ABB BALDOR RELIANCE

Customer information packet

D50300R-BV

300 1750 LC3613ATZ DPFV STR SHNT

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Specifications

Enclosure	DP
Frame	LC3613ATZ
Frame Material	Steel
Output Power	300.000 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	STR. SHUNT
Frame Prefix	LC
Heater Indicator	No Heater
Lifting Lugs	Standard Lifting Lugs
Motor Standards	NEMA
Mounting Arrangement	F2
Overall Length	50.12 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Slinger Indicator	No Slinger

Part Detail

Revision	-
Type	DC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	G8291A B
Layout	616042-001
Eff. date	04-13-2015
CD Diagram	406770-006
Poles	00
Leads	
Proprietary	False
Created date	04-09-2015

Nameplate

000613006HP									
CAT.NO.	D50300R-BV		**SPEC NO.**	T36S1319					
FR	LC 3613ATZ	**HP**	300		**DUTY**	CONT			
ENCL.	DP	**RPM**	1750/ 2000		**S.F.**	1.0			
ENCL MOD	FORCE VENT	**VOLTS**	500		**INSUL**	F			
MAX SAFE SPEED	3200	**AMPS**	478.00		**AMB.**	40			
	FIELD DATA		**SER.NO.**						
WINDING	STR. SHUNT		**POWER CODE**	C					
VOLTS	300		**D.E. BRG.**	95BC02J30X					
MAX AMPS @ 25 C	12.57		**O.D.E. BRG.**	80BC02J30X					
HOT AMPS	8.71/ 7.37		**MIN. AMB.**	0		**TYPE**	TR		
	BRUSH:419904052AB								

616042–001

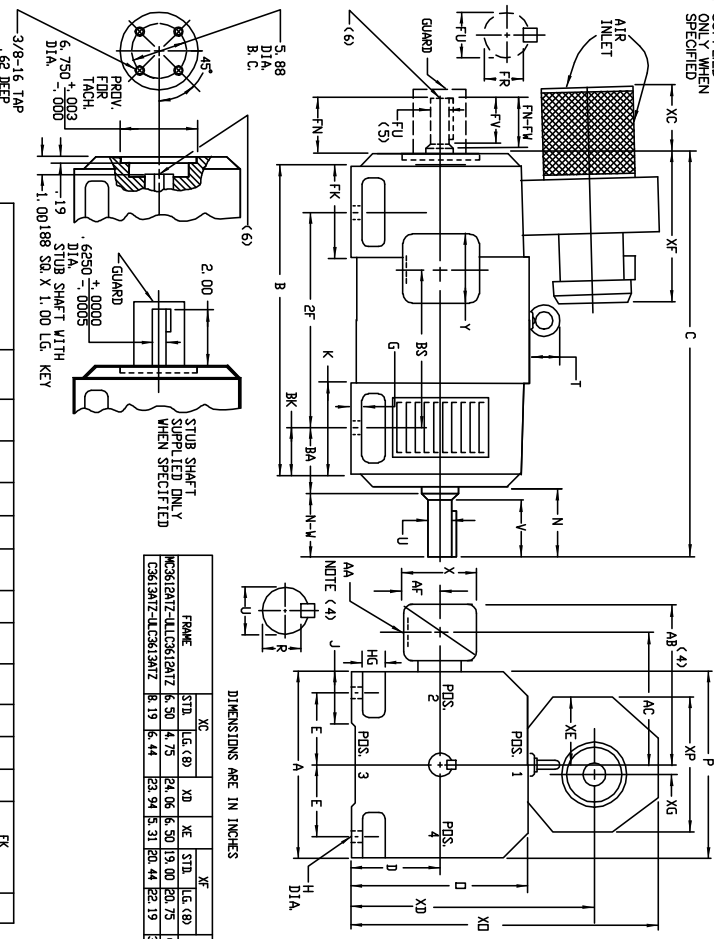
INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED
SPLASHPROOF
MOUNTING:FOOT

COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR AIR FILTERED

ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

FRAMES MC3612ATZ THRU ULC3613ATZ



DIMENSIONS ARE IN INCHES

FRAME	XC		XD	XE	XF		XG	XD	XP
	STD.	LG.(8)			STD.	LG.(8)			
MC3612ATZ-ULC3613ATZ	6.50	4.75	24.06	6.50	19.00	20.75	(9)	29.75	13.00
C3613ATZ-ULC3613ATZ	8.19	6.44	23.94	5.31	20.44	22.19	3.38	31.50	15.12

FRAME	A	BK(1)	E	G	H	HG	J	D	P	T	BA	K	FK STD.	FK LG.(8)	BK
MC3612ATZ-ULC3613ATZ	17.50	9.00	7.00	.88	.81	2.62	3.50	17.81	17.62	3.54	5.88	7.25	8.56	10.31	4.62

FRAME	METHOD OF DRIVE	C(7) STD.	C(7) LG.(8)	B STD.	B LG.(8)	BS	2F	DRIVE END SHAFT AND KEY N	N-W	W (2)	V	R(3)	SQ.	LGTH.	OPPOSITE DRIVE END SHAFT AND KEY FN	FN-FU	FW(2)	FV	FRK(3)	SQ.	LGTH.	(5) WT. LBS.
MC3612ATZ- UMC3612ATZ	COUPLED	42.88	44.62	34.44	36.19	18.12	28.00	6.00	5.75	2.875	5.50	2.450	750	4.25	6.00	5.75	2.875	5.50	2.450	750	4.25	1685
UMC3612ATZ-ULMC3612ATZ	BELTED	43.62	45.38	34.44	36.19	18.12	28.00	6.75	6.50	3.250	6.25	2.831	750	5.00	6.00	5.75	2.875	5.50	2.450	750	4.25	1695
LC3612ATZ- LLC3612ATZ	COUPLED	46.62	48.38	38.19	39.94	21.88	28.00	6.00	5.75	2.875	5.50	2.450	750	4.25	6.00	5.75	2.875	5.50	2.450	750	4.25	1850
LC3612ATZ-ULLC3612ATZ	BELTED	47.38	49.12	38.19	39.94	21.88	28.00	6.75	6.50	3.250	6.25	2.831	750	5.00	6.00	5.75	2.875	5.50	2.450	750	4.25	1860
C3613ATZ- LC3613ATZ	COUPLED	50.12	51.88	41.69	43.44	25.38	32.00	6.00	5.75	2.875	5.50	2.450	750	4.25	6.00	5.75	2.875	5.50	2.450	750	4.25	2010
UC3613ATZ-ULC3613ATZ	BELTED	50.88	52.62	41.69	43.44	25.38	32.00	6.75	6.50	3.250	6.25	2.831	750	5.00	6.00	5.75	2.875	5.50	2.450	750	4.25	2020

(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", 60979-2, AND 60979-3 REFER TO BOX D.S. (STD. 60979-1, OPPOSITE DRIVE END SHAFT SUPPLIED ONLY WHEN SPECIFIED.
(5) MOTOR SHAFT TAPPED FOR SCREW IN STUB SHAFT.
(6) 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 LMC, LLC, LC3613ATZ, ULMC, ULLC OR ULC3613ATZ.
(9) "XG" DIMENSION IS NOT APPLICABLE TO "C3612ATZ" FRAMES (BLOWER MOTOR IS CENTERED ON SHAFT C/L)
(10) SHAFT RUNOUT .003 MAX. T.I.R.

TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TERMINAL SIDES LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, V-4, U-5, OR T-6, OR F-1, 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. CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

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

REV. DESC: ADD SHAFT RUNOUT NOTE		
REV. LTR: B	VERSION: 02	TDR: 000001186744
FILE: \RGG\00016\063	REVISED: 03:32:04 03/02/2022	BY: RGGNAS
MTL: –		

BALDOR - RELIANCE®

DIMENSION DRAWING,MC3612ATZ – ULC3613ATZ,DPP,FOOT MTG

SH 1 of 1

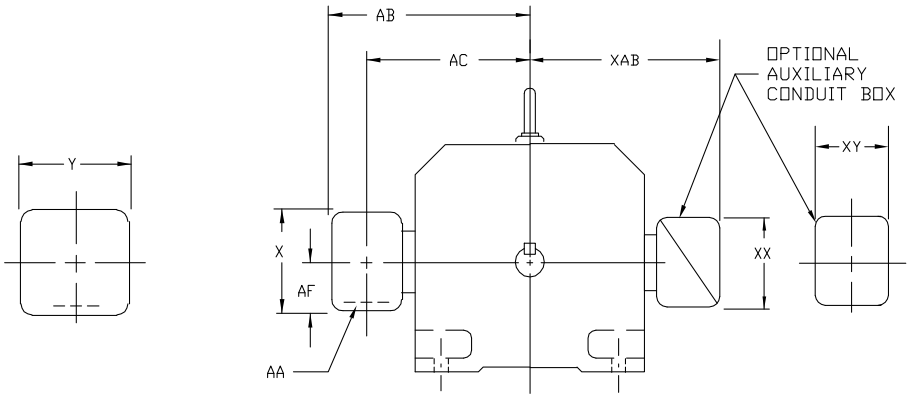
616042–001

609979-003

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

HOFFMAN TERMINAL BOX - MILL TYPE

FRAMES C3210ATZ THRU C3612ATZ



DIMENSIONS ARE IN INCHES

TERMINAL BOX DIMENSIONS F1 MOUNTING								
FRAME SIZE	MAX. AMPS	AA	AB	AC	AF	X	Y	PART NUMBER
C3210ATZ	128	2	15.47	12.06	6.00	16.00	16.00	706310-3G
C3212ATZ	185	3	15.47	12.06	6.00	16.00	16.00	706310-3H
C3214ATZ	269	4	15.47	12.06	6.00	16.00	16.00	706310-3J
(1)	500	(2)	15.47	12.06	6.00	16.00	16.00	706310-3F
C3612ATZ C3613ATZ	128	2	16.47	13.06	6.00	16.00	16.00	706310-3G
	185	3	16.47	13.06	6.00	16.00	16.00	706310-3H
	269	4	16.47	13.06	6.00	16.00	16.00	706310-3J
(1)	500	(2)	16.47	13.06	6.00	16.00	16.00	706310-3F

TERMINAL BOX DIMENSIONS F2 MOUNTING								
FRAME SIZE	MAX. AMPS	AA	AB	AC	AF	X	Y	PART NUMBER
C3210ATZ C3212ATZ C3214ATZ	128	2	15.47	12.06	6.00	16.00	16.00	706310-4G
	185	3	15.47	12.06	6.00	16.00	16.00	706310-4H
	269	4	15.47	12.06	6.00	16.00	16.00	706310-4J
(1)	500	(2)	15.47	12.06	6.00	16.00	16.00	706310-4F
C3612ATZ C3613ATZ	128	2	16.47	13.06	6.00	16.00	16.00	706310-4G
	185	3	16.47	13.06	6.00	16.00	16.00	706310-4H
	269	4	16.47	13.06	6.00	16.00	16.00	706310-4J
(1)	500	(2)	16.47	13.06	6.00	16.00	16.00	706310-4F

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) SUBTRACT 4.50 FROM 'BS' DIMENSION SHOWN ON MOTOR DIMENSION SHEET. TERMINAL BOX LOCATED ON OPPOSITE SIDE OR ON TOP WHEN SPECIFIED.
(2) NO LEAD OUTLET HOLE. CUSTOMER MUST MACHINE HOLE IN TERMINAL BOX FOR CONDUIT AS REQUIRED.

609979-003

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

BALDOR

DIM SHT,C3210ATX THRU C3612ATZ,MILL TYPE TERMINAL BOX
SH 1 of 1

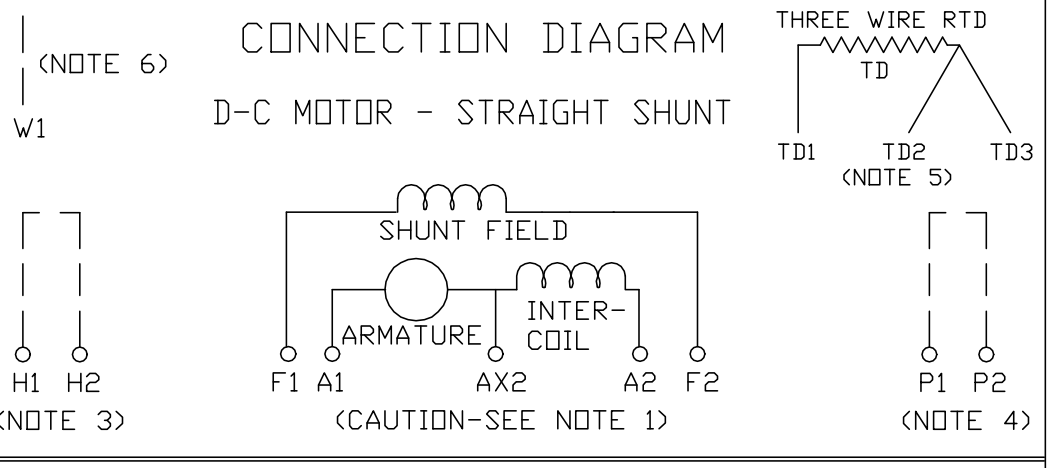
REV. DESC: LOAD TO BUS		TDR: 000000958120
REV. LTR: -	VERSION: 00	
FILE: \RGG\00026\326	REVISED: 03:12:59 12/17/2015	BY: RGGWT
MTL: -		

406770-006

406770-006

CONNECTION DIAGRAM

D-C MOTOR - STRAIGHT SHUNT



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 ORDER NO. _____ RELIANCE S.O. NO. _____

BALDOR

D-C MOTOR CONNECTION DIAGRAM, STRAIGHT SHUNT

SH 1 of 1

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