

ARGUS™

# DCB05 Front Access Distribution System

020-569-B2



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# *Power*

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## **DCB05 FRONT ACCESS DISTRIBUTION SYSTEM**

**#020-569-B2**

**Serial #\_\_\_\_\_**

The following documents and drawings are included in this manual to provide the necessary information required for routine operation and fault diagnosis of the unit.

- Warranty Policy: 048-507-10
- Important Safety Instructions
- Installation and Operation Instructions: 020-569-C0 Rev P/A
- Outline Drawings: 020-569-06
- Customer Connections Drawing: 020-569-08 (pending)
- Sample Power System Drawing: 023-772-05
- Factory Service Information: 048-527-10

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# WARRANTY AND REPAIR INFORMATION

## Warranty Policy

Argus Technologies Ltd. warrants all equipment manufactured by it to be free from defects in parts and labor, excluding third party OEM materials (example: air conditioners, batteries), for a period of two years from the date of shipment from the factory. For third party products the OEM's warranty shall apply. The liability of Argus applies solely to repairing, replacing or issuing credit (at Argus' sole discretion) for any equipment manufactured by it and returned by the customer during the warranty period. The terms of the warranty are Ex Works (EXW) from Argus' factory service location.

Argus reserves the right to void the warranty if:

- (1) identification marks or serial numbers are removed or altered in any way,
- (2) invoice is unpaid, or
- (3) defect is the result of misuse, neglect, improper installation, environmental conditions, non-authorized repair, alteration or accident.

Argus shall not be liable to the customer or other parties for any loss of profits, loss of use, costs for removal or installation of defective equipment, damages or consequential damages based upon equipment failure during or after the warranty period. There shall be no other obligations either expressed or implied. Argus will not honor warranties for batteries and other third party products without prior written Argus authorization.

## Freight Policy

Customer is responsible for all shipping and handling charges (COD and freight collect will not be accepted without prior approval from Argus Technologies).

## Terms of Payment (North America)

Payment terms are net 30 days subject to prior credit approval. All other orders require payment before shipping.

## Terms of Payment (International)

Payment terms are subject to prior approval and are typically through Tele-Transfer.

## Return Material Policy

Our RMA policy is designed to ensure prompt, efficient and high quality factory service. A Return Material Authorization (RMA) number must be obtained before products can be accepted for servicing by the Argus factory. For returns to an authorized service center (refer to "Authorized Service Centers" for locations), please consult the individual service center for specific return policies and instructions.

To obtain a RMA number for a factory return, customers must call the appropriate location with the product serial and model number, as well as a brief description of the problem, shipment instructions and billing details.

The original packing container should be used whenever possible. Both the shipping documents and the outside of the box must have the RMA # clearly marked and the product shipped prepaid to the Argus factory service center. Argus will endeavor to repair products within five working days of receipt. Repairs to the returned product are warranted for a period of six months. A service charge may be applied if no fault is found in the returned product. Argus will not accept products without an RMA number.

## Business Hours

Argus North American office hours are 7:30 am to 5:00 pm (Pacific Standard Time) Monday to Friday.

### Factory Service Centers

#### Canada and International

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#### USA

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Email: returns-usa@argusdcpower.com

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Fax: +86 755 8895 3307

#### Authorized Service Center

##### Argentina

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Fax: +90 216 472 90 66

**MANUAL ADDENDUM**

Unit Description: DCB05 (100A) **FRONT ACCESS DISTRIBUTION SYSTEM**  
Manual P/N: 020-569-B2 Applies to Manual Revision: P/B

#	Date	Page#	Line#	Correction to be implemented
1	00-02-24	8	6	Insert: WARNING: After completing the various adjustments and placing the test switch back to NORMAL position, you must wait at least 5 seconds before placing the OUT/AUTO/IN switch back to the AUTO position. Switching before a 5 second delay may cause the DCB05 controller to momentarily disengage the load.

**MANUAL ADDENDUM**

Authorized by:

FORM 954-010-10

020569pb.doc

# **IMPORTANT SAFETY INSTRUCTIONS**

**SAVE THESE INSTRUCTIONS - This manual contains important safety and operating instructions for the Argus Technologies' Front Access Distribution Center DCB05.**

- 1. Before using distribution unit, read all instructions and cautionary markings on: (1) distribution unit, (2) products connected to distribution unit.**
- 2. Do not expose distribution unit to rain or snow.**
- 3. Use of an attachment not recommended or sold by the distribution unit manufacturer may result in a risk of fire, electric shock, or injury to persons.**
- 4. Do not operate distribution unit if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified service center.**
- 5. Do not disassemble distribution unit; take it to a qualified service center when service or repair is required. Incorrect reassembling may result in a risk of electrical shock or fire.**

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## 2.0 DOCUMENTATION - PART NUMBER INFORMATION

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### 2.1 Introduction

Please read this manual thoroughly prior to use in order to become familiar with the unit's numerous features and operating procedures. To obtain a maximum degree of safety, follow the prescribed sequences as outlined.

This manual incorporates warnings and notes to the user. Points that are vital to the proper operation or safety of the operator are indicated by the heading: **WARNING**. Points that are important to the performance or ease of use of the equipment are covered by a notation that is double underlined.

Items that refer to physical components or features such as indicator lights will be in ***Bold Italic*** typeface. Items that refer to states or modes and generated messages such as found on the LCD display panel will be in **BOLD UPPERCASE** typeface.

### 2.2 ARGUS Numbering system

ARGUS technologies uses a eight digit drawing number system which is broken into three blocks. The first three digits describe the category of the product ie. rectifier or fuse panel. The next three digits indicate the sequence in which the product number was allocated in a particular category. The last two digits indicate the type of drawing ie:

- 05 ....Schematic
- 06 .....Outline Drawing
- 20 ....Main Assembly

ARGUS Technologies uses a eight digit part numbering system for all components and sub assemblies. Each part is covered by its own unique number. Due to the quantity categories will not be listed within this manual.

## **3.0 GENERAL INFORMATION**

---

### **3.1 Scope of the Manual**

This instruction manual covers the installation and operation of Argus Technologies DCB05 Front Access Distribution Center.

### **3.2 Introduction**

The DCB05 is designed to provide a compact, complete distribution and alarm package for small communications applications. Up to eight bolt-in breakers can be installed (1 to 100A per position). The breakers are recessed to prevent accidental operation. All breaker positions accommodate 2 hole lugs (1/4" holes on 5/8" centres). An additional eight-position 0-10A GMT fuse panel is part of the supervisory and control panel included with the unit. A load disconnect contactor and a battery disconnect breaker provide additional protection.

The DCB05 is available with the following part numbers and list options:

### **3.3 Features**

## 4.0 INSTALLATION INSTRUCTIONS

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This section is provided for qualified personnel to install and interconnect the DCB05 distribution center.

### 4.1 Tools Required

- Nut driver (for 7/16" nut)
- Slotted screw driver (Blade size 1/4")
- Slotted screw driver (Blade size 1/8")
- Slotted screw driver (Blade size .09" x .02") or tweaker
- 4½ Digit Digital Voltmeter (DVM)

### 4.2 Inspection

All Argus products are shipped in rugged, double-walled boxes and suspended via solid polyurethane foam inserts to minimize shock that may occur during transportation. Package assemblies and methods are tested to National Safe Transit Association (NSTA) standards.

Before uncrating the distribution center, look for signs of damage to the shipping container. Next, uncrate the unit and inspect the exterior. If any damage is observed, contact the carrier immediately. Continue the inspection for internal damage. In the unlikely event of internal damage, please inform the carrier and contact Argus Technologies for advice on the impact of the damage.

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**NOTE:**     **Save the original shipping container. If the unit needs to be returned for service, it should be packaged in its original shipping container. If the original container is unavailable, make sure the unit is packed with at least three inches of shock-absorbing material to prevent shipping damage. Argus Technologies is not responsible for damage caused by the improper packaging of returned units.**

---

### 4.3 Preparation/Mounting

The DCB05 is available in two cabinet versions: rack and wall mount. The rack model is designed for mounting in a 19" or 23" EIA relay rack. The wall version mounts on any vertical surface. Mounting brackets accommodate both 1" or 1 3/4" spacing. Units can be arranged in the following rack mounting configurations:

**Center rack mounting** – All loose units shipped from the factory are arranged for 19" mounting. See drawing #020-569-06.

**Flush rack mounting** – Remove the bracket screws, move the brackets to the front from the mid-mounting positions and re-attach as shown in drawing #020-569-06.

**Adapting from 19" to 23" rack mounting** – Remove the bracket screws, flip the brackets so that the small flange is against the DCB05 chassis and re-attach as shown in drawing #020-569-06.

The DCB05 should be mounted to the rack using two, #12 – 24 x 1/2" screws in each bracket. A Philips screwdriver should be used to eliminate the possibility of slippage and scratching of the unit's exterior.

Prepare the DCB05 for cable connections by removing the front panel.

#### 4.4 Wiring and Connections

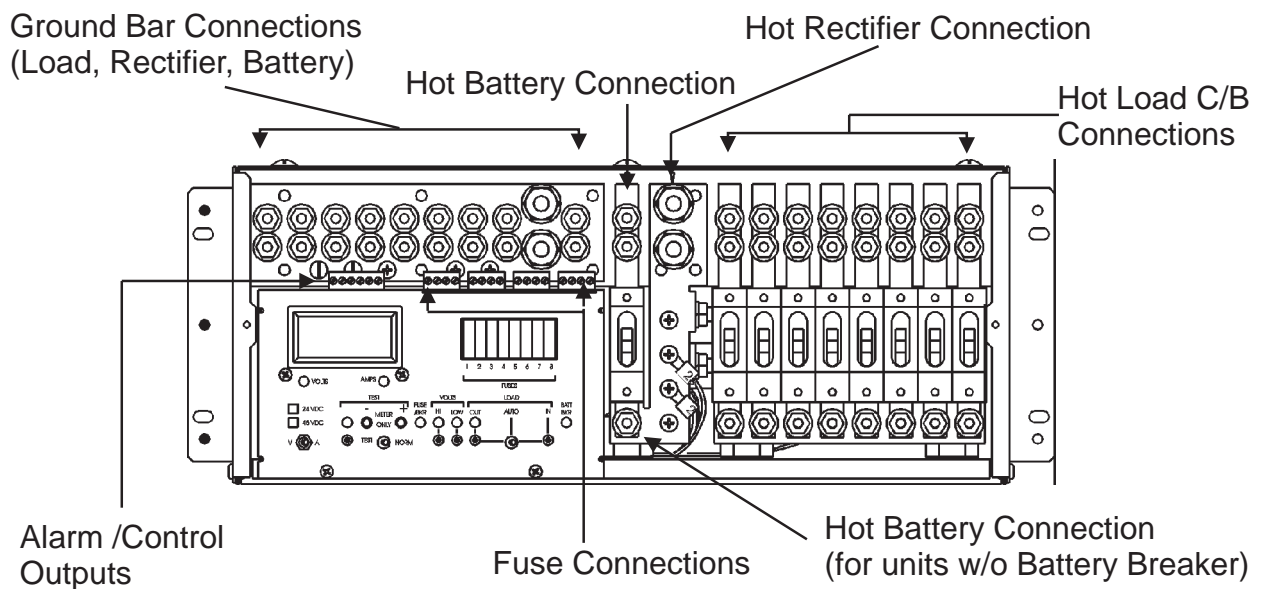
**NOTE:** Connections to the DCB05 should comply with all applicable local electrical codes and ordinances.

**WARNING:** Ensure that input and output power is removed before attempting work on the DCB05's wiring connections.

##### 4.4.1 Power / Battery connections

**WARNING:** Ensure the correct polarity is used for all input cable terminations.

Connect the DC power from the rectifier and batteries to the positive and negative power bars on the unit (see figure 1).



**FIGURE 1 – DCB05 WITH FRONT COVER REMOVED**

---

**NOTE:** For units which do not include a battery breaker option, connect “hot” battery cables to the lowest bolt on the battery terminal strip. See figure 1 for details.

---

#### **4.4.2 Load Circuit Breaker Connections**

Ensure breakers are in the “off” position. Connect the ground return leads to the ground bar and “hot” leads to the load side of the circuit breakers. For example, in a –48VDC system, connect positive (+) ground leads to the ground bar and connect negative (-) leads to distribution circuit breakers (see figure 1 for more detail).

#### **4.4.3 Load Fuse Connections**

**WARNING: When wiring fuse connections do not exceed more than 30A maximum total current capacity.**

Each load fuse corresponds to a unique position (1 to 8) on the load distribution terminal blocks located behind the unit’s front panel. Connect “hot” leads to terminals 1 to 8 and common leads to terminals labelled COM. Terminal blocks can accommodate wire sizes 0.34 to 2.5 mm<sup>2</sup> (#22 to #14 AWG).

#### **4.4.4 Alarm Connections**

All alarms provide jumper selectable Form A/B alarm contacts which are extended to terminal blocks located behind the unit’s front panel. These relay contacts can be individually set to Normally Open (NO) or Normally Closed (NC) by positioning jumpers located underneath the supervisory panel’s cover. The factory default setting is Normally Open (NO). Terminal blocks can accommodate wire sizes 0.34 to 2.5 mm<sup>2</sup> (#22 to #14 AWG). See table 1 for alarm configuration detail.

---

**NOTE:** Normally Open (NO) is the contact state when the alarm relay is de-energized. Relays are energized during an alarm condition.

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**TABLE 1: ALARM CONFIGURATION**

<b>ALARM</b>	<b>TERMINAL #</b>	<b>DEFAULT SIGNAL*</b>	<b>JUMPER SETTING</b>
Battery Breaker	TB1-12	NO	P2 (2-3)
Fuse/Breaker	TB1-11	NO	P5 (2-3)
High Volts	TB1-10	NO	P7 (2-3)
Low Volts	TB1-9	NO	P9 (2-3)
Load Out	TB1-8	NO	P11 (2-3)
Alarm Common	TB1-7	Common	None

Notes: \*For Normally Closed (NC) operation, jumpers must be positioned across pins 1-2.

---

**NOTE:** The common connection for all alarms is terminated at TB1-7 (ALARM COM)

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#### **4.5 Circuit Breaker Installation/Replacement**

**WARNING:** Due to the compact nature of the cabinet enclosure, following proper safety precautions is paramount while working on the live circuit breaker assembly. We recommend using fully insulated, taped tools and insulating the grounded cabinet in areas adjacent to hot buswork.

Remove circuit breakers by unscrewing the top two nuts and bottom bolt. Remove adaptor bar from circuit breaker and place on new breaker. Re-install new breaker assembly.

#### **4.6 GMT Fuse Installation**

Distribution fuses may be removed from the module using an insulated hook. Check load and ensure correct fuse type and size before replacement.

## 5.0 ADJUSTMENTS

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### 5.1 Factory Settings/Ranges

Function	Range	Factory Setting
----------	-------	-----------------

#### **24 Volt Units**

High Volts Alarm	24-30	27.75V
Low Volts Alarm	21-27	24.00V
Load "IN"	24-30	25.00V
Load "OUT"	20-27	21.00V

#### **48 Volt Units**

High Volts Alarm	48-60	55.50V
Low Volts Alarm	42-54	48.00V
Load "IN"	48-60	50.00V
Load "OUT"	40-54	42.00V

### 5.2 Setup, Testing and Adjustments

#### 5.2.1 Tools Required

- 4½ digit digital multimeter equipped with test leads
- Small tweaker-type slot screwdriver

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**NOTE:** The DCB05's front panel digital meter can be substituted for a hand-held digital multimeter.

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#### 5.2.2 Test Mode

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**NOTE:** Entering the TEST mode disables all control and alarm relays. However, LEDs will function normally.

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The Test mode is entered by toggling the front panel TEST switch. Selection of this mode transfers the alarm circuit sensing to an internal test power supply. This allows the user to make alarm adjustments without disturbing the load. The power supply is controlled by the TEST potentiometer located next to the TEST switch. When the switch is activated, the Test LED illuminates. If the internal test supply is not on or has a low voltage, the Low Voltage Alarm and Load Disconnect LEDs may activate.

**WARNING:** To prevent the load disconnect contactor from operating during the setup of alarms and the LOAD IN/OUT controls, place the IN/OUT/AUTO switch in the "IN" position before making the adjustment and return the switch to the AUTO position after the adjustment is complete.

### **5.2.2 High Volts Alarm (HVA) Adjustment**

The HVA potentiometer raises or lowers the setting at which the high voltage alarm operates. To raise the setting, rotate the potentiometer clockwise.

**To confirm the HVA alarm and LED operation, follow the steps below:**

1. Place OUT/AUTO/IN switch in the "IN" position.
2. Place the TEST/NORM switch in the TEST position.
3. Return the OUT/AUTO/IN switch to the "AUTO" position.
4. Attach a DVM and increase the TEST supply voltage by rotating the TEST potentiometer clockwise. Monitor the point at which the HVA alarm trips. Reduce the voltage by rotating the TEST potentiometer counter-clockwise and monitor the point at which the alarm clears.
6. When completed, place the OUT/AUTO/IN switch in the "IN" position.
7. Return the unit from TEST to the NORMAL mode by placing the switch in NORM position.
8. Return the OUT/AUTO/IN switch to the "AUTO" position.

**To adjust the HVA alarm, follow the steps below:**

1. Place OUT/AUTO/IN switch in the "IN" position.
2. Place the TEST/NORM switch in the TEST position.
3. Return the OUT/AUTO/IN switch to the "AUTO" position.
4. Rotate the HVA potentiometer completely clockwise to its maximum setting.
5. Attach a DVM to the voltage test jacks and monitor the test supply voltage. Adjust the TEST potentiometer to the desired HVA trip level.
6. Turn the HVA potentiometer counterclockwise until the HVA LED illuminates.
7. Turn the TEST potentiometer counterclockwise until the alarm clears.
8. When completed, place the OUT/AUTO/IN switch in the "IN" position.
9. Return the unit from TEST to the NORMAL mode by placing the switch in NORM position.
10. Return the OUT/AUTO/IN switch to the "AUTO" position.



### **5.2.3 Low Volts Alarm (LVA) Adjustment**

This potentiometer raises or lowers the setting at which the low voltage alarm operates. To lower the setting rotate the potentiometer counter-clockwise.

**To confirm the LVA alarm and LED operation, follow the steps below:**

1. Place OUT/AUTO/IN switch in the "IN" position.
2. Place the TEST/NORM switch in the TEST position.
3. Return the OUT/AUTO/IN switch to the "AUTO" position.
4. Attach a DVM and decrease the test supply voltage by rotating the TEST potentiometer counter-clockwise. Monitor the point at which the LVA alarm trips. Increase the test supply voltage by rotating the TEST potentiometer clockwise and monitor the point at which the alarm clears.
6. When completed, place the OUT/AUTO/IN switch in the "IN" position.
7. Return the unit from TEST to the NORMAL mode by placing the switch in NORM position.
8. Return the OUT/AUTO/IN switch to the "AUTO" position.

**To adjust the LVA alarm, follow the steps below:**

1. Place OUT/AUTO/IN switch in the "IN" position.
2. Place the TEST/NORM switch in the TEST position.
3. Return the OUT/AUTO/IN switch to the "AUTO" position.
2. Rotate the LVA potentiometer completely counter-clockwise to its minimum setting.
3. Attach a DVM to the voltage test jacks and monitor the test supply voltage. Adjust the TEST potentiometer to the desired LVA trip level.
4. Turn the LVA potentiometer clockwise until the LVA LED illuminates.
5. Next, turn the TEST potentiometer clockwise until the alarm clears.
8. When completed, place the OUT/AUTO/IN switch in the "IN" position.
9. Return the unit from TEST to the NORMAL mode by placing the switch in NORM position.
10. Return the OUT/AUTO/IN switch to the "AUTO" position.

#### **5.2.4 Load IN/OUT Disconnect Adjustment**

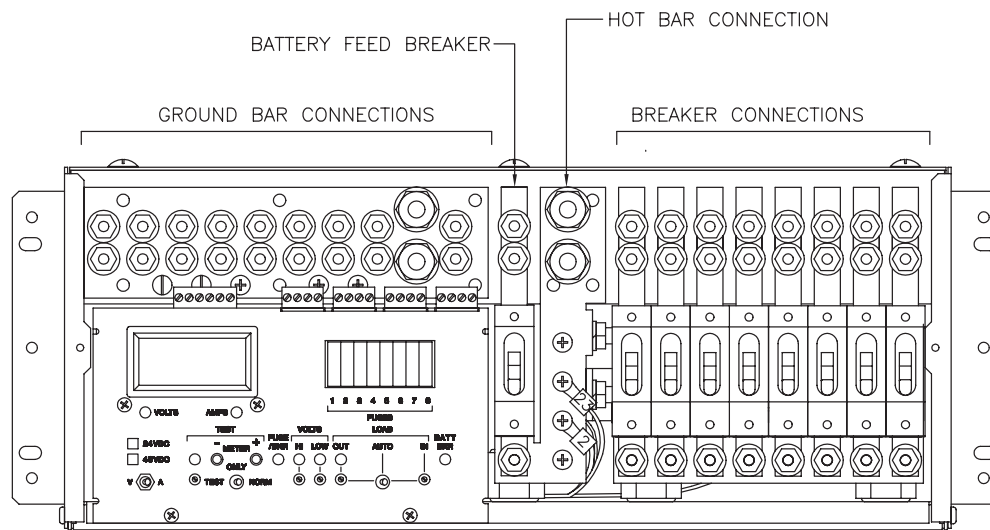
These potentiometers raise or lower the setting at which the load is dropped in and out of the circuit. To lower the settings, rotate the potentiometers counter-clockwise.

**To confirm the LOAD IN/OUT alarm and LED operation, follow the steps below:**

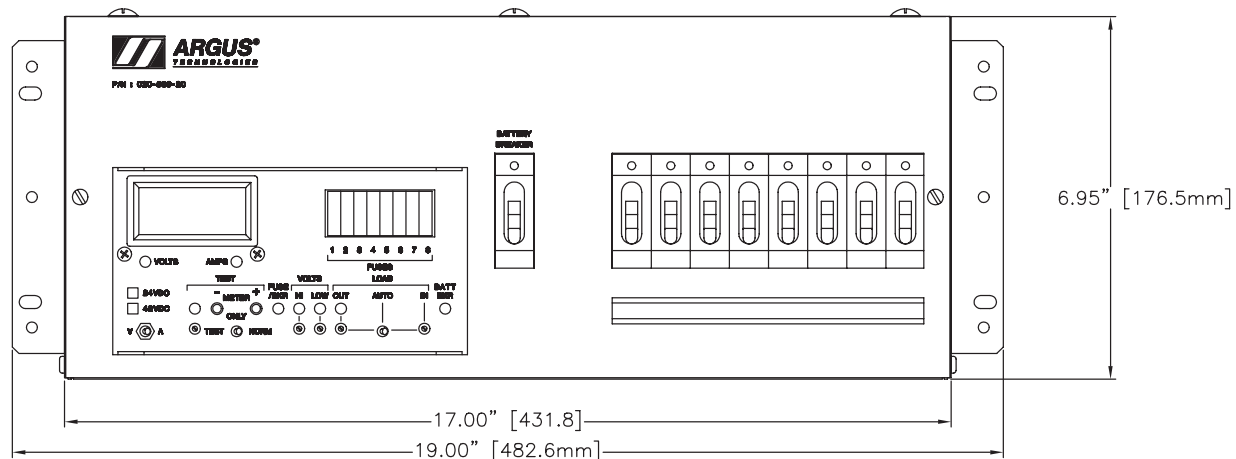
1. Place OUT/AUTO/IN switch in the "IN" position.
2. Place the TEST/NORM switch in the TEST position.
3. Return the OUT/AUTO/IN switch to the "AUTO" position.
4. Attach a DVM and decrease the TEST supply voltage by rotating the TEST potentiometer counter-clockwise. Monitor the point at which the LOAD OUT alarm trips. Increase the voltage by rotating the TEST potentiometer clockwise and monitor the point at which the alarm clears.
6. When completed, place the OUT/AUTO/IN switch in the "IN" position.
7. Return the unit from TEST to the NORMAL mode by placing the switch in NORM position.
8. Return the OUT/AUTO/IN switch to the "AUTO" position.

**To adjust the LOAD IN/OUT settings, follow the steps below:**

1. Place OUT/AUTO/IN switch in the "IN" position.
2. Place the TEST/NORM switch in the TEST position.
3. Return the OUT/AUTO/IN switch to the "AUTO" position.
4. Adjust LOAD OUT potentiometer fully counter-clockwise. Adjust LOAD IN potentiometer fully clockwise.
5. Attach a DVM to the voltage test jacks and monitor the test supply voltage. Adjust the TEST potentiometer to the desired LOAD OUT voltage.
6. Adjust the LOAD OUT potentiometer clockwise until the LOAD OUT lamp turns on.
7. Rotate the TEST potentiometer to the desired LOAD IN voltage setting.
8. Adjust the LOAD IN potentiometer counterclockwise until the LOAD OUT lamp turns off.
9. When completed, place the OUT/AUTO/IN switch in the "IN" position.
10. Return the unit from TEST to the NORMAL mode by placing the switch in NORM position.
11. Return the OUT/AUTO/IN switch to the "AUTO" position.




FRONT VIEW – FRONT COVER OFF



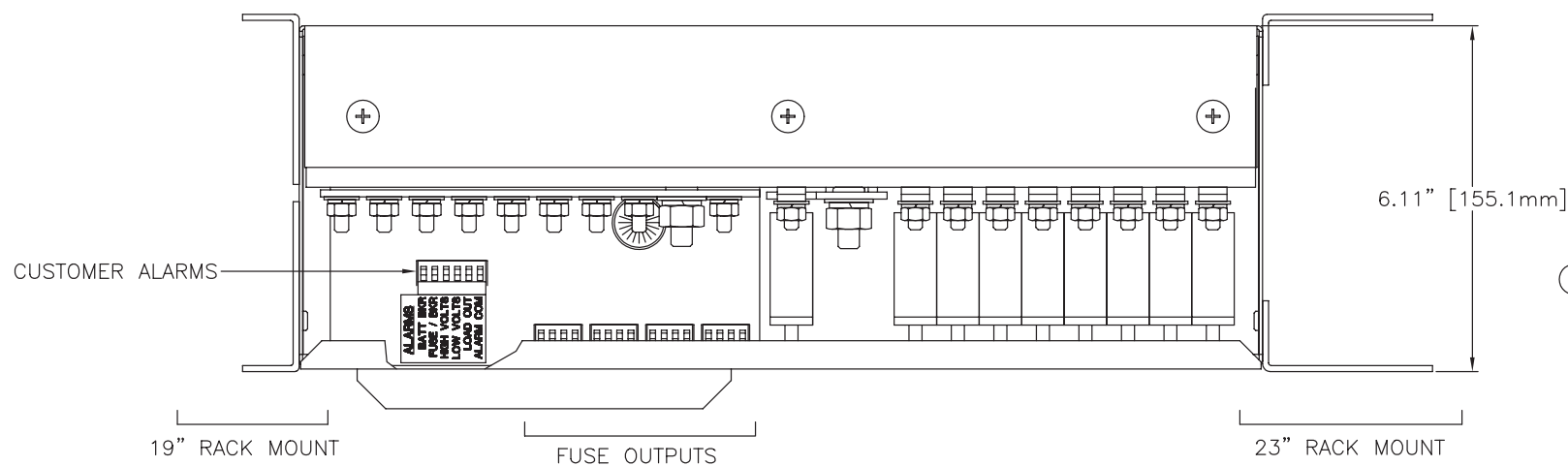
FRONT VIEW – FRONT COVER ON  
19" RACK MOUNTING SHOWN

REVISIONS			
LTR	DESCRIPTION	DATE	APPD

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A	DESCRIPTION		QTY	
LTR	FINISHED HOLE LEGEND			
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APPROVED				
TOLERANCE			SCALE	N.T.S.
TITLE				
OUTLINE				
100A UDC, BOLT-IN BREAKERS				
ISSUE	SHEET 1		OF 2	
DATE				
SIZE	DWG NO.		TYPE	REV
B	020 - 569 - 06		A1	A

REVISIONS			
LTR	DESCRIPTION	DATE	APPD

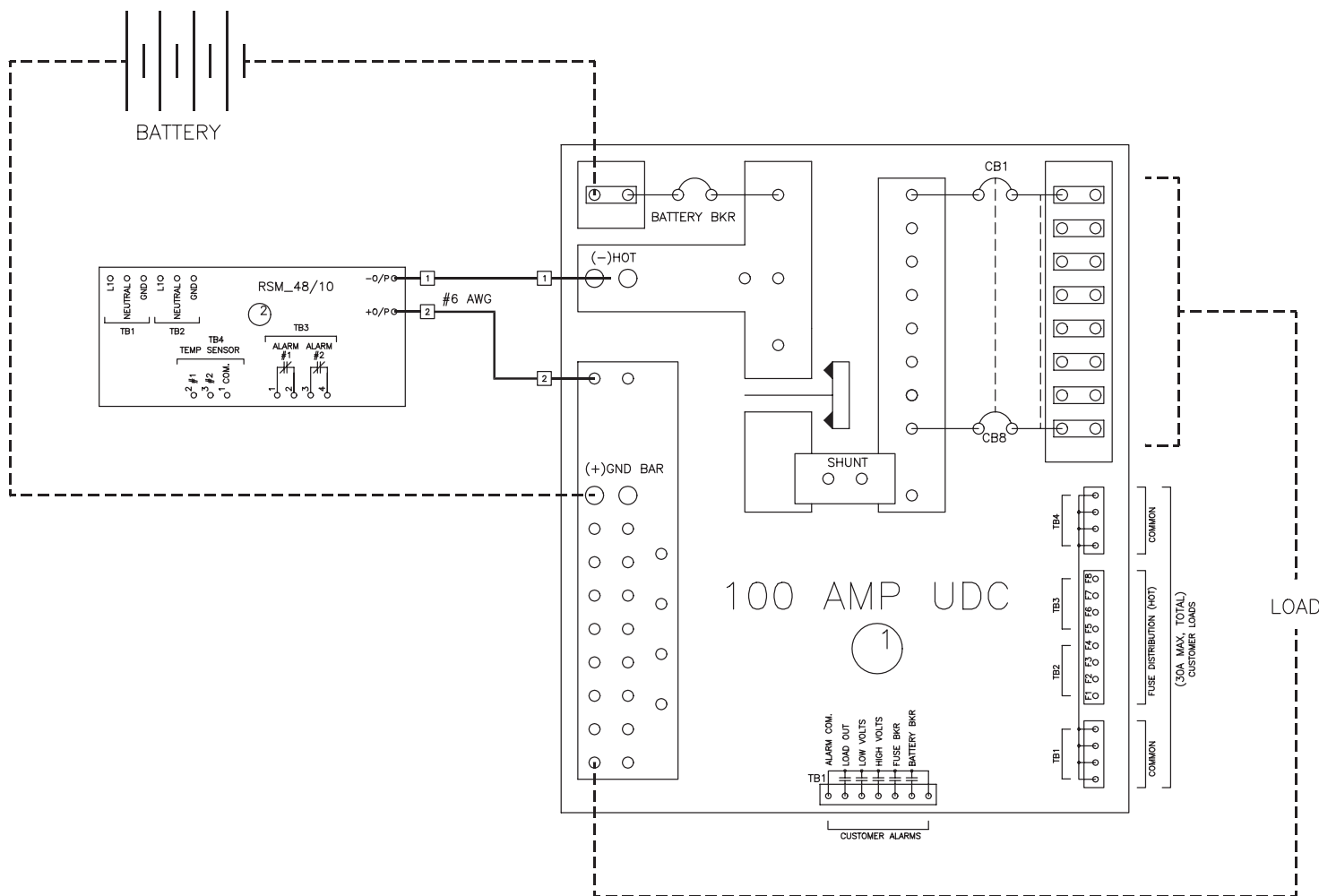


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TOP VIEW

A			
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DRAWN	PDS	97/02	
CHECKED			FINISH
APPROVED			
TOLERANCE			SCALE
			N.T.S.
TITLE			
OUTLINE			
100A UDC, BOLT-IN BREAKERS			
ISSUE	SHEET 2 OF 2		
DATE			
SIZE	DWG NO.	TYPE	REV
B	020 - 569 - 06	A1	A

REVISIONS			
LTR	DESCRIPTION	DATE	APPD



AMPS	RW90 WIRE		VERTICAL COPPER BARS (TYP.) (MINIMUM)
	RECT. CONV. (MINIMUM)	PLANT WIRING (MINIMUM)	
15	#10	#6	-
30 / 50	#8	#2	1/4 x 2"
100	#1/0	#1/0	1/4 x 2"
150	#2/0	#2/0	1/4 x 2"
200	2 x #1/0	2 x #2/0	1/4 x 2"
300	2 x #2/0	2 x #4/0	1/4 x 2"
400	-	2 x #4/0	1/4 x 2"
600	-	3 x #4/0	1/4 x 3"
800	-	4 x #3/0	1/4 x 3"
1000	-	4 x #4/0	1/4 x 4"
1200	-	-	-

- NOTES:
- 1) USE ABOVE TABLE FOR PLANT AND RECTIFIER WIRING. INDIVIDUAL RECTIFIER WIRES ARE IN CONTACT. PLANT WIRES ARE NOT.
  - 2) FOR CONTINUOUS OPERATION, IT IS RECOMMENDED THAT SHUNTS ARE NOT RUN AT MORE THAN 80% THE RATED CURRENT UNDER NORMAL CONDITIONS.
  - 3) DASHED LINES DENOTE CUSTOMER WIRING.
  - 4) ALL WIRES ARE #18AWG EXCEPT AS NOTED.
  - 5) NUMBERS IN BUBBLES REFER TO ITEM NUMBERS ON BILL OF MATERIALS.
  - 6) "□" REFERS TO WIRE TAG NUMBERS ON WIRES.
  - 7) "□" REFERS TO TERMINALS ON DIGITAL METER.
  - 8) FOR INTERNAL WIRING OF UDC SEE PRODUCTION BOOK 020-569-20 FOR DETAILS.

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A	DESCRIPTION		QTY
LTR	FINISHED HOLE LEGEND		
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DESIGN	S.K.	97-08-20	MATERIAL
DRAWN	S.K.	97-08-20	FINISH
CHECKED			
APPROVED			
TOLERANCE			SCALE N/A
TITLE			
48V POS.GND 100A POWER SYSTEM FOR METRONET (SEISMIC RACK)			
ISSUE	SHEET 1 OF 1		
DATE			
SIZE	DWG NO.	TYPE	REV
B	023-772-05	A1	A

# FACTORY SERVICE INFORMATION

## Technical Support

Technical support staff are available for answering general questions related to installation, operation and maintenance of Argus products. In Canada and the USA, call Argus toll free 7:30 am to 5:00 pm Pacific Standard Time at:

**+1-888 GO ARGUS**

(+1-888-462-7487)

For emergencies, call +1-888-GO-ARGUS 24 hours a day, seven days a week.  
Customers outside Canada and the USA, call +1-604-436-5547 for technical support.

## Training

Argus offers various levels of product and technical training. These workshops provide a mix of theory and hands on application for qualified customers. Please consult your sales representative for course schedules, locations and costs, or visit our website at [www.argusdcpower.com](http://www.argusdcpower.com).

## Factory Repair and Servicing

All service, beyond initial adjustments, should be carried out by qualified factory service personnel. For these procedures, please contact Argus Technologies at the locations listed to the right.

## Product Returns

Before returning any product for service, please obtain a Return Material Authorization (RMA) number from an Argus factory service representative. The representative will require the model and serial number, as well as a brief description of the problem prior to issuing the RMA number. All material must be pre-authorized before being returned.

See document 048-507-10 "Warranty and Repair Information" for more details.

## Moving and Storage

Units must be suitably packed in the original shipping container (or equivalent) prior to re-shipping. The box should be completely enclosed and constructed of wood or double-wall, corrugated cardboard. At least 3" of foam or shock absorbing packing material must surround the unit.

### Factory Service Centers

#### Canada and International

Argus Technologies Ltd.  
ATTN: RMA Returns  
7033 Antrim Avenue  
Burnaby, BC, V5J 4M5 Canada  
Tel: +1 604 436 5900  
Fax: +1 604 436 1233  
Email: [returns@argusdcpower.com](mailto:returns@argusdcpower.com)

#### USA

Argus Technologies Inc.  
ATTN: RMA Returns  
3116 Mercer Avenue  
Bellingham, WA, 98225 USA  
Tel: +1-360 756 4904  
Fax: +1-360 647 0498  
Email: [returns-usa@argusdcpower.com](mailto:returns-usa@argusdcpower.com)

#### Asia-Pacific

PCM Electronics (Dong Guan) Co., Ltd.  
Hongli Industrial Area, Miaobian, Liaobu Town,  
Dongguan City, Guangdong Province,  
523400 China  
Tel: +86 755 8895 3310  
Fax: +86 755 8895 3307

#### Authorized Service Center

##### Argentina

Argus Technologies de Argentina  
Belen 315, Capital Federal, Buenos Aires,  
14071 Argentina  
Tel: +54 (11) 4672 4821  
Fax: +54 (11) 4504 4698  
Cell: +54 9 (11) 4993 9996  
Email: [ikleiman@argus.ca](mailto:ikleiman@argus.ca)

##### Asia

Argus Technologies Asia Pte Ltd  
Blk 6 Tagore Lane #160  
Singapore 787570  
Tel: +65 6458 8900  
Fax: +65 6458 2122

##### Australia

CPS National  
8/376 Newbridge Rd  
Moorebank, NSW, 2170 Australia  
Tel: +61 02 9822 8977  
Fax: +61 02 9822 8077

##### Australia/New Zealand

Alpha Power Systems Pty Ltd  
Unit 3, 30 Heathcote Road  
Moorebank, NSW, 2170 Australia  
Tel: +61 02 9602 8331  
Fax: +61 02 9602 9180

##### Century Yuasa

37 - 65 Colbalt Street  
Carole Park QLD 4300  
Australian Sales & Service  
Tel: +61 07 3361 6587  
Fax: +61 07 3361 6705  
New Zealand Sales & Service  
Tel: +64 9 978 6689  
Fax: +64 9 978 6677

##### Canada

Compower Systems Inc.  
118 Tiffind Road  
Toronto, ON, M1V 5N2 Canada  
Tel: +1 416 293 3088  
Fax: +1 416 293 0671

##### Europe

Alpha Technologies Europe Ltd.  
Cartel Business Estate  
Edinburgh Way  
Harlow, Essex, CM20 2DU UK  
Tel: +44 1279 422110  
Fax: +44 1279 423355

##### Mexico & Central America

Technologies Argus First De Mexico SA de CV  
Anatole France No. 17  
Col. Polanco  
Mexico City, 11560 Mexico  
Tel: +52 55 5280 6990  
Fax: +52 55 5280 6585

##### South America

Argus Technologies Argentina  
Santo Tome 2573, Capital Federal  
Buenos Aires, 1416 Argentina  
Tel: +54 11 4504 4698  
Cell: +54 9 11 4993 9996  
E-pager: [541149939996@nextel.net.ar](mailto:541149939996@nextel.net.ar)

##### Turkey

IPC Enerji Elk San ve TIC AS  
Inonu cad. Kanarya sok. No:20  
Yenisahra - Kadikoy  
Istanbul, Turkey  
Tel: +90 216 317 41 42  
Fax: +90 216 472 90 66