

**BALDOR® • RELIANCE** 

**Product Information Packet**

**SAFE-WAY ELECTRIC MOTOR COMPANY**

**D5060RS-BV**

**60HP,1750RPM,DC,2812ATZ,DPG-FV,**

Part Detail							
Revision:	-	Status:	PRD/A	Change #:		Proprietary:	No
Type:	DC	Prod. Type:		Elec. Spec:	G7693A A	CD Diagram:	406770-001
Enclosure:	DP	Mfg Plant:		Mech. Spec:		Layout:	609952-096
Frame:	MC281	Mounting:	F2	Poles:	00	Created Date:	04-09-2015
Base:		Rotation:	R	Insulation:	F	Eff. Date:	04-13-2015
Field Type:		Literature:		Elec. Diagram:		Replaced By:	

Specs			
Enclosure:	DP		
Frame:	MC2812ATZ		
Frame Material:	Steel		
Agency Approvals:	CCSA US		
Base Indicator:	Rigid		
Bearing Grease Type:	Polyrex EM (-20F +300F)		
Drip Cover:	No Drip Cover		
Duty Rating:	CONT		
Feedback Device:	NO FEEDBACK		
Field Winding Type:	STAB SHUNT		
Frame Prefix:	MC		
Heater Indicator:	No Heater		
Insulation Class:	F		
Lifting Lugs:	Standard Lifting Lugs		
Mounting Arrangement:	F2		
Shaft Extension Location:	Pulley End		

<b>Shaft Ground Indicator:</b>	No Shaft Grounding		
<b>Shaft Slinger Indicator:</b>	No Slinger		
<b>Motor Standards:</b>	NEMA		

<b>Nameplate 000613006LP</b>	
<b>CAT.NO.</b>	D5060RS-BV
<b>FR</b>	MC 2812ATZ
<b>ENCL.</b>	DP
<b>ENCL MOD</b>	FORCE VENT
<b>MAX SAFE SPEED</b>	4500
<b>FIELD DATA</b>	
<b>WINDING</b>	STAB SHUNT
<b>VOLTS</b>	300
<b>MAX AMPS @ 25 C</b>	3.43
<b>HOT AMPS</b>	2.41/ 1.90
BRUSH:419904051AD; AIR BAFFLED	
<b>SPEC NO.</b>	T28T1330
<b>HP</b>	60
<b>RPM</b>	1750/ 2100
<b>VOLTS</b>	500
<b>AMPS</b>	100.00
<b>SER.NO.</b>	
<b>DUTY</b>	CONT
<b>S.F.</b>	1.0
<b>INSUL</b>	F
<b>AMB.</b>	40
<b>POWER CODE</b>	C
<b>D.E. BRG.</b>	65BC03J30X
<b>O.D.E. BRG.</b>	55BC02J30X
<b>MIN. AMB.</b>	0
<b>TYPE</b>	TR

Parts List		
Part Number	Description	Quantity
SA297062	SA T28T1330	1.000 EA
AA016113	AA T28T1330	1.000 EA
000613006LP	EXTRUDER DUTY D-C MOTOR W/CSA	1.000 EA
000692000FP	NP, WARNING LIFT INSTRUCTIONS	1.000 EA
000692000FS	WARNING LABEL	1.000 EA
036170004EA	ROUND HEAD DRIVE SCREW	6.000 EA
406770001	C/D TAG (STAB SHUNT)	1.000 EA
036000020HB	HHCS M6-1.0X20MM PLATED	4.000 EA
036000020KB	MHHCS M10-1.5X20MM PLTD.	4.000 EA
036501008AB	KPNUT M6-1.0 ZINCPLETED	8.000 EA
036610010AB	MHSLW M10 PLATED	4.000 EA
419904-51AD	BRUSH C	8.000 EA
419905003A	FLAT WASHER ROCKER RPM III RGG	4.000 EA
419905008A	HARDWARE	8.000 EA
706364051RF	BRHLD METRIC SPRING CHG.	4.000 EA
706372011RG	BR STUD/ROCKER	1.000 EA
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
034693001AB	PPLG - G508- use 034692001AB	1.000 EA
035000001A	ALFTG 1/8" 1610-BL	1.000 EA
035000001BB	GREASE FTG,GRS.IN	1.000 EA
036000075KB	HHCS M10 75MM ZINCPLAT	3.000 EA
036100060JA	M8-1.25 X 60MM HXSOCHDCS	3.000 EA
036310012FB	PHMS M4 X 12MM M2	8.000 EA
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA

Parts List (continued)		
Part Number	Description	Quantity
036500011AB	METRIC NUT M12-1.75 PLT.	4.000 EA
036501006AB	KPNUT M4 ZINC	8.000 EA
048977006C	GRFTG - XP	1.000 EA
049730000L	BPLUG	6.000 EA
400638001AD	WAVEN - 400	1.000 EA
412118001B	3/8-16 X 3/4 DRAIN SSTL.	1.000 EA
418057013A	GROMT	2.000 EA
418150003A	GREASE FITTING CAP	2.000 EA
609830005V	TBOLT METRIC RP609830-	4.000 EA
706311003E	PLATE	1.000 EA
706311003F	BAFFLE CX NOMEX .24 MI	1.000 EA
706311003X	BAFLE	1.000 EA
801928052A	BRKT,ODE,C280	1.000 EA
801929058A	BRKT,DE,C280	1.000 EA
000613006NT	NAME PLATE IEC	1.000 EA
032018004CK	HHCS 3/8-16X1/2L PLATED	4.000 EA
032018006CK	HHCS 3/8-16X3/4L PLATED	4.000 EA
034017014AB	LCKW 3/8 STD. PLATED	4.000 EA
036000012HB	HHCS M6X12MM LONG PLATED	4.000 EA
036000012JB	M8-1.25 X 12MM HXHDC	3.000 EA
036000020JB	HHCS M8-1.25X20L PLTD-250	4.000 EA
036000020JB	HHCS M8-1.25X20L PLTD-250	4.000 EA
036000045HB	MHHCS M6X45MM PLATED	3.000 EA
036000045JB	M8-1.25 X 45MM HXHCS	4.000 EA

Product Information Packet: D5060RS-BV - 60HP,1750RPM,DC,2812ATZ,DPG-FV,

036010012GB	M5-.8 X 12 HXWHD SCREW	6.000 EA
036600009AB	METRIC FLWASH M8 PLATED	3.000 EA
036620009AB	M8 EXTERNAL LK WASHER	1.000 EA
074875000A	CONDUIT BOX COVER	1.000 EA
402731000A	GASK 320-400	1.000 EA
410978010E	INLET FLGE	1.000 EA
410978019A	SCREEN, INLET FLANGE	1.000 EA
417077121	FILTER KIT	1.000 EA
417733004D	GASKET CONDUIT BOX	2.000 EA
418014004A	ADAPT 418014-4WCA	1.000 EA
418018070A	TAG "WARNING THERMOSTA	1.000 EA
418018074A	GROUND LABEL G100 METRIC 160 D.C.	1.000 EA
422919053	HHCVR KIT, C280, DE, XT	1.000 EA
422919053	HHCVR KIT, C280, DE, XT	1.000 EA
422919053	HHCVR KIT, C280, DE, XT	1.000 EA
422919064	HHCVR KIT, C280, ODE, SOLID	1.000 EA
422919064	HHCVR KIT, C280, ODE, SOLID	1.000 EA
422919075	HHCVR KIT, C280, ODE, LEXAN	1.000 EA
610409052A	ADAPT	1.000 EA
610490001AF	1.5HP,3450//2850RPM,3PH,60//50HZ,56C,352	1.000 EA
611917001F	GASKT	1.000 EA
611917002F	GASKT	1.000 EA
611965001A	WHEEL, BLOWER	1.000 EA
705034031A	BAFFL	1.000 EA
706303015A	GUARD	2.000 EA
706303015B	GUARD	2.000 EA

Product Information Packet: D5060RS-BV - 60HP,1750RPM,DC,2812ATZ,DPG-FV,

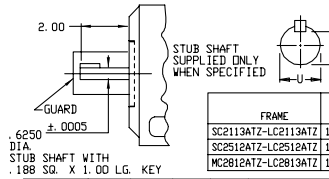
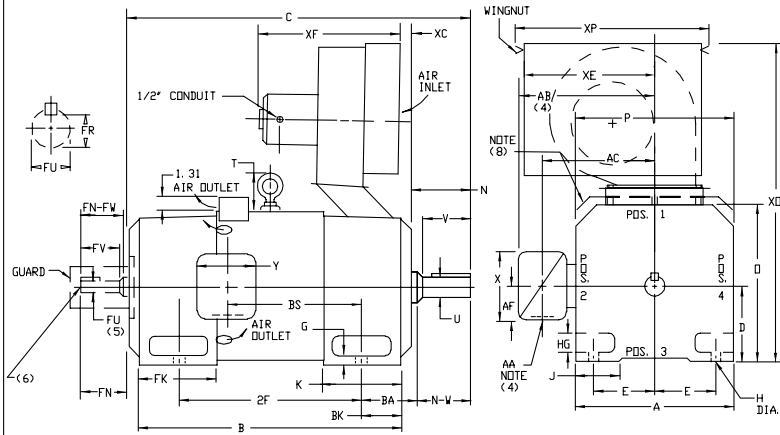
706305026A	GUARD,SHAFT	1.000 EA
706320009A	CB, 2.00 CONDUIT, METRIC, SHEET METAL	1.000 EA
708528004B	BLOWER HOUSING	1.000 EA
000640000P	TAG WINDING THERMOST	1.000 EA
000692000NG	LABEL ;NP 4POLE METRIC LABEL	1.000 EA
034180028HA	KEY 5/8X5/8X3-1/2L-445	1.000 EA
418018116	WARNING PLATE	1.000 EA



609952-096

## INDUSTRIAL DIRECT CURRENT MOTORS AND GENERATORS - RPM III

ENCLOSURE: DRIP-PROOF FULLY-GUARDED, SPLASHPROOF  
 COOLING: FORCE VENTILATED WITH INTEGRAL BLOWER AND MOTOR WITH AIR FILTERED-SPECIAL BAFFLE  
 MOUNTING: FOOT  
 METHOD OF DRIVE: COUPLED OR BELTED  
 FRAMES SC2113ATZ THRU C2813ATZ  
 ACCESSORIES: PROVISION FOR TACHOMETER MOUNTING ONLY WHEN SPECIFIED

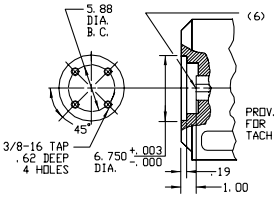


DIMENSIONS ARE IN INCHES

FRAME	MC	ME	MF	MD	MP
SC2113ATZ-LC2113ATZ	1.00	10.00	17.25	28.00	14.50
SC2512ATZ-LC2512ATZ	2.50	10.00	17.25	30.31	14.50
MC2812ATZ-LC2813ATZ	1.75	10.00	18.50	30.62	14.50

FRAME	A	B(1)	E	G	H	HG	J	D	P	T	BA	K	FK	BK
SC2113ATZ-LC2113ATZ	10.25	5.25	4.25	.44	1.38	1.75	10.44	10.31	2.56	3.50	5.19	6.81	2.38	3.00
SC2512ATZ-LC2512ATZ	12.31	6.25	5.00	.56	1.62	2.00	12.50	12.44	3.06	4.25	6.06	8.00	3.00	3.00
MC2812ATZ-LC2813ATZ	13.78	7.00	5.50	.62	1.56	1.88	14.00	13.94	3.38	4.75	6.75	9.19	3.50	3.50

FRAME	C	B	BS	2F	DRIVE END SHAFT AND KEY										OPPOSITE DRIVE END SHAFT AND KEY(S)					WT. LBS.
					N	N-V	U(2)	V	R(3)	SO	LGTH	FN	FN-FW	FU(2)	FV	FR(3)	SO	LGTH		
SC2113ATZ	28.38	22.50	11.38	18.00	4.00	3.75	1.875	3.50	1.591	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.25	345	
MC2113ATZ	29.62	23.75	12.62	18.00	4.00	3.75	1.875	3.50	1.591	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.25	370	
LC2113ATZ	31.25	25.38	14.25	18.00	4.00	3.75	1.875	3.50	1.591	500	2.50	3.50	3.25	1.625	3.00	1.416	3.75	2.25	400	
SC2512ATZ	31.69	25.06	12.06	20.00	4.50	4.25	2.125	4.00	1.845	500	3.00	4.00	3.75	1.875	3.50	1.591	500	2.50	535	
MC2512ATZ	33.19	26.56	13.56	20.00	4.50	4.25	2.125	4.00	1.845	500	3.00	4.00	3.75	1.875	3.50	1.591	500	2.50	570	
LC2512ATZ	34.69	28.06	15.06	20.00	4.50	4.25	2.125	4.00	1.845	500	3.00	4.00	3.75	1.875	3.50	1.591	500	2.50	610	
MC2812ATZ	37.38	29.94	14.25	22.00	5.00	4.75	2.375	4.50	2.021	625	3.50	4.50	4.25	2.125	4.00	1.845	500	3.00	810	
LC2812ATZ	39.62	32.19	16.50	22.00	5.00	4.75	2.375	4.50	2.021	625	3.50	4.50	4.25	2.125	4.00	1.845	500	3.00	885	
LC2813ATZ	41.25	33.81	18.12	25.00	5.00	4.75	2.375	4.50	2.021	625	3.50	4.50	4.25	2.125	4.00	1.845	500	3.00	940	



- (1) "B" DIMENSION WILL NOT BE EXCEEDED. SHIMS UP TO .03 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. 609959-1, "X"/P/ 609959-2, MILL 609959-3)
  - (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 DRP, DRIVE END, ADD .25 TO "C" DIM. FOR BRACKET COVER.
  - (8) FOR HORIZONTAL APPLICATIONS ONLY.
- TERMINAL BOX CAN BE ROTATED FOR LEAD OUTLET AT TOP, SIDES OR BOTTOM. TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, W-1, V-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. MOTOR WEIGHT MAY VARY 15% FOR NON-STANDARD RATINGS AND/OR ACCESSORIES. IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
 BLOWER MOTOR

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

REV. DESC: UPDATE FRAME SIZE	VERSION: 01	TDR: 000000845571
REV. LTR: A	REVISED: 10:46:47 03/25/2014	BY: RGGWT
FILE: \RGG\00015\585		
MTL: -		

**BALDOR**

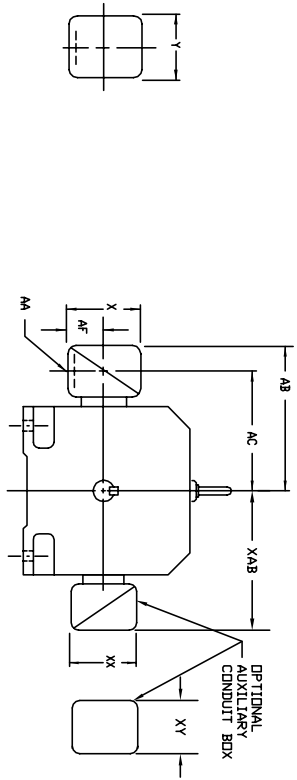
DIMENSION DRAWING, SC2113ATZ - C2813ATZ, DPP, FOOT MTG.

SH 1 of 1

609952-096

609959-001

**INDUSTRIAL DIRECT CURRENT MOTORS  
AND GENERATORS - RPM III**  
TERMINAL BOX DIMENSIONS  
STANDARD SIZE AND ONE SIZE LARGER  
FRAMES C2113ATZ THRU C2815ATZ



DIMENSIONS ARE IN INCHES

FRAME SIZE	STANDARD SIZE						ONE SIZE LARGER								
	MAX. AMPS	AK(1)	AB	AC	AF	PART NUMBER	AK(1)	AB	AC	AF	PART NUMBER				
C2113ATZ	40	3/4 & 1"	8.97	7.47	1.94	4.38	5.00	7.05029-1-R	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	7.05029-1-R
C2115ATZ	96	1-1/4 & 1-1/2	10.03	8.03	2.50	5.50	6.12	7.05029-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	7.05030-1-R
(2)	208	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	7.05030-1-R	2" & 2-1/2	11.16	8.41	3.19	7.00	7.62	7.05030-1-R
C2513ATZ	40	3/4 & 1"	10.03	8.53	1.94	4.38	5.00	7.05029-1-R	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	7.05029-1-R
C2515ATZ	96	1-1/4 & 1-1/2	11.09	9.09	2.50	5.50	6.12	7.05029-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	7.05030-1-R
(2)	208	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	7.05030-1-R	2" & 2-1/2	12.22	9.47	3.19	7.00	7.62	7.05030-1-R
C2813ATZ	128	2"	14.03	10.53	4.25	8.44	7.25	7.4874-R	3"	14.47	11.22	4.25	8.44	7.25	7.4874-R
C2815ATZ	185	3"	14.47	11.22	4.25	8.44	7.25	7.4874-R	4"	15.91	11.84	5.38	10.56	9.00	7.0308-3-R
(2)	259	4"	15.91	11.84	5.38	10.56	9.00	7.0308-3-R	5" (4)	18.72	13.47	7.00	12.75	15.00	7.02658-1-C

FRAME SIZE	STANDARD SIZE						ONE SIZE LARGER								
	MAX. AMPS	AK(3)	AB	AC	AF	PART NUMBER	AK(3)	AB	AC	AF	PART NUMBER				
C2113ATZ	18	3/4	10.03	8.03	2.50	5.00	5.75	7.05028-2-S	1"	10.03	8.03	2.50	5.00	5.75	7.05028-2-T
C2115ATZ	40	1"	10.03	8.03	2.50	5.00	5.75	7.05028-2-R	1-1/2	10.97	8.53	3.00	6.00	7.00	7.05029-2-R
(2)	96	1-1/2	10.97	8.53	3.00	6.00	7.00	7.05029-2-R	2"	10.97	8.53	3.00	6.00	7.00	7.05029-2-S
208	2"	10.97	8.53	3.00	6.00	7.00	7.05029-2-S	2-1/2	12.66	8.91	3.62	7.88	9.23	7.05030-2-R	
18	3/4	11.09	9.09	2.50	5.00	5.75	7.05028-2-T	1"	11.09	9.09	2.50	5.00	5.75	7.05028-2-T	
C2513ATZ	40	1"	11.09	9.09	2.50	5.00	5.75	7.05028-2-T	1-1/2	12.03	9.59	3.00	6.00	7.00	7.05029-2-R
C2515ATZ	96	1-1/2	12.03	9.59	3.00	6.00	7.00	7.05029-2-S	2"	12.03	9.59	3.00	6.00	7.00	7.05029-2-S
(2)	208	2"	12.03	9.59	3.00	6.00	7.00	7.05029-2-S	2-1/2	12.03	9.59	3.00	6.00	7.00	7.05029-2-R
C2813ATZ	128	2"	12.78	10.34	3.00	6.00	7.00	7.5460-T	3"	14.47	10.72	3.62	7.88	9.23	7.6700-R
C2815ATZ	185	3"	14.47	10.72	3.62	7.88	9.23	7.6700-R	4"	15.78	11.59	4.12	9.50	10.50	7.6700-R
(2)	259	4"	15.78	11.59	4.12	9.50	10.50	7.6700-R	5" (4)	18.59	13.34	7.00	12.75	15.00	7.6870-S

FRAME SIZE	STANDARD SIZE						ONE SIZE LARGER					
	AMP'S	AB	AC	AF	X	Y	AB	AC	AF	X	Y	
C210	100	10.71	8.98	2.72	7.48	7.48	7.48	7.48	7.48	7.48	7.48	
200	11.26	9.25	3.35	8.82	8.82	8.82	7.48	7.48	7.48	7.48	7.48	
100	11.30	9.57	2.72	7.48	7.48	7.48	7.48	7.48	7.48	7.48	7.48	
200	11.85	9.84	3.35	8.82	8.82	8.82	7.48	7.48	7.48	7.48	7.48	
400	17.48	12.75	6.20	14.39	14.39	14.39	7.48	7.48	7.48	7.48	7.48	
800	17.48	12.75	6.20	14.39	14.39	14.39	7.48	7.48	7.48	7.48	7.48	
200	12.60	10.99	3.76	8.82	8.82	8.82	7.48	7.48	7.48	7.48	7.48	
400	18.27	13.54	6.20	14.39	14.39	14.39	7.48	7.48	7.48	7.48	7.48	
800	18.27	13.54	6.20	14.39	14.39	14.39	7.48	7.48	7.48	7.48	7.48	
1600	18.27	13.54	7.68	15.35	15.35	15.35	7.48	7.48	7.48	7.48	7.48	

(1) \*AM. CONDUIT  
(2) STEEL TERMINAL BOX FOR C2113ATZ AND C2513ATZ  
(3) \*AM. PIPE TAP  
(4) TERMINAL BOX 76870-9R EXTENDS BELOW MOTOR FEET.  
TERMINAL BOX CAN BE ROTATED FOR LEAD DULLET AT TOP, SIDES OR BOTTOM.  
TERMINAL BOX LOCATED ON OPPOSITE SIDE WHEN F-2, V-1, V-4, V-5, V-7,  
OR C-1 MOUNTING IS SPECIFIED. BOX LOCATED ON TOP WHEN SPECIFIED.  
FOR \*X/P TERMINAL BOX DIMENSIONS SEE 609959-2.  
FOR \*\*X/P TERMINAL BOX DIMENSIONS SEE 609959-3.

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

REV. DESC: ADD 706310-63G C/BOX TO C250 AND C280 FRAMES	VERSION: 01	TDR: 000000816512
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FILE: \RGG\00021\153		REVISED: 03:09:09 09/06/2013
MTL: -		BY: RGGWT



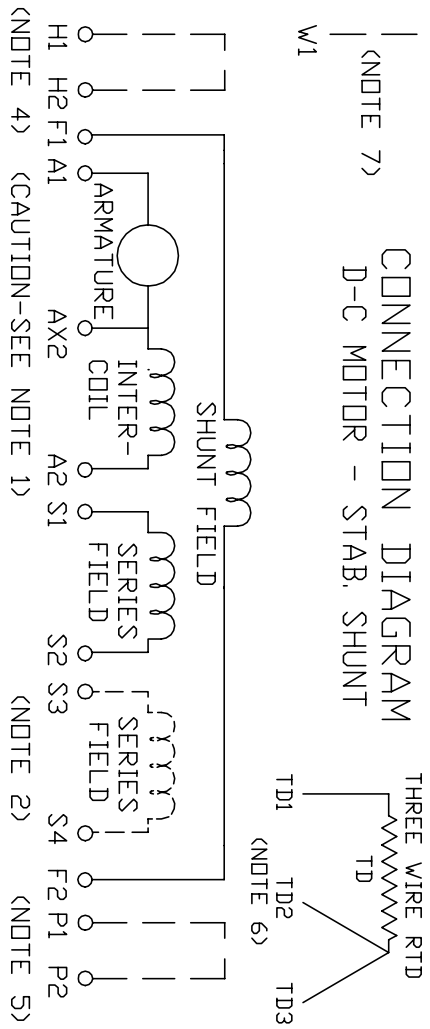
DIMENSION SHEET  
SH 1 of 1

609959-001

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

- 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 RTD'S, 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 DRIVE END BRACKET, ADJACENT TO THE TERMINAL BOX FOR MOTOR GROUNDING. GROUND LEAD, WHEN PROVIDED, WILL BE GREEN.
- CUSTOMER \_\_\_\_\_ RELIANCE  
CUSTOMER ORDER NO. \_\_\_\_\_ S.D. NO. \_\_\_\_\_

REV. DESC: DELETED DUPLICATE WORDS FROM NOTE 8		
REV. LTR: A	VERSION: 01	TDR: 000000970330
FILE: \RSN\00026\422	REVISED: 10:19:12 03/11/2016	BY: RAGTBM
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**BALDOR**

D-C MOTOR CONNECTION DIAGRAM STAB. SHUNT

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