BALDOR
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BALDOR • RELIANCE

Product Information Packet

D50150RS-BV

150HP,1750RPM,DC,3612ATZ,DPG-FV,

For Baldor Sales and Support, Please Contact: Walker EMD • http://www.walkeremd.com • Toll-Free: (800) 876-4444 • Phone: (203) 426-7700 • Fax: (203) 426-7800

Part Detail			
Type:	DC	**Prod. Type:**	TR
Power Code:	C	**Weight:**	1630
Frame Group:	MC 3612ATZ	**Mounting Pos.:**	F2
HP:	150	**Enclosure:**	DPFV
RPM:	1750/2000	**Wound:**	STAB SHUNT
Service Factor:	1.0	**Arm V:**	500
Arm A:	240.00	**Field V:**	300
Field A:	4.81	**Field A Hot:**	3.47/2.98
Insulation Class:	F	**Ambient:**	40
Duty:	CONT	**DE Bearing:**	95BC02J30X
ODE Bearing:	80BC02J30X	**Brushes:**	419904-52AF
Brush Qty.:			

609972-049

INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS – RPM III

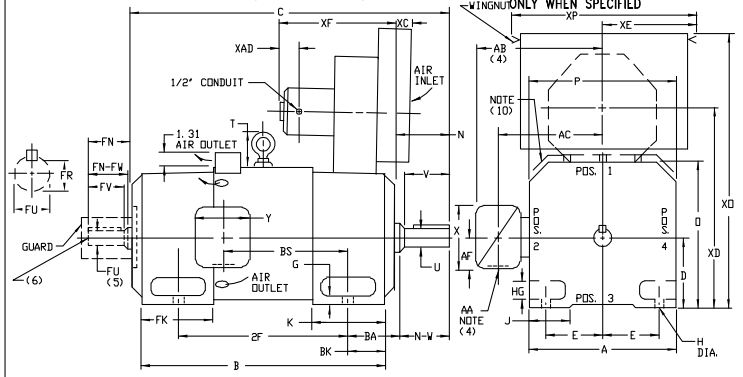
ENCLOSURE: DRIP-PROOF FULLY-GUARDED, SPLASHPROOF

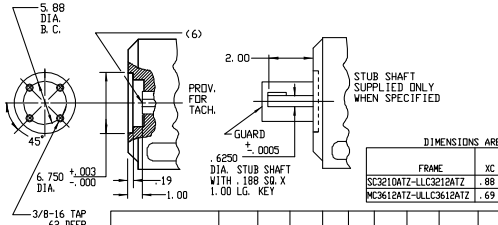
MOUNTING:FOOT

COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR AIR FILTERED– SPECIAL BAFFLE

ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

FRAMES SC3210ATZ THRU ULLC3612ATZ





DIMENSIONS ARE IN INCHES

FRAME	XC	XB	XE	XF	XD	XP	XAD
SC3210ATZ-LLC3212ATZ	.88	23.44	11.25	17.69	38.63	22.50	3.06
MC3612ATZ-ULLC3612ATZ	.69	23.94	9.83	18.81	38.25	22.50	(11)

FRAME	A	D(1)	E	G	H	HG	J	O	P	T	BA	K	FK STD.	FK LG(8)	BK
SC3210ATZ-LLC3212ATZ	15.50	8.00	6.25	.75	6.9	2.25	3.00	15.81	15.62	4.25	5.25	6.75	7.94	10.44	4.00
MC3612ATZ-ULLC3612ATZ	17.50	9.00	7.00	.88	8.1	2.62	3.50	17.81	17.62	4.25	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	U(2)	V	R(3)	SQ.	LGTH.	OPPOSITE DRIVE END SHAFT AND KEY (5) FN	FN-FW	FU(2)	FV	FR(3)	SQ.	LGTH	WT. LBS.
SC3210ATZ- LSC3210ATZ	(9)	36.25	38.75	28.31	30.81	13.38	20.00	5.50	5.25	2.625	5.00	2.275	.625	4.00	4.75	4.50	2.250	4.25	1.972	.500	3.25	1115
MC3212ATZ- LMC3212ATZ	(9)	39.25	41.75	31.31	33.81	16.38	25.00	5.50	5.25	2.625	5.00	2.275	.625	4.00	4.75	4.50	2.250	4.25	1.972	.500	3.25	1210
LC3212ATZ- LLC3212ATZ	(9)	41.25	43.75	33.31	35.81	18.38	25.00	5.50	5.25	2.625	5.00	2.275	.625	4.00	4.75	4.50	2.250	4.25	1.972	.500	3.25	1290
UMC3212ATZ-ULMC3212ATZ	BELTED	39.75	42.25	31.31	33.81	16.38	25.00	6.00	5.75	2.875	5.50	2.450	.750	4.25	4.75	4.50	2.250	4.25	1.972	.500	3.25	1180
MC3612ATZ- LMC3612ATZ	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
ULC3612ATZ-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

(1) "D" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP .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, WILL 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 OPP. DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER.
(8) DIMENSION FOR FRAMES WITH PREFIX LSC, LMC, LLC, ULMC, OR ULLC.
(9) METHOD OF DRIVE: COUPLED OR BELTED.
(10) FOR HORIZONTAL APPLICATIONS ONLY.
(11) "XAD" DIMENSION IS NOT APPLICABLE TO C360 FRAMES. (BLOWER MOTOR HAS CONDUIT BOX.)
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-3, 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
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		
REV. LTR: –	VERSION: 00	TDR: 000000577407
FILE: \RGG\00015\628	REVISED: 01:15:54 01/26/2011	BY: CONNAS
MTL: –		

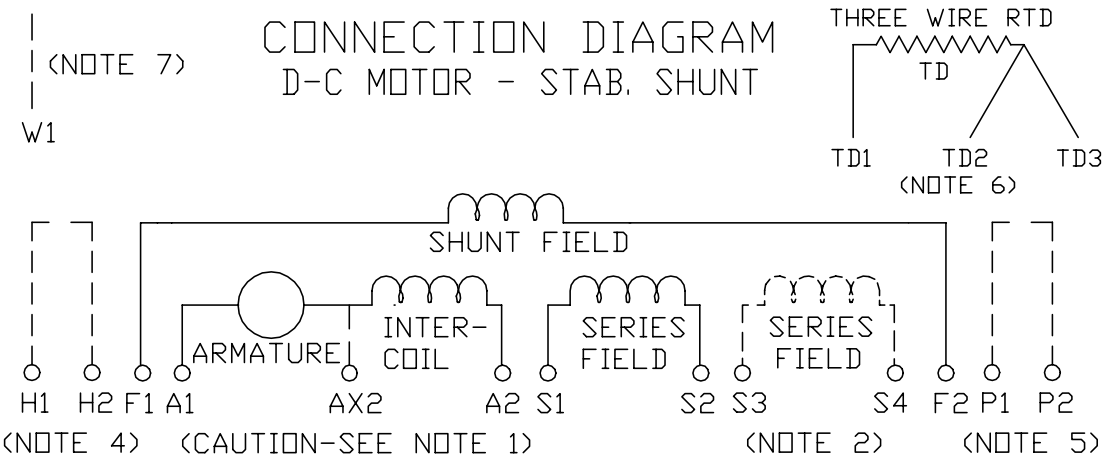
BALDOR

DIMENSION DRAWING,SC3210ATZ – ULLC3612ATZ,DPP,FOOT MTG.

SH 1 of 1

609972-049

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 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. _____

RELIANCE ELECTRIC
CLEVELAND, OHIO 44117 U. S. A.

DR. BY N. L. EVANS
CK. BY N. JUESCHKE
APP. BY E. J. HINGER
DATE 5-5-69

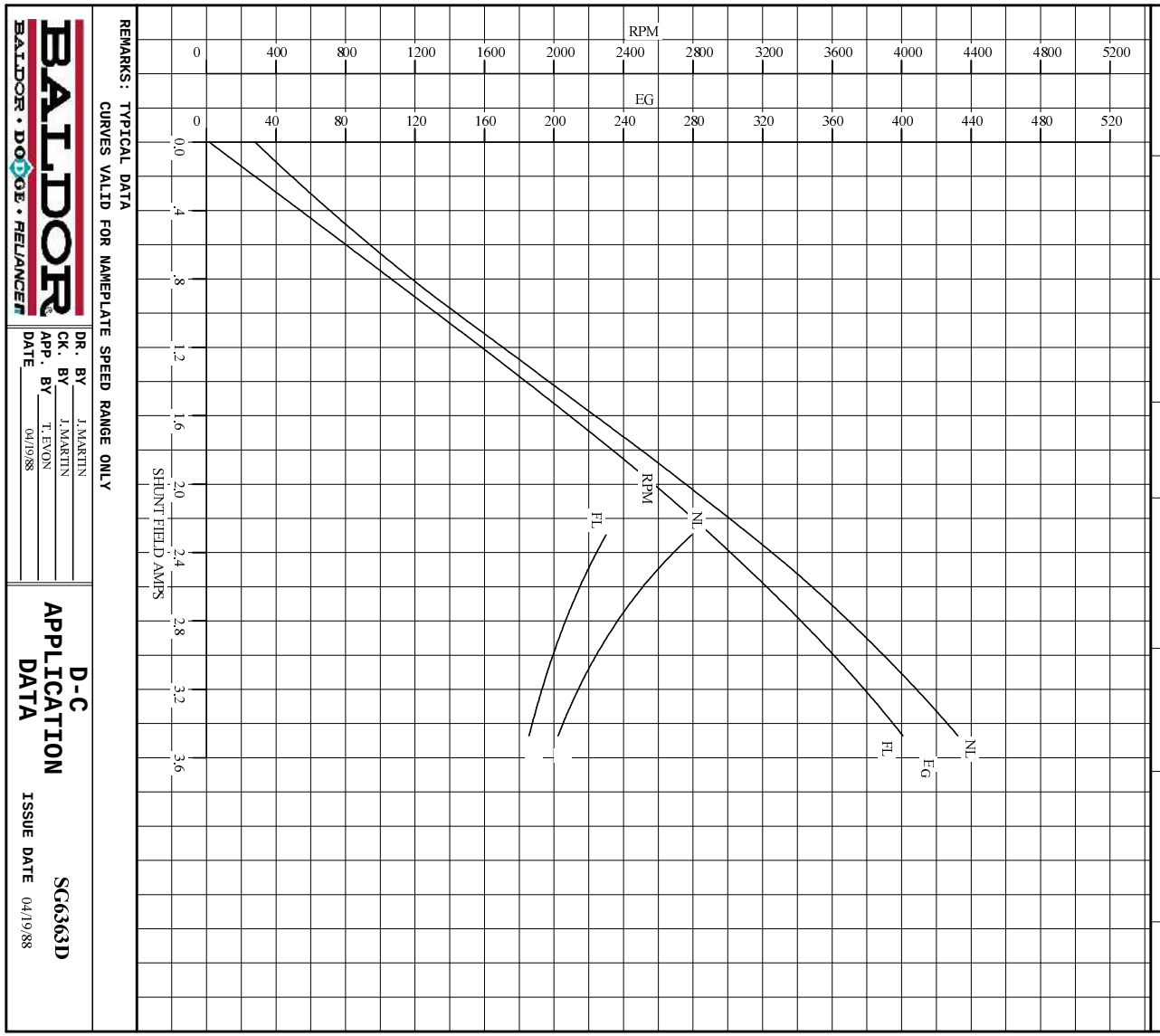
CONNECTION DIAGRAM

406770-1
ORIGINAL AT RRC

C/R 290048, 354478, 354480

REL S.O.		FRAME	RATING		BASE SPEED		WINDING TYPE			
		MC3612AT	150HP		1750		STAB SHUNT			
S.F.	ENCL.	AMB°C/INSUL	DUTY		POWER CODE/FORM FACTOR			TYPE	WINDER RPM	WK²(LB-FT²)
1.0	DPFV	40/F	CONT		C			TR	-	38.69
COOLING AIR(CFM/IN H_2O)	$\bar{\tau}$ (sec)	$\bar{R}$ (hot)	T_E	T_M	BASIC RPM	MAX CONT RPM				MAX. SAFE
1000/4.0	.488	.0362	.0270	.0177	2100	2300				3400

WINDING	VOLTS	RESISTANCE		CURRENT		INDUCTANCE	TURNS
		25°C	HOT	25°C	HOT		PER COIL
ARM CIRCUIT	500	.0492	.0624	-	240	1.97 mH	-
SERIES S1-S2	-	.00413	.00532	-	240	-	2.50
SHUNT F1-F2	300	62.4	86.4	4.81	3.47	25.9 H	775



REMARKS: TYPICAL DATA

CURVES VALID FOR NAMEPLATE SPEED RANGE ONLY

BALDOR • DODGE • RELIANCE

DR. BY J.MARTIN
CK. BY J.MARTIN
APP. BY T.EVON
DATE 04/19/88

D-C APPLICATION DATA

SG6363D

ISSUE DATE 04/19/88

REL S.O.	FRAME	RATING	RPM	ARM. VOLTS	ARM. AMPS
	MC3612AT	150HP	1750	500	240

WINDING TYPE	S.F.	ENCL.	AMB °C/INSUL	DUTY	FIELD VOLTS
STAB. SHUNT	1.0	DPFV	40/F	CONT	300

POWER CODE	TYPE	WK^2(LB-FT ^{2})	HOT ARM.CIR.RES.	FLD. AMPS@25 °C	HOT FIELD RES
C	TR	38.69	.0623	4.80	86.4

ARM. CIR. IND. (mh)	FIELD IND. (H)	COOLING AIR(CFM/IN H_2O)	TURNS PER COIL SHUNT/SERIES	TEST DATE
1.96	25.9	1000/4.0	775/2.5	-

LOAD PERFORMANCE

LOAD	AMPERES	TORQUE IN LB.-FT.	OUTPUT IN HP	RPM	% EFFICIENCY
NO LOAD	5.0	0	0	2010	0
1/4	60	98.8	36.6	1947	83.2
2/4	120	209	75.5	1899	89.6
3/4	180	319	114	1868	91.2
4/4	240	427	151	1853	91.5
O.L.	360	633	222	1844	90.7

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
3.47	2009	1852	432	400
3.17	2150	1937	407	376
2.88	2311	2034	378	350
2.59	2518	2152	347	321
2.29	2792	2300	312	290

MAXIMUM SAFE SPEED = 3400 RPM

REMARKS: TYPICAL DATA

BALDOR • DODGE • RELIANCE

DR. BY J. MARTIN
CK. BY J. MARTIN
APP. BY T. EVON
DATE 04/19/88

D-C MOTOR PERFORMANCE DATA DG6363D ISSUE DATE 04/19/88