

BALDOR® • ***RELIANCE***

Product Information Packet

D5550R

50 1750/2300 LC3212ATZ TEFC 500V

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Part Detail			
Type:	DC	Prod. Type:	TR
Power Code:	C	Weight:	1270
Frame Group:	LC 3212ATZ	Mounting Pos.:	F2
HP:	50	Enclosure:	TEFC
RPM:	1750/2300	Wound:	STAB SHUNT
Service Factor:	1.0	Arm V:	500
Arm A:	84.00	Field V:	300
Field A:	1.98	Field A Hot:	1.37/.94
Insulation Class:	F	Ambient:	40
Duty:	CONT	DE Bearing:	70BC03J30X
ODE Bearing:	60BC02J30X	Brushes:	419904-52AJ
Brush Qty.:			

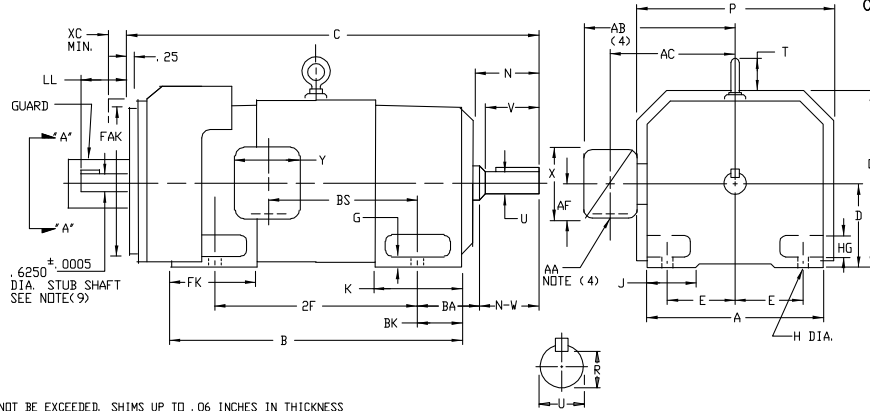
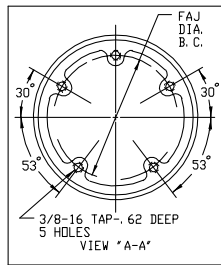
609971-013

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

FRAMES SC3210ATZ THRU ULLC3612ATZ

COOLING: FAN COOLED
ACCESSORIES: PROVISION FOR
TACHOMETER MOUNTING
ONLY WHEN SPECIFIED



TACHOMETER	LL
BC-42	4.25
BC-46	
RD-11	
RD-12	
RD-51	
RD-61	
RD-62	2.12
RE-210	
M627, M628	
M727, M737	
M738	
DYNAPAR 74S	
RE-045G	2.12
WITH K45M1000	
5PY	

- (1) "B" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .06 INCHES IN THICKNESS ARE USUALLY REQUIRED FOR COUPLED OR GEARED MACHINES.
- (2) "U" VARIES-----+.000 - .001
- (3) "R" VARIES-----+.000 - .015
- (4) TERMINAL BOX VARIES WITH H.P. FOR DIMENSIONS "AA", "AB", "AC", "AF", "X" AND "Y". SEE DRAWING NUMBER 609979-1.
- (5) DIMENSION FOR FRAMES WITH PREFIX LSC, LMC, LLC, ULMC, OR ULLC.
- (6) METHOD OF DRIVE: COUPLED OR BELTED.
- (7) WALLS OR OBSTRUCTIONS MUST NOT ENCRDACH ON AIR INLET SPACE "XC".
- (8) "FAK" VARIES +.000 - .005-----FACE ROUNDT AND ECCENTRICITY .007 MAX. T. I. R.
- (9) STUB SHAFT SUPPLIED ONLY WHEN SPECIFIED. KEY SIZE, 1/88 X .188 X 1.00.
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.
MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES.
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.

DIMENSIONS ARE IN INCHES

FRAME	A	DX(1)	E	G	H	HG	J	D	P	T	BA	K	FK		BK	FAJ	FAK(8)	XC(7)
													STD.	LG (5)				
SC3210ATZ-LLC3212ATZ	15.50	8.00	6.25	.75	.69	2.25	3.00	17.00	18.00	3.12	5.25	6.75	7.94	10.44	4.00	13.00	14.500	1.25
SC3612ATZ-ULLC3612ATZ	17.50	9.00	7.00	.88	.81	2.62	3.50	19.00	20.00	3.12	5.88	7.25	8.56	10.31	4.62	15.25	16.750	1.25

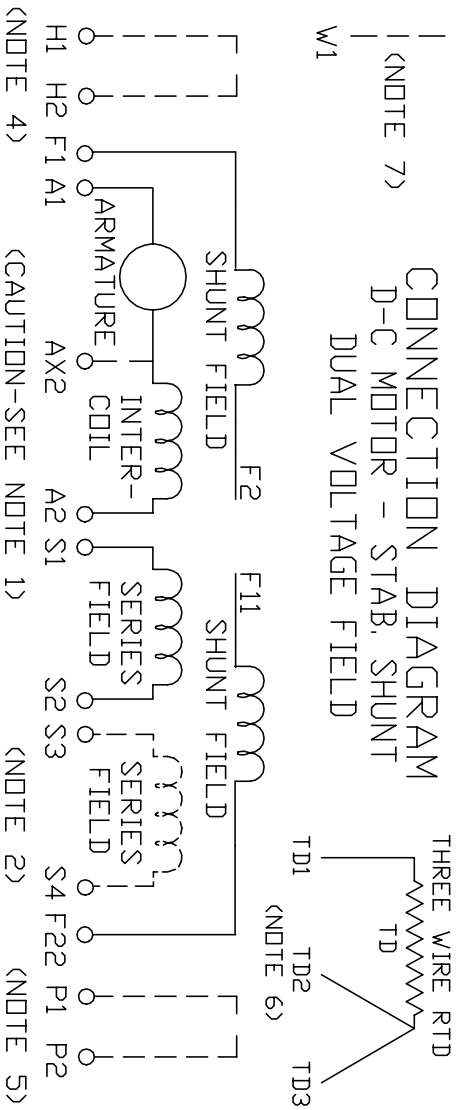
FRAME	METHOD OF DRIVE	C		B		BS	2F	DRIVE END SHAFT AND KEY								WT. LBS.
		STD.	LG (5)	STD.	LG (5)			N	N-W	UX(2)	V	R(3)	SQ	LGTH.		
SC3210ATZ-LSC3210ATZ	(6)	40.56	43.06	28.31	30.81	13.38	20.00	5.50	5.25	2.625	3.00	2.275	6.25	4.00	1.90	
MC3212ATZ-LMC3212ATZ	(6)	43.56	46.06	31.31	33.81	16.38	25.00	5.50	5.25	2.625	3.00	2.275	6.25	4.00	2.45	
LC3212ATZ-LLC3212ATZ	(6)	45.56	48.06	33.31	35.81	18.38	25.00	5.50	5.25	2.625	3.00	2.275	6.25	4.00	3.25	
MC3612ATZ-LMC3612ATZ	COUPLED	47.69	49.44	34.44	36.19	18.12	28.00	6.00	5.75	2.875	3.50	2.450	7.50	4.25	1.740	
LMC3612ATZ-ULMC3612ATZ	BELTED	48.44	50.19	34.44	36.19	18.12	28.00	6.75	6.50	3.250	6.25	2.831	7.50	5.00	1.750	
LC3612ATZ-LLC3612ATZ	COUPLED	51.44	53.19	38.19	39.94	21.88	28.00	6.00	5.75	2.875	3.50	2.450	7.50	4.25	1.905	
ULLC3612ATZ-ULLC3612ATZ	BELTED	52.19	53.94	38.10	39.94	21.88	28.00	6.75	6.50	3.250	6.25	2.831	7.50	5.00	1.915	

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

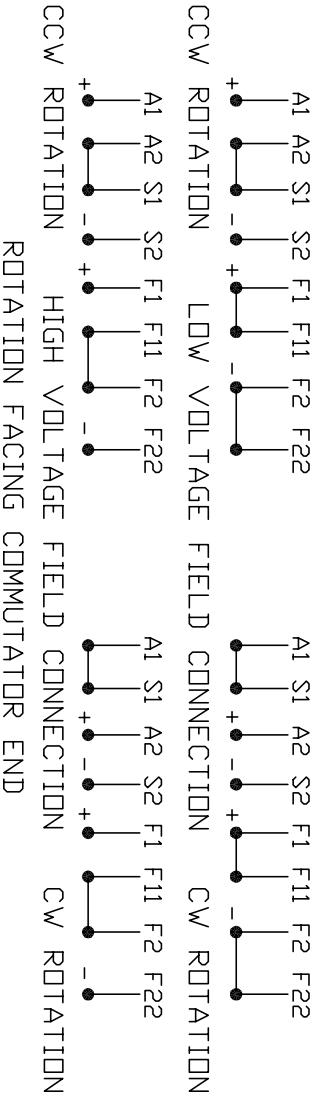
REV. DESC: CHANGE LAYOUT OF DRAWING			BALDOR		
REV. LTR: A	VERSION: 01	TDR: 0000076763	DIMENSION DRAWING, SC3210ATZ - ULLC3612ATZ, TEFC, FOOT MTG		
FILE: \RGG\00015\623	REVISED: 07:49:39 10/03/2012	BY: RGGWT	SH 1 of 1		
MTL: -					

609971-013

**CONNECTION DIAGRAM
D-C MOTOR - STAB. SHUNT
DUAL VOLTAGE FIELD**



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



- CAUTION** — ARMATURE AND SERIES FIELD MAY HAVE MULTIPLE LEADS. CONNECT ALL LUGS WITH THE SAME MARKING TOGETHER.
- 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.
- OPTIONAL CONTROL SIGNAL LEAD IS MARKED AX2. ALWAYS TAKE INTERPOLE DROP BETWEEN A2 AND AX2. NOTE: NEMA DESIGNATION FOR AX2 IS LETTER C.
- SPACE HEATERS, WHEN PROVIDED, WILL HAVE LEADS MARKED H1 AND H2, H3, H4, ETC.
- THERMAL PROTECTOR, WHEN PROVIDED, WILL HAVE LEADS MARKED P1 AND P2, P3, P4, ETC.
- WINDING RTDS, WHEN PROVIDED, WILL HAVE LEADS MARKED TD1, TD2, & TD3
- BRUSH WEAR SENSOR, WHEN PROVIDED, WILL HAVE LEAD MARKED W1.
- 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 _____ RELIANCE
ORDER NO. _____ S.D. NO. _____



Rev. BY N.L. EVANS
CHK BY N. JESCHKE
APP BY E. J. HINER
DATE 5-5-69

CONNECTION DIAGRAM
406770-2
ORIGINAL AT RRC

C/R 244907, 290048, 354478, 354480


REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	LC3212AT	50.0HP	1750	500	84.0
WINDING TYPE					
	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STAB. SHUNT	1.0	TEFC	10/F	CONT	300
POWER CODE					
	TYPE	WK ² (LB-FT ²)	HOT ARM.CIR.RES.	FLD. AMPS@25 °C	HOT FIELD RES
C	TR	19.49	.290	1.97	21.9

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H 20)	TURNS PER COIL SHUNT/SERIES	TEST DATE
6.54	58.7	-/-	1100/2	-

LOAD PERFORMANCE					
LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	3.9	0	0	1887	0
1/4	21	32.5	11.4	1841	77.1
2/4	42	72.8	24.9	1796	86.4
3/4	63	113	38.0	1763	88.5
4/4	84	153	50.6	1743	88.8
O.L.	126	226	74.6	1733	87.6

RPM VS. FIELD AMPS			Eg VS. FIELD AMPS		
FIELD AMPS	RPM N.L.	RPM F.L.	Eg N.L. @ BASE SPEED	Eg F.L. @ BASE SPEED	
1.36	1887	1742	461	436	
1.26	2038	1846	429	407	
1.15	2205	1969	396	377	
1.05	2407	2118	363	345	
.947	2655	2300	329	313	

REMARKS: TYPICAL DATA
MAXIMUM SAFE SPEED = 3600 RPM

	DR. BY B. GRANT	D-C MOTOR PERFORMANCE DATA DG6296A ISSUE DATE 5-27-87
	CK. BY T. EVON	
	APP. BY 5-27-87	

