

BALDOR • RELIANCE

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.		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

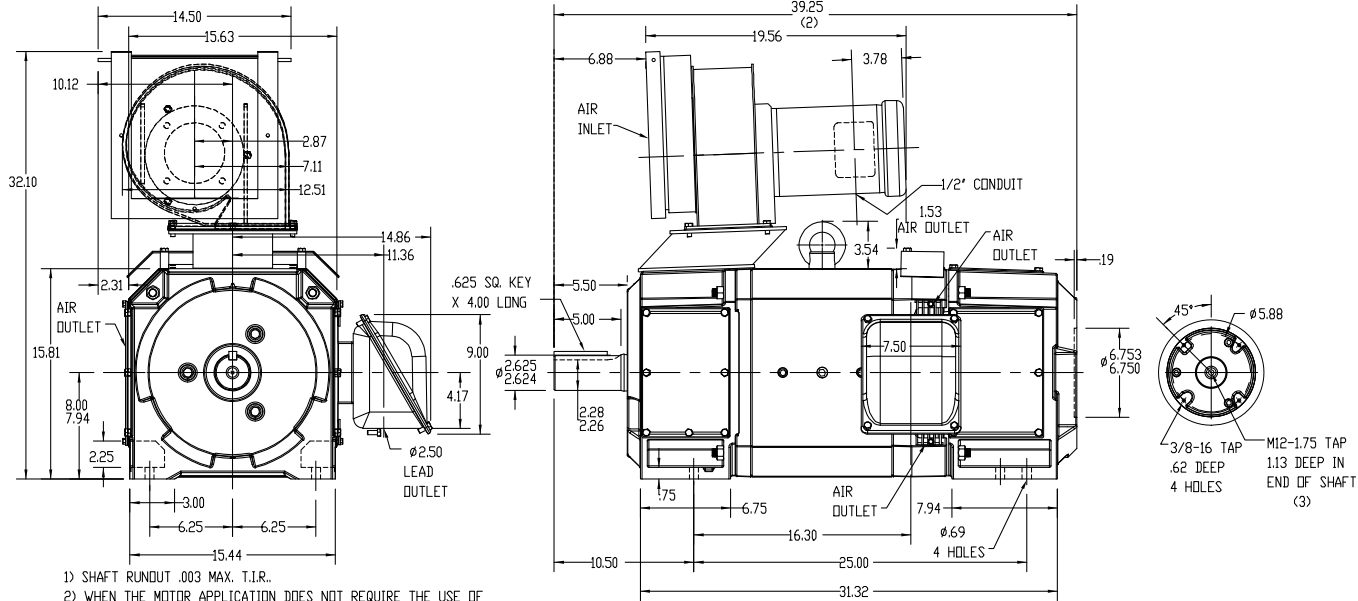
INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

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 RUNDOUT .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)

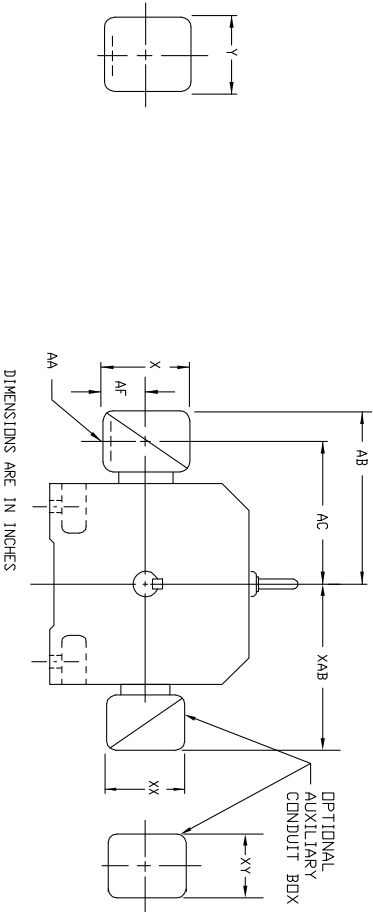
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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

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



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(1)	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	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	21.00	15.88	6.50	12.10	14.62	702658-1-C
C3214ATZ	500	5	21.00	15.88	6.50	12.10	14.62	702658-1-C	6	21.00	15.88	6.50	12.10	14.62	702658-1-C	7	23.88	17.38	8.44	14.12	17.75	703008-3-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	22.00	15.88	6.50	12.10	14.62	702658-1-C

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	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-S	7	21.00	15.88	6.50	12.10	14.62	702658-1-C
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	20.44	15.19	7.00	12.75	15.00	76870-S

FRAME SIZE	AMPS	STANDARD SIZE						CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)								
		AB	AC	AF	X	AA (3)	Y	AB	AC	AF	X	AA (3)	Y			
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	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	OPTIONAL AUXILIARY CONDUIT BOX DIMENSIONS (MAXIMUM)			PART NUMBER			
			XY	XY	XY				
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) *AF* CONDUIT.
- (2) *AA* PIPE TAP.
- (3) *CUSTOMER TO PROVIDE HOLE FOR CONDUIT TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-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.

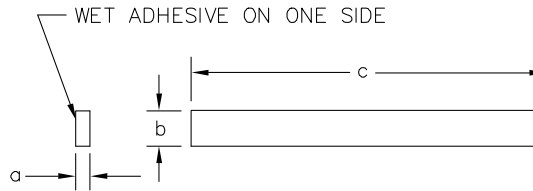
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

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

BALDOR

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

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: 00000571980
FILE: \RGG\00000\220	REVISED: 10:54:04 12/16/2010	BY: RGGWT
MTL: -		

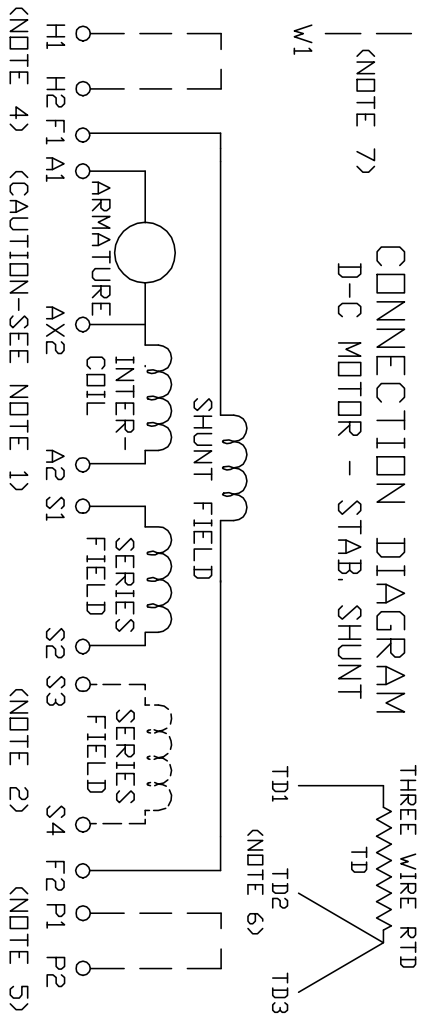
BALDOR
GASKET,STRIP,CLOSED CELL NEOPRENE
SH 1 of 1

065564-004

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 _____

CUSTOMER ORDER NO. _____

RELIANCE 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