

**BALDOR® • RELIANCE™**

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

609972-368

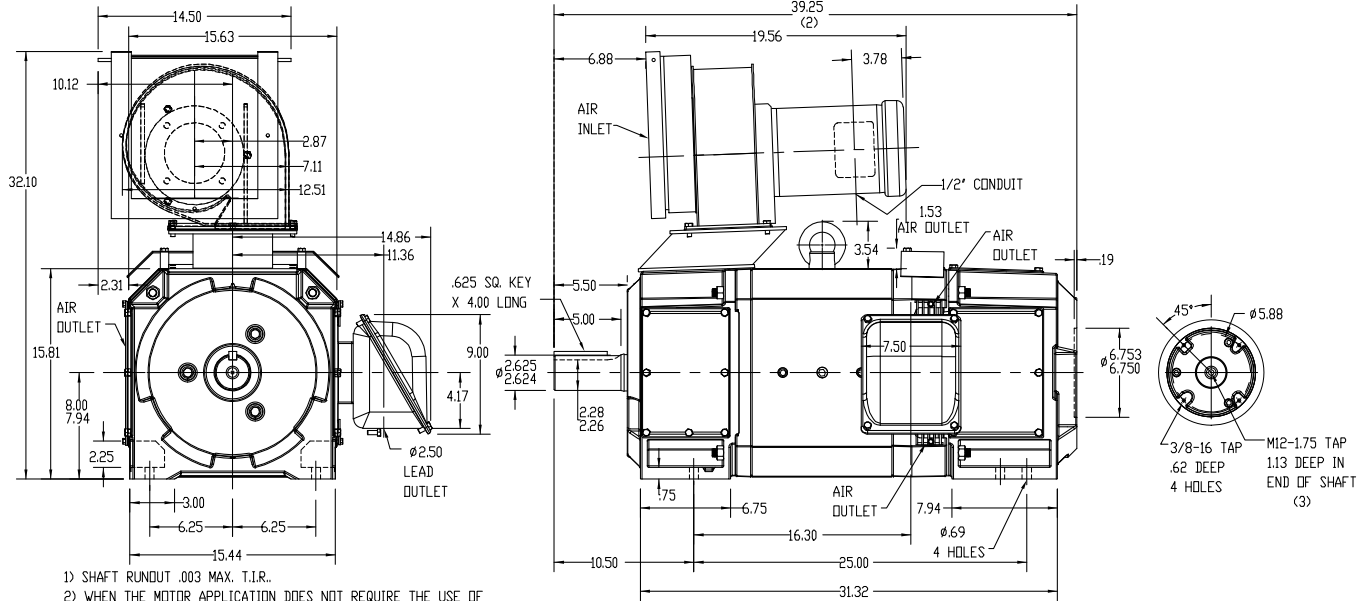
## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

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		
REV. LTR: A	VERSION: 01	TDR: 00001241447
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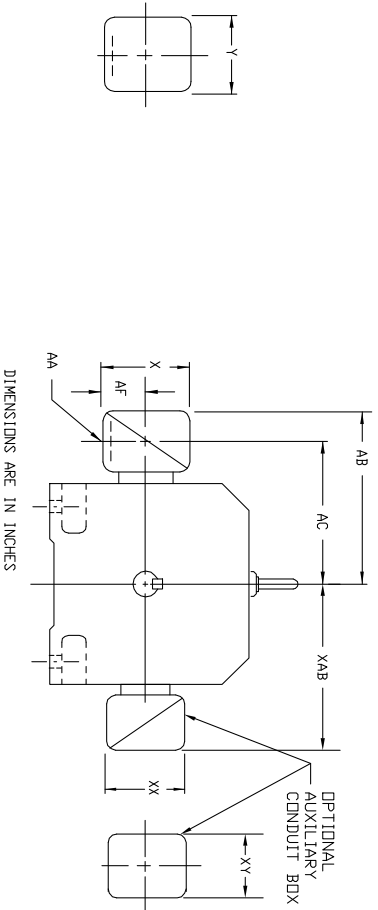
**BALDOR - RELIANCE®**

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

FRAME SIZE	MAX AMPS	STANDARD SIZE						STEEL TERMINAL BOX DIMENSIONS						ONE SIZE LARGER								
		AA(2)	AB	AC	AF	X	Y	AA(1)	AB	AC	AF	X	Y	AA(2)	AB	AC	AF	X	Y			
C3210ATZ	185	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	4	16.75	12.69	5.38	10.56	9.00	700308-3-R
C3212ATZ	269	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	5	21.00	15.88	6.50	12.10	14.62	702658-1-C
C3214ATZ	500	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	6	25.00	19.44	8.44	14.19	17.00	76708-R
C3612ATZ	185	3	16.31	13.06	4.25	8.44	7.25	74874-R	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	6	26.00	20.44	9.00	15.19	18.00	76870-S
C3613ATZ	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	6	26.00	20.44	9.00	15.19	18.00	76870-S

FRAME SIZE	MAX AMPS	STANDARD SIZE						CAST IRON TERMINAL BOX DIMENSIONS						ONE SIZE LARGER								
		AA(2)	AB	AC	AF	X	Y	AA(2)	AB	AC	AF	X	Y	AA(1)	AB	AC	AF	X	Y			
C3210ATZ	185	3	15.31	11.19	3.00	6.00	7.00	75460-R	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-R
C3212ATZ	269	4	16.62	12.44	4.12	9.50	10.50	76708-R	5	19.44	14.19	7.00	12.75	15.00	76870-S	6	23.00	17.00	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-S	7	23.00	17.00	7.00	12.75	15.00	76870-S
C3612ATZ	185	3	16.31	12.56	3.62	7.88	9.25	75460-R	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-R
C3613ATZ	269	4	17.62	13.44	4.12	9.50	10.50	76708-R	5	20.44	15.19	7.00	12.75	15.00	76870-S	6	24.00	18.00	7.00	12.75	15.00	76870-S
C3613ATZ	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	7	24.00	18.00	7.00	12.75	15.00	76870-S

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

FRAME SIZE	MAX AMPS	STANDARD SIZE						OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)					
		AB	AC	AF	X	AA (3)	Y	XAB	XX	XY	XY	XY	XY
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					

FRAME SIZE	XAB	XX	XY	XY	XY	XY	XY	XY	XY	XY	XY	XY	XY
C320	10.00	4.25	4.25	602007-26-A	C320	13.50	8.00	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	8.00	706310-3-B		

- (1) \*AA\* CONDUIT.
- (2) \*AA\* PIPE TAP.
- (3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
- (4) TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, W-5, W-7.
- (5) TERMINAL BOX LOCATED ON TOP WHEN SPECIFIED.
- (6) TERMINAL BOX DIMENSIONS SEE 609979-2.
- (7) FOR \*X/P\* TERMINAL BOX DIMENSIONS SEE 609979-3.

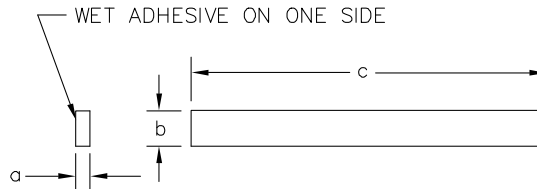
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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REV. LTR: -	REVISED: 08: 37: 45 12/17/2015	BY: RCGWT
FILE: \RGG\00026\318		
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DIM SHT,C3210ATZ THRU C3613ATZ,W/AUX C/BOX

065564-004



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

$\Delta$  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.

065564-004

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

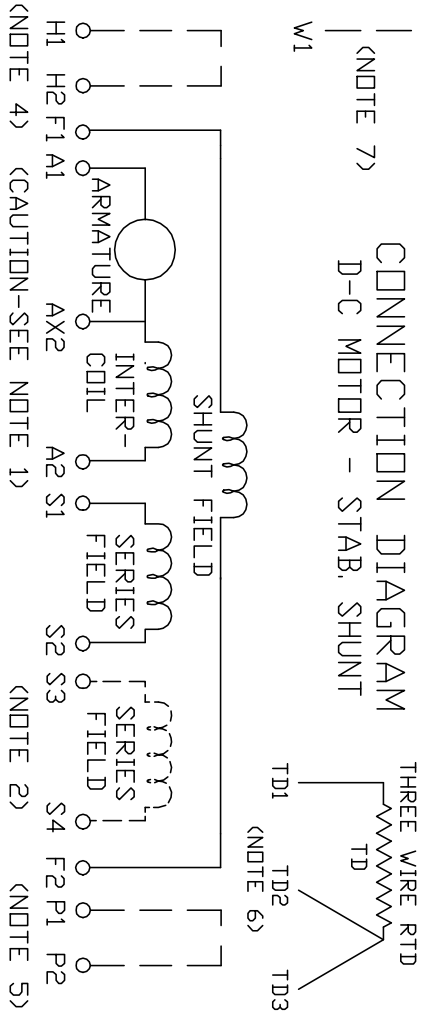
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**BALDOR**  
GASKET,STRIP,CLOSED CELL NEOPRENE  
SH 1 of 1

406770-001

406770-001

CONNECTION DIAGRAM  
D-C MOTOR - STAB. SHUNT



ARMATURE AND FIELD EXTERNAL CONNECTIONS  
WARNING- SEE NOTE 8 FOR GROUNDING INSTRUCTIONS



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

CUSTOMER \_\_\_\_\_

ORDER NO. \_\_\_\_\_

RELIANCE  
CUSTOMER

S.D. NO. \_\_\_\_\_

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8

REV. LTR: A

VERSION: 01

TDR: 00000970330

FILE: \RSN\00026\422

REVISED: 10:19:12 03/11/2016

BY: RAGTBM

MTL: -

**BALDOR**

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

SH 1 of 1

