



Field Replacement of Current Voltage Monitor (CVM) In Constant Current Regulators and ACE Combo Boxes

Document No. ALN105

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ADB Airfield Solutions

P.O. Box 30829 Tel: (614) 861-1304
977 Gahanna Parkway Fax: (614) 864-2069
Columbus, OH 43230

Record of Changes

Page	Rev	Description	EC No.	Checked	Approved	Date
All	A	Released new Service Bulletin	01237	WT	WT	
	B	Changed company name to ADB		JWC	JWC	3/17/10

CVM Installation Instructions

1. Introduction

This service bulletin provides instructions for field replacement of the Current Voltage Monitor (CVM) in the ADB Constant Current Regulars as listed in Table 1 .

2. Special Tools and Equipment Required

Refer to Tables 1 and 2 for the Retrofit Kit contents and tools and equipment required to install the CVM.

Table 1. Required Equipment Supplied

Retro Fit Kit Number Description ¹	Where Used	Quantity ²
94A0395/1 6.6A	CCF66XXXXXX	1
94A0395/2 20A	CCF20XXXXXX	1
94A0395/3 6.6A	ACE Combo Box	1
94A0395/4 20A	ACE Combo Box	1
94A0395/5 6.6A	PPF66XXXXXX	1
94A0395/6 20A	PPF20XXXXXX	1
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Notes:

Table 2. Required Equipment Not Supplied

Description	Part No.
L828 CCT CCR Instruction Manual	96A0296
L828 CCF CCR Instruction Manual	96A0288
L828 PPF CCR Instruction Manual	96A0306
ACE Combo Box Instruction Manual	

3. CVM Installation Instructions



WARNING: Disconnect equipment from line voltage. Failure to observe this warning may result in personal injury, death, or equipment damage.

Replacing CVM on CCR Component Plate

1. Locate the existing CVM and disconnect all electrical leads attached to the CVM. Remove CVM from the component mounting plate and remove any mounting bracket associated with the CVM. See Figure 1 to identify the existing CVM and Figure 2 to identify the new CVM.



Figure 1 Existing CVM on Mounting Bracket

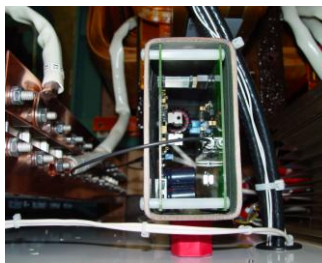


Figure 2 New CVM Mounted Directly on Component Plate

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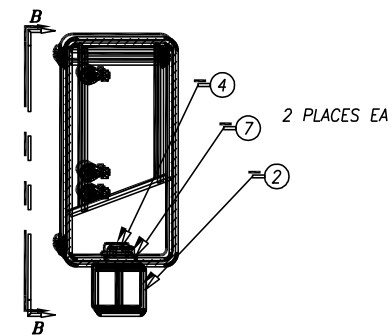
- To install the new CVM follow instructions on drawings and Figures listed below: Drawings are found at the end of this service bulletin.

Type	Retrofit Kit	Installation Dwg No	Page
CCF66XX-XXXX	94A0395-1	94A0395-X	8
CCT20XX-XXXX	94A0395-2	94A0395-X	8
ACE Combo Box 44A6125-XXXX	94A0395-3	94A0395-X	7
ACE Combo Box 44A6125-XXXX	94A0395-4	94A0395-X	7
PPF66XX-XXXX	94A0395-5	94A0395-X	6
PPF20XX-XXXX	94A0395-6	94A0395-X	6

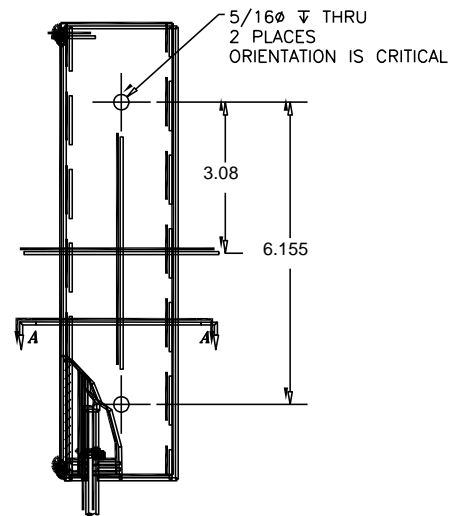
FOR A 20A CIRCUIT, MAKE SURE THE CVM HAS A HEAT SINK ON THE CURRENT SENSE RESISTORS.

MEASURE THE CURRENT THROUGH ST3 ON THE 20A STEP AND CORRECT PER TABLE :

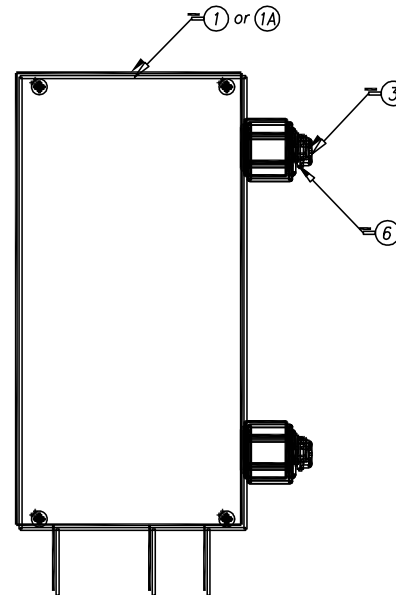
6.6A	ST3 and ST4 on the CVM are reversed
13.2A	The CVM is wired correctly
26.6A	The phase of the 20A to 6.6A transformer for the CVM is reversed



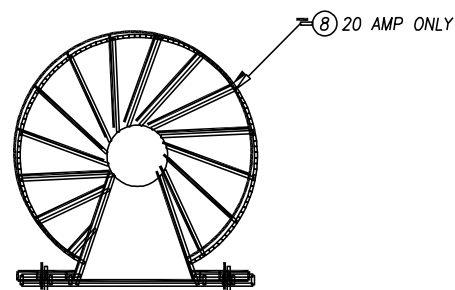
SECTION A-A
TOP



FRONT



SECTION B-B



CAUTION!!
CARE SHOULD BE TAKEN WHILE DRILLING THRU
CVM BODY TO AVOID CONTACT WITH ANY
COMPONENT OF THE CVM.

GENERAL ASSEMBLY BILL OF MATERIAL				6.6A	20A
ITEM NO.	PART NUMBER	PART NAME/DESCRIPTION	UNITS	QTY.	QTY.
1	44A6326/10	CIRCUIT VOLTAGE MONITOR ASSY, 6.6 AMP	EA	1	0
1A	44A6326/11	CIRCUIT VOLTAGE MONITOR ASSY, 20 AMP	EA	0	1
2	61A0349	GLASTIC STANDOFF INSULATOR 1 IN, 1/4-20	EA	2	2
3	64A0173/6	1/4-20 X 3/8 HX HD	EA	2	2
4	64A0241/6	1/4-20 X 3/8 HX HD NYL	EA	2	2
5	64A0245/8	8-32 X 1/2 HX HD SELF TAP	EA	0	4
6	66A0026/24	1/4 SPLIT LOCKWASHER	EA	2	2
7	66A0259/6	WSHR NYLON .740OD .062THK 5/16	EA	2	2
8	35A0308	CURRENT TX 20A/6.6A	EA	0	1
9	ALN105	SERVICE BULLETIN L829 FCS/CVM REPLACEMENT	EA	1	1

94A0395/5
94A0395/6

NOTES:

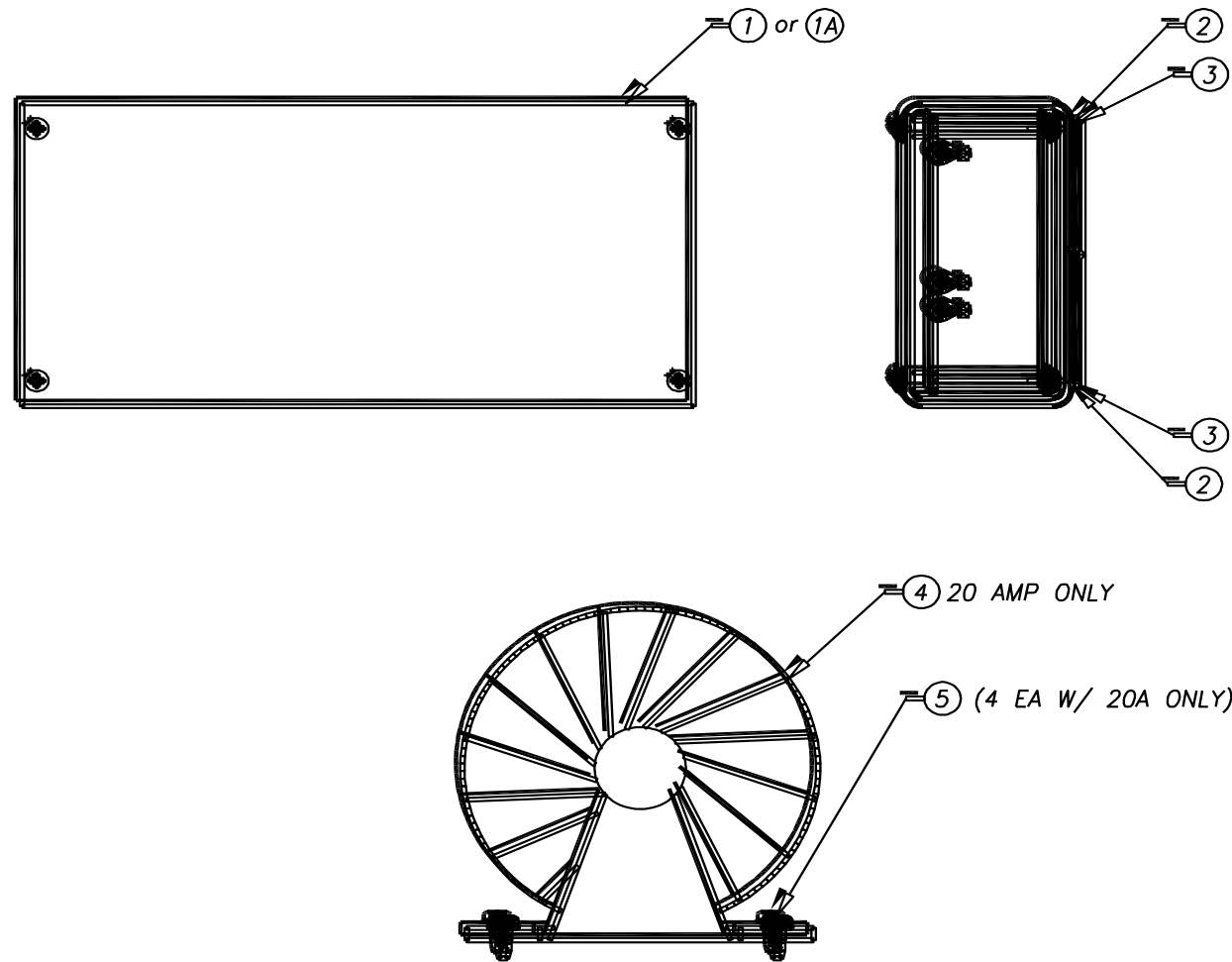
1. USE 94A0395/5 AND 94A0395/6 FOR SGRS™ SYSTEMS ONLY.
(PPF66XX/XXXX AND PPF20XX/XXXX RESPECTIVELY)

INSTRUCTIONS:

- STEP 1. FABRICATE CVM BODY AS SHOWN IN FRONT VIEW.
- STEP 2. ASSEMBLE HARDWARE AS SHOWN IN TOP VIEW.
- STEP 3. ATTACH MOUNTING HARDWARE AS SHOWN IN SECTION B-B.
- STEP 4. SECURE AND BULK PACK REMAINDER OF BOM ITEMS.
- STEP 5. RETRIEVE A COPY OF ALN105 FROM CMS (OR CURRENT PDM) AND INCLUDE WITH SHIPMENT.

(THE SALES ORDER MUST INCLUDE SERVICE BULLETIN ALN105)

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INITIAL & DATE:			
SIEMENS			
SIEMENS AIRFIELD SOLUTIONS, INC. 977 Gahanna Parkway, Columbus, Ohio 43230 Telephone: 614-861-1304, Fax: 614-864-2069			
JOB REPLACEMENT CIRCUIT VOLTAGE MONITOR /FIELD CIRCUIT SENSOR (REPLACES 44A5914/(20) SGRS RETROFIT KIT			
REV. LEVEL	REVISION DESCRIPTION	APPROVED BY	REV. DATE
A	PRODUCTION RELEASE	JES	11MAY04
		JM GAFFNEY	11MAY04
Information contained on this drawing is to be used expressly in accordance with the purpose for which it was submitted. Any disclosure of this information is strictly prohibited except as Siemens Airfield Solutions, Inc. may otherwise agree in writing. Copyright © 2004 Siemens Airfield Solutions, Inc.			3 OF 3
94A0395/X			A



GENERAL ASSEMBLY BILL OF MATERIAL				6.6A	20A
ITEM NO.	PART NUMBER	PART NAME/DESCRIPTION	UNITS	QTY.	QTY.
1	44A6326/10	CIRCUIT VOLTAGE MONITOR ASSY, 6.6 AMP	EA	1	0
1A	44A6326/11	CIRCUIT VOLTAGE MONITOR ASSY, 20 AMP	EA	0	1
2	RM0533	VELCRO ULTRA HOOK, 2" WIDE, BLACK	IN	18	18
3	RM0534	VELCRO LOOP, 2" WIDE, BK (USE W/ RM0533)	IN	18	18
4	35A0308	CURRENT TX 20A/6.6A	EA	0	1
5	64A0245/8	8-32 X 1/2 FH HD SELF TAP	EA	1	1
6	ALN105	SERVICE BULLETIN L829 FCS/CVM REPLACEMENT	EA	1	1

94A0395/3
94A0395/4

NOTES:

1. USE 94A0395/3 AND 94A0395/4 FOR COMBO BOX ONLY.
(44A6125/1X FOR 6.6A, 44A6125/2X FOR 20A)

INSTRUCTIONS:

STEP 1. CUT RM0533 AND RM0534 INTO 9 INCH STRIPS (2EA).

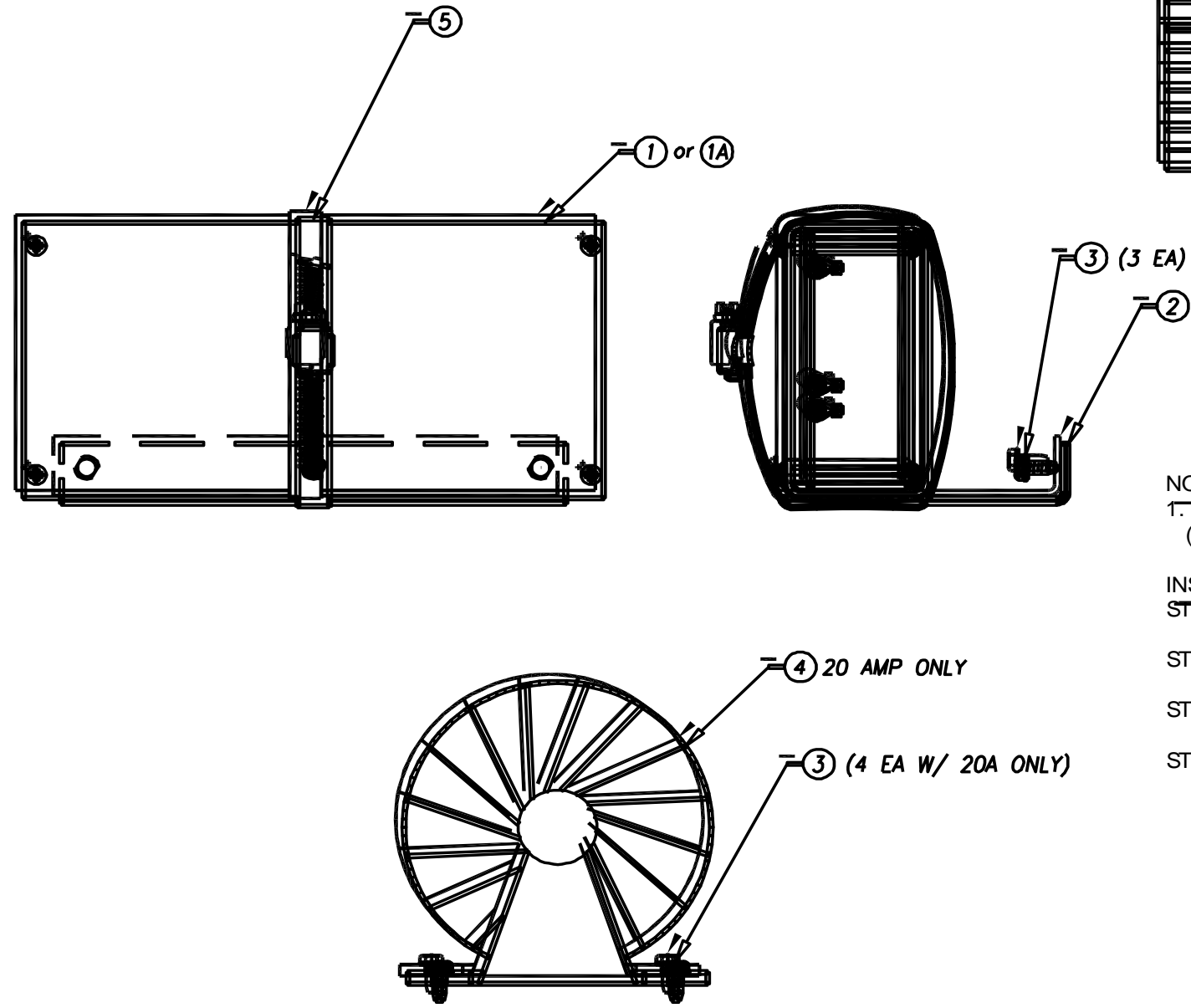
STEP 2. ATTACH RM0533 TO CVM BODY AS SHOWN.

STEP 3. ATTACH RM0534 TO RM0533 AS SHOWN.
!DO NOT EXPOSE ADHESIVE BACKING ON ITEM RM0534!
RM0534 IS FOR CUSTOMER USE.

STEP 4. RETRIEVE A COPY OF ALN105 FROM CMS (OR CURRENT PDM) AND INCLUDE WITH SHIPMENT.

(THE SALES ORDER MUST INCLUDE SERVICE BULLETIN ALN105)

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SIEMENS			
SIEMENS AIRFIELD SOLUTIONS, INC. 977 Gahanna Parkway, Columbus, Ohio 43230 Telephone: 614-861-1304, Fax: 614-864-2069			
PCB REPLACEMENT CIRCUIT VOLTAGE MONITOR FIELD CIRCUIT SENSOR (REPLACES 44A5914/(20) COMBO BOX RETROFIT KIT			
REV	DATE	BY	DATE
1		M. GAFFNEY	11/20/04
N/A		2 OF 3	
94A0395/X			A



GENERAL ASSEMBLY BILL OF MATERIAL					QTY.	QTY.
ITEM NO.	PART NUMBER	PART NAME/DESCRIPTION	UNITS	QTY.	QTY.	
1	44A0320/10	CIRCUIT VOLTAGE MONITOR/ASST. 0.5 AMP	EA	1	0	
1A	44A0320/11	CIRCUIT VOLTAGE MONITOR/ASST. 20 AMP	EA	1	1	
2	00A239Z	LENOX RESONANT CURRENT SENSING	EA	1	1	
3	04A024500	3/32 X 1/2 IN. HD. SCL. STA.	EA	3	7	
4	00A0300	CURRENT TX 20A/0.0A	EA	0	1	
5	77A0170/19	ROSGEN AMP. 1/2" WIDE BAND, 2.5 - 5.5 FC.	EA	1	1	
6	ALN105	SERVICE BULLETIN FOR 23 FC CURRENT REPLACEMENT	EA	1	1	

94A0395/1
94A0395/2

NOTES:
1. USE 94A0395/1 AND 94A0395/2 FOR CCF & CCT REGULATORS ONLY.
(CCF66XX/XXXX AND CCT20XX/XXXX RESPECTIVELY)

INSTRUCTIONS:
STEP 1. ASSEMBLE HARDWARE AS SHOWN.
STEP 2. SECURE SELF TAPPING SCREWS TO ASSEMBLY.
STEP 3. SECURE AND BULK PACK REMAINDER OF BOM ITEMS.
STEP 4. RETRIEVE A COPY OF ALN105 FROM CMS (OR CURRENT PDM) AND INCLUDE WITH SHIPMENT.

(THE SALES ORDER MUST INCLUDE SERVICE BULLETIN ALN105)

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SIEMENS AIRFIELD SOLUTIONS, INC. 977 Gahanna Parkway, Columbus, Ohio 43230 Telephone: 614-861-1304, Fax: 614-864-2069	
JOB REPLACEMENT CIRCUIT VOLTAGE MONITOR FIELD CIRCUIT SENSOR REPLACES 44A5914(20) CCF, CCT RETROFIT KIT	
94A0395/X	A