB	AC	AF	X	Y	NUMBER			
C3210ATZ	128	2	14.88	11.38	4.25	8.44	7.25	74874-R	3	15.31	12.06	4.25	8.44	7.25	74874-24-R		
C3212ATZ	185	3	15.31	12.06	4.25	8.44	7.25	74874-24-R	4	16.75	12.69	5.38	10.56	9.00	700308-3-R		
C3214ATZ	269	4	16.75	12.69	5.38	10.56	9.00	700308-3-R	5	21.00	15.88	6.50	12.10	14.62	702658-1-C		
	500	5	21.00	15.88	6.50	12.10	14.62	702658-1-C	3	21.00	15.88	6.50	12.10	14.62	702658-1-1-C		
C3612ATZ	128	2	15.88	12.38	4.25	8.44	7.25	74874-R	3	16.31	13.06	4.25	8.44	7.25	74874-24-R		
C3612ATZ	185	3	16.31	13.06	4.25	8.44	7.25	74874-24-R	4	17.75	13.69	5.38	10.56	9.00	700308-3-R		
C3613ATZ	269	4	17.75	13.69	5.38	10.56	9.00	700308-3-R	5	22.00	15.88	6.50	12.10	14.62	702658-1-C		
	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	702658-1-1-C		

CAST IRON TERMINAL BOX DIMENSIONS																	
FRAME		STANDARD SIZE						PART		ONE SIZE LARGER						PART	
AMPS	AA(2)	AB	AC	AF	X	Y	NUMBER	AA(2)	AB	AC	AF	X	Y	NUMBER			
C3210ATZ	128	1-1/2	13.62	11.19	3.00	6.00	7.00	75460-R	3	15.31	11.56	3.62	7.88	9.25	76700-RB		
C3210ATZ	185	3	15.31	11.56	3.62	7.88	9.25	76700-RB	4	16.62	12.44	4.12	9.50	10.50	76708-RR		
C3212ATZ	269	4	16.62	12.44	4.12	9.50	10.50	76708-RR	5	19.44	14.19	7.00	12.75	15.00	76870-S		
C3214ATZ	500	5	19.44	14.19	7.00	12.75	15.00	76870-S	6	19.44	14.19	7.00	12.75	15.00	76870-R		
	128	1-1/2	14.62	12.19	3.00	6.00	7.00	75460-R	3	16.31	12.56	3.62	7.88	9.25	76700-RB		
C3612ATZ	185	3	16.31	12.56	3.62	7.88	9.25	76700-RB	4	17.62	13.44	4.12	9.50	10.50	76708-RR		
C3613ATZ	269	4	17.62	13.44	4.12	9.50	10.50	76708-RR	5	20.44	15.19	7.00	12.75	15.00	76870-S		
	500	5	20.44	15.19	7.00	12.75	15.00	76870-S	6	20.44	15.19	7.00	12.75	15.00	76870-R		

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)											
STANDARD SIZE											
FRAME SIZE	AMPS	AB	AC	AF	X	AA (3)	Y	PART NUMBER			
C320	400	19.02	15.28	6.20	14.39	---	14.39	706310-63-B			
	800	19.02	15.28	6.20	14.39	---	14.39	706310-63-B			
	1600	19.02	15.28	7.68	15.35	---	15.35	706310-63-C			
C360	400	20.00	15.28	6.20	14.39	---	14.39	706310-63-B			
	800	20.00	15.28	6.20	14.39	---	14.39	706310-63-B			
	1600	20.00	15.28	7.68	15.35	---	15.35	706310-63-C			

OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)											
FRAME SIZE	XAB	XX	XY	FRAME SIZE	XAB	XX	XY	PART NUMBER			
C320	10.00	4.25	4.25	602007-26-A	C320	13.50	8.00	8.00	8.00	706310-3-B	
C360	11.00	4.25	4.25	602007-26-A	C360	14.50	8.00	8.00	8.00	706310-3-B	

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

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

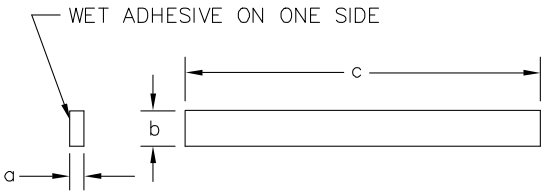
REV. DESC: LOAD TO BUS	VERSION: 00	TDR: 000000958110
REV. LTR: -	REVISED: 08:37:45 12/17/2015	BY: RGGWT
FILE: \RGG\00026\318		
MTL: -		

BALDOR

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

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065564-004



SYM	MAKE FROM	a	b	c	REMARKS
	065564-004				
A	X	1/8	5/8	24*	TERMBX & CVR 180AT-250AT
B	X	1/8	5/8	37 1/2*	TERMBX & CVR 280AT-320AT
C	Y	1/4	5/8	44 1/2Δ	FILTER TO HOUSING GASKET
D	X	1/8	5/8	170"	TEAO HEAT EXCH.
E	Y	1/4	5/8	72"Δ	TERMBX & CVR

SYM	MAT'L SPEC	a	b	c
X	46024-XV	1/8	5/8	* 50' ROLL; WET ADHESIVE ON ONE SIDE
Y	46024-XV	1/4	5/8	* 50' ROLL; WET ADHESIVE ON ONE SIDE

Δ RELIANCE WILL CUT AND MOUNT ON FILTER HOUSING PER ASSEMBLY DRAWING 603989-2.

* PROD. NOTE: WHEN ORDERING THRU PURCHASING ORDER AS 50 FT. ROLLS, WET ADHESIVE ON ONE SIDE. RELIANCE WILL CUT AND MOUNT ON COVER. PER INSTRUCTIONS ON COVER DRAWINGS.

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

REV. DESC: CHANGE DESCRIPTION ON TITLE BLOCK		
REV. LTR: C	VERSION: 03	TDR: 000000571980
FILE: \RGG\00000\220	REVISED: 10:54:04 12/16/2010	BY: RGGWT
MTL: -		

BALDOR
GASKET,STRIP,CLOSED CELL NEOPRENE
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065564-004



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 LEAD 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 DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER _____ CUSTOMER RELIANCE
ORDER NO. _____ S.D. NO. _____

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8		
REV. LTR: A	VERSION: 01	TDR: 000000970330
FILE: \RSN\00026\422	REVISED: 10:19:12 03/11/2016	BY: RAGTBM
MTL: -		 

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT
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