

ABB BALDOR RELIANCE III

Customer information packet

D5075RS-1BV

MC3212ATZ, 75HP, 1750RPM, 500, 300, , F2

Specifications

Armature Voltage	500 V
Base Speed	1750 rpm
Enclosure	DPG-FV
Field Voltage	300 V
Frame	MC3212ATZ
Output Power	75.000 HP
Ambient Temperature	40 °C
Armature Current	122.0 a
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	STAB SHUNT
Frame Prefix	MC
Heater Indicator	No Heater
Insulation Class	F
IP Rating	IP23
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	39.25 IN
Service Factor	1.00
Shaft Diameter	2.624 IN
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.	G6295A A
Layout	609972-368
Eff. date	09-25-2024
CD Diagram	406770-001
Poles	00
Leads	
Proprietary	False
Created date	01-24-2019

Nameplate

000613006LP									
CAT.NO.	D5075RS-1BV	SPEC NO.		D32-A000-0075					
FR	MC3212ATZ	HP	75		DUTY		CONT		
ENCL.	DPG-FV	RPM	1750/2100			S.F.	1.00		
ENCL MOD		VOLTS	500			INSUL		F	
MAX SAFE SPEED	3600	AMPS	122.00			AMB.	40		
FIELD DATA		SER.NO.							
WINDING	STAB SHUNT	POWER CODE		C					
VOLTS	300	D.E. BRG.		70BC03J30X					
MAX AMPS @ 25 C	3.56	O.D.E. BRG.		60BC02J30X					
HOT AMPS	2.50/1.84	MIN. AMB.		0		TYPE		TR	
	BRUSH:419904052AJ								
	AIR BAFFLED								

609972-368

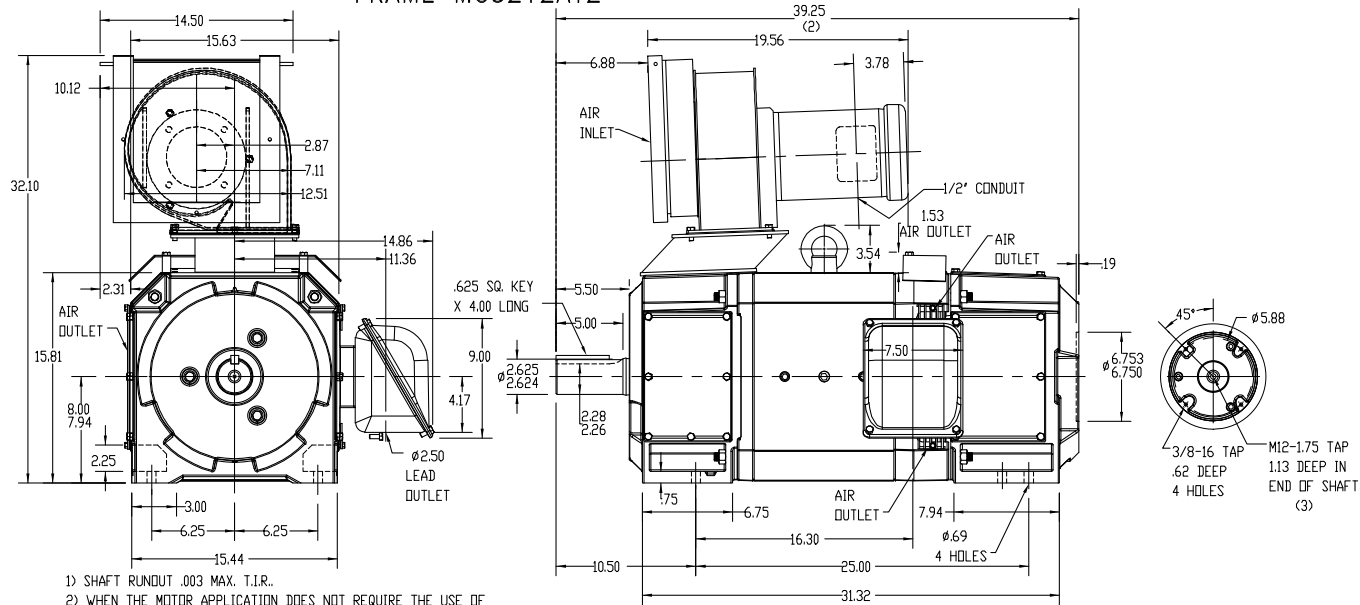
INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

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: 00001241447
REV. LTR: A	FILE: \RGG\00033\332	REVISED: 03:42:52 09/23/2024
MTL: -	BY: USN/SCH2	

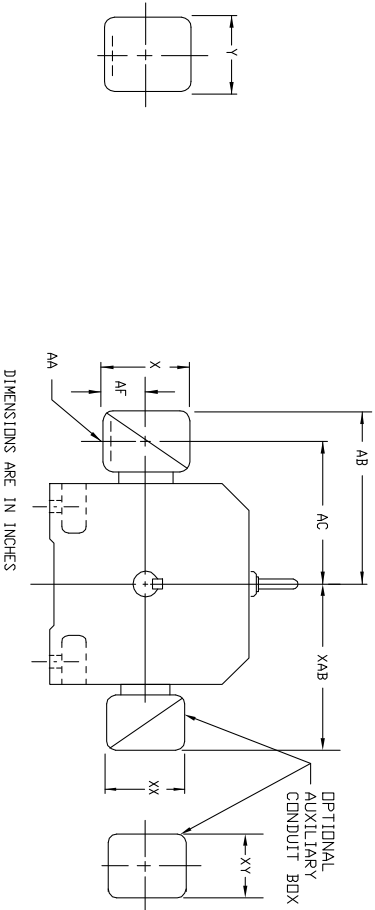
BALDOR - RELIANCE®

DIM DRAWING, MC3212ATZ, DPP. FOOT MTG, BAFFLED, AIR FILTER
SH 1 of 1

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 SIZE		STANDARD SIZE				PART NUMBER		ONE SIZE LARGER				PART NUMBER		
MAX AMP(S)	AA(1)	AB	AC	AF	X	Y		AA(1)	AB	AC	AF	X	Y	
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-R
C3210ATZ	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
C3212ATZ	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
C3214ATZ	500	5	21.00	15.88	6.50	12.10	14.62	702658-1-C	5	21.00	15.88	6.50	12.10	14.62
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-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
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
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-C
CAST IRON TERMINAL BOX DIMENSIONS														
FRAME SIZE		STANDARD SIZE				PART NUMBER		ONE SIZE LARGER				PART NUMBER		
MAX AMP(S)	AA(2)	AB	AC	AF	X	Y		AA(2)	AB	AC	AF	X	Y	
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
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
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
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
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
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-S

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

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

- (1) *AA* CONDUIT.
- (2) *AF* PIPE TAP.
- (3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
- (4) *XAB* DIMENSION IS THE DISTANCE FROM THE 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.
- (5) *XY* TERMINAL BOX DIMENSIONS SEE 609979-2.
- (6) *XAB* TERMINAL BOX DIMENSIONS SEE 609979-3.

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

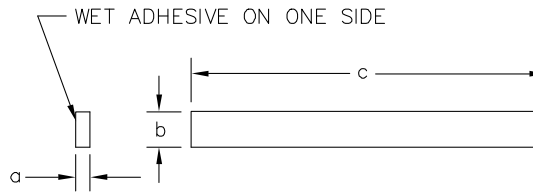
REV. DESC: LOAD TO BUS	VERSION: 00	TDR: 000000958110
REV. LTR: -	REVISED: 08:37:45 12/17/2015	BY: RGGWT
FILE: \RGG\00026\318		
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DIM SHT,C3210ATZ THRU C3613ATZ,W/AUX C/BOX

SH 1 of 1

065564-004



SYM	MAKE FROM 065564-004	a	b	c	REMARKS
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 1/2 Δ	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.

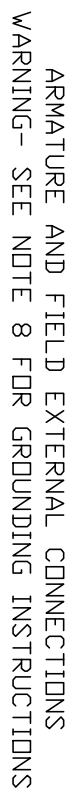
* PROD. NOTE: WHEN ORDERING THRU PURCHASING ORDER AS 50 FT. ROLLS, WET ADHESIVE ON ONE SIDE. RELIANCE WILL CUT AND MOUNT ON COVER. PER INSTRUCTIONS ON COVER DRAWINGS.

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
SH 1 of 1

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

CUSTOMER _____ ORDER NO. _____ S.O. 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
SH 1 of 1