



Customer information packet

D5175R-1BV

MC3212ATZ, 75HP, 1150RPM, 500, 300, , F2

Specifications

Armature Voltage	500 V
Base Speed	1150 rpm
Enclosure	DPG-FV
Field Voltage	300 V
Frame	LC3212ATZ
Output Power	75.000 HP
Ambient Temperature	40 °C
Armature Current	125.0 a
Bearing Grease Type	Polyrex EM (-20F +300F)
Drip Cover	No Drip Cover
Duty Rating	CONT
Feedback Device	NO FEEDBACK
Field Winding Type	STR. SHUNT
Frame Prefix	LC
Heater Indicator	No Heater
Insulation Class	F
IP Rating	IP23
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F1
Overall Length	41.25 IN
Service Factor	1.00
Shaft Diameter	2.624 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

Part detail

Revision	B
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G6152D A
Layout	616032-001
Eff. date	01-30-2019
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	01-22-2019

Nameplate

000613006HP

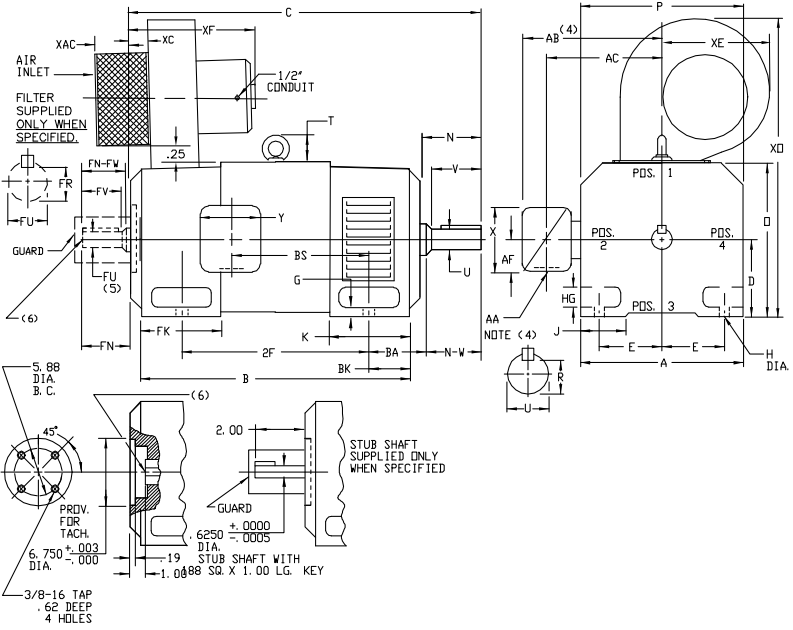
CAT.NO.	D5175R-1BV	SPEC NO.	D32-A000-0074		
FR	MC3212ATZ	HP	75	DUTY	CONT
ENCL.	DPG-FV	RPM	1150/2000	S.F.	1.00
ENCL MOD		VOLTS	500	INSUL	F
MAX SAFE SPEED	03600	AMPS	128.00	AMB.	40
	FIELD DATA	SER.NO.			
WINDING	STR. SHUNT	POWER CODE	C		
VOLTS	300	D.E. BRG.	70BC03J30X		
MAX AMPS @ 25 C	6.34	O.D.E. BRG.	60BC02J30X		
HOT AMPS	4.28/2.00	MIN. AMB.	0	TYPE	TR
	BRUSH:419904052AJ				

616032-001

INDUSTRIAL DIRECT CURRENT MOTORS
AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED
SPLASHPROOF
MOUNTING: FOOT
COOLING: FORCE VENTILATED
WITH INTEGRAL
BLOWER AND MOTOR

ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED
FRAMES SC3210ATZ THRU ULC3214ATZ



DIMENSIONS ARE IN INCHES

FRAME	XAC	XC	XE	XF	XO
SC3210ATZ-ULC3214ATZ	6.75	3.25	8.50	19.25	28.00

FRAME	A	D(1)	E	G	H	HG	J	O	P	T	BA	K	FK	STD.	LG.(8)	BK
SC3210ATZ-ULC3214ATZ	15.50	8.00	6.25	.75	.69	2.25	3.00	15.81	15.62	3.54	5.25	6.75	7.94	10.44	4.00	

FRAME	METHOD OF DRIVE	C(7)				B	BS	2F	DRIVE END SHAFT AND KEY				OPPOSITE DRIVE END SHAFT AND KEY				WT.				
		STD.	LGTH.	STD.	LGTH.				N	N-W	U(2)	V	R(3)	ISO	LGTH.	FN		FN-FW	FU(2)	FV	FR(3)
SC3210ATZ-ULC3210ATZ COUPLED		36.25	38.75	28.31	30.81	13.38	20.00	5.50	5.25	2.625	5.00	2.275	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1115
USC3210ATZ-ULC3210ATZ BELTED		36.75	39.25	28.31	30.81	13.38	20.00	6.00	5.75	2.875	5.50	2.450	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1120
MC3212ATZ-UMC3212ATZ COUPLED		39.25	41.75	31.31	33.81	16.38	25.00	5.50	5.25	2.625	5.00	2.275	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1210
UMC3212ATZ-UMC3212ATZ BELTED		39.75	42.25	31.31	33.81	16.38	25.00	6.00	5.75	2.875	5.50	2.450	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1215
LC3212ATZ-LLC3212ATZ COUPLED		41.25	43.75	33.31	35.81	18.38	25.00	5.50	5.25	2.625	5.00	2.275	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1290
ULC3212ATZ-ULC3212ATZ BELTED		41.75	44.25	33.31	35.81	18.38	25.00	6.00	5.75	2.875	5.50	2.450	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1295
CS3214ATZ-LLC3214ATZ COUPLED		46.25	48.75	38.31	40.81	23.38	32.00	5.50	5.25	2.625	5.00	2.275	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1470
UC3214ATZ-ULC3214ATZ BELTED		46.75	49.25	38.31	40.81	23.38	32.00	6.00	5.75	2.875	5.50	2.450	4.25	4.75	4.50	2.250	4.25	1.972	5.00	3.25	1475

- (1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
(2) "U" AND "FU" VARY-----+.000 - .001
(3) "R" AND "FR" VARY-----+.000 - .015
(4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". REFER TO BOX D/S. (STD. 609979-1, "X/P" 609979-2, MILL 609979-3)
(5) OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
(6) MOTOR SHAFT TAPPED FOR SCREW IN STUB SHAFT.
(7) WHEN THE MOTOR APPLICATION DOES NOT REQUIRE THE USE OF DPP DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER.
(8) DIMENSION FOR FRAMES WITH PREFIX LSC, LMC, LLC, LC, ULSC, ULMC, ULLC OR ULC.
(9) "XE" DIMENSION IS NOT APPLICABLE TO "C3214ATZ" FRAMES (BLOWER MOTOR IS CENTERED ON SHAFT C/L).
- 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.
BLOWER ASSEMBLY CAN BE LOCATED AT POSITIONS 1, 2, OR 4, EXCEPT BLOWER ASSEMBLY AND TERMINAL BOX CAN NOT BE LOCATED AT THE SAME POSITION.
MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

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

REV. DESC: LOADED TO BUS	VERSION: 00	TDR: 000000578087
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FILE: \RGG\00016\040		
MTL: -		

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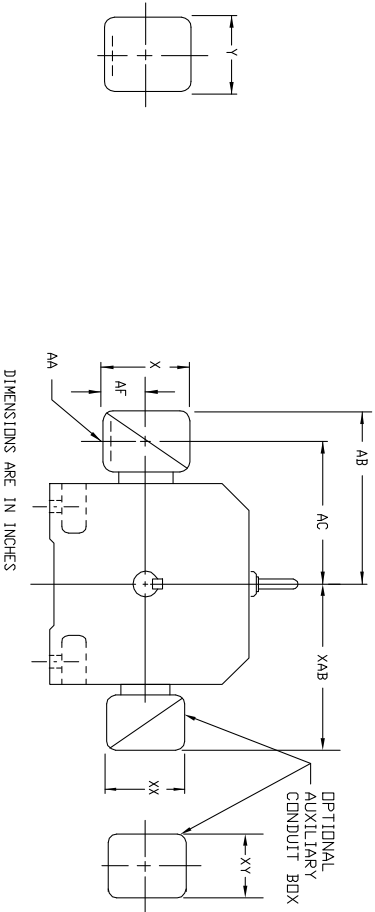
DIMENSION DRAWING, SC3210ATZ - ULC3214ATZ, DPP, FOOT MTG

SH 1 of 1

616032-001

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



STEEL TERMINAL BOX DIMENSIONS

FRAME SIZE	MAX AMPS	AA(1)	AB	AC	AF	X	Y	PART NUMBER	AA(1)	AB	AC	AF	X	Y	PART 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
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	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
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	702658-1-C
C3612ATZ	185	3	16.31	13.06	4.25	8.44	7.25	74874-24-R	3	16.31	13.06	4.25	8.44	7.25	74874-24-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	700308-3-R
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

CAST IRON TERMINAL BOX DIMENSIONS

FRAME SIZE	MAX AMPS	AA(2)	AB	AC	AF	X	Y	PART NUMBER	AA(2)	AB	AC	AF	X	Y	PART 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-S
C3612ATZ	185	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	269	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
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

CONDUIT BOX DIMENSIONS WITH TERMINAL BOARDS (IEC TYPE BOX)

FRAME SIZE	MAX 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
C320	800	19.02	15.28	6.20	14.39	---	14.39	706310-63-B
C320	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
C360	800	20.00	15.28	6.20	14.39	---	14.39	706310-63-B
C360	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 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 '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: RGGWT
FILE: \RGG\00026\318		
MTL: -		



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

406770-006

CONNECTION DIAGRAM

406770-006

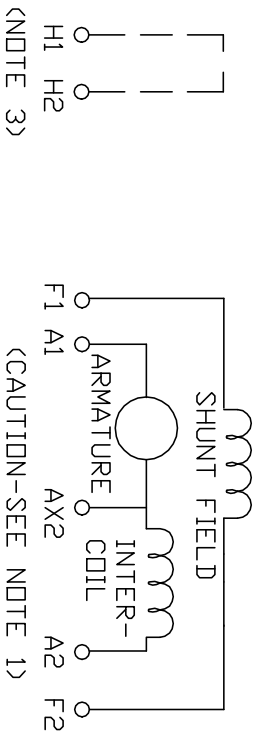
(NOTE 6)

D-C MOTOR - STRAIGHT SHUNT

THREE WIRE RTD

TD

Diagram of a parallel circuit. A resistor is connected in parallel with three branches labeled TD1, TD2, and TD3. A note indicates TD1 is for Note 5.



NOTE 3)

<CAUTION-SEE NOTE 1>

(NOTE 4)

ARMATURE AND FIELD EXTERNAL CONNECTIONS

WARNING- SEE NOTE 7 FOR GROUNDING INSTRUCTIONS



ROTATION FACING COMMUTATOR END

1. CAUTION — ARMATURE MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
2. OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
3. SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
4. THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
5. WINDING RTD'S, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3.
6. BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
7. 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 OPPOSITE DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.

CUSTOMER _____

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

REV. DESC: UPDATE LOGO AND TITLEBLOCK: LOADED TO BUS		
REV. LTR: -	VERSION: 00	TDR: 000000781086
FILE: \RSN\00026\515		REVISED: 02: 41: 08 02/01/2013
MTL: -		BY: MGHPC

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D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT

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