ABB BALDOR RELIANCE

Customer information packet

D5075RS-1BV

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

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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

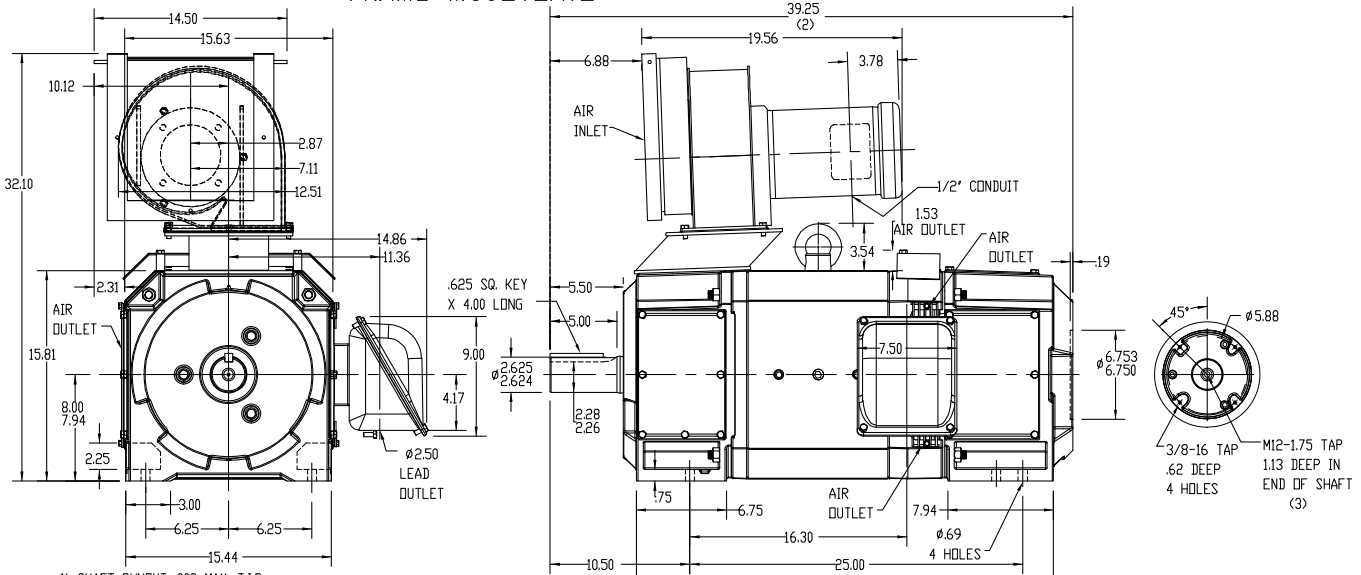
ENCLOSURE: DRIP-PROOF FULLY-GUARDED, SPLASHPROOF

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 RUNOUT .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		BALDOR - RELIANCE®
REV. LTR: A	VERSION: 01	TDR: 000001241447
FILE: \RGG\00033\332	REVISED: 03:42:52 09/23/2024	BY: USNISCH2
MTL: –		DIM DRAWING,MC3212ATZ, DPP. FOOT MTG, BAFFLED, AIR FILTER
		SH 1 of 1

609972-368

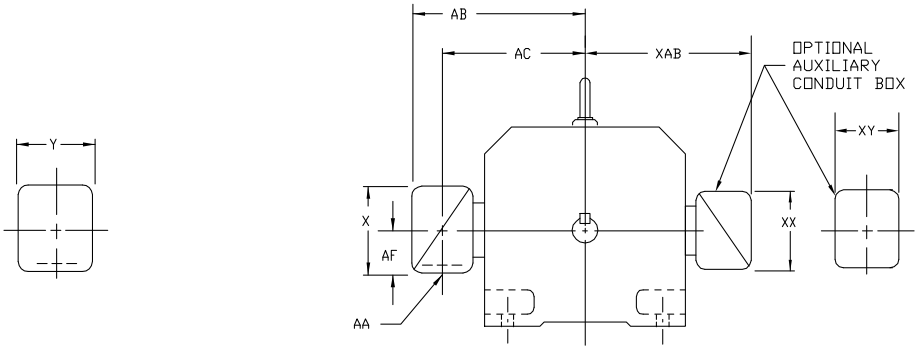
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INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

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	MAX. AMPS	STANDARD SIZE AA(1)	AB	AC	AF	X	Y	PART NUMBER	ONE SIZE LARGER AA(1)	AB	AC	AF	X	Y	PART NUMBER
C3210ATZ C3212ATZ C3214ATZ	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
	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
	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	5	21.00	15.88	6.50	12.10	14.62	702658-1-C
C3612ATZ C3613ATZ	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
	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
	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-C

CAST IRON TERMINAL BOX DIMENSIONS

FRAME SIZE	MAX. AMPS	STANDARD SIZE AA(2)	AB	AC	AF	X	Y	PART NUMBER	ONE SIZE LARGER AA(2)	AB	AC	AF	X	Y	PART NUMBER
C3210ATZ C3212ATZ C3214ATZ	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
	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
	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
	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
C3612ATZ C3613ATZ	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
	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
	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	PART NUMBER	FRAME SIZE	XAB	XX	XY	PART NUMBER
C320	10.00	4.25	4.25	602007-26-A	C320	13.50	8.00	8.00	706310-3-B
C360	11.00	4.25	4.25	602007-26-A	C360	14.50	8.00	8.00	706310-3-B

(1) 'AA' CONDUIT.
(2) 'AA' PIPE TAP.
(3) CUSTOMER TO PROVIDE HOLE FOR CONDUIT.
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.
FOR 'X/P' 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.

BALDOR

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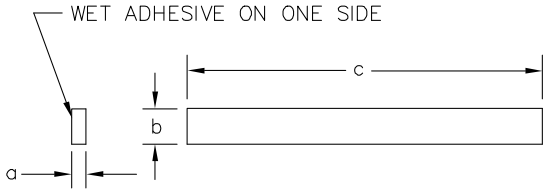
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BY: RGGWT

DIM SHT,C3210ATZ THRU C3613ATZ,W/AUX C/BOX
SH 1 of 1

100-676609

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△	FILTER TO HOUSING GASKET
D	X	1/8	5/8	170"	TEAO HEAT EXCH.
E	Y	1/4	5/8	72"△	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

△ 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

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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 _____ CUSTOMER
ORDER NO. _____ RELIANCE
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
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D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

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