

Output Pins Table 3-13 lists the pinouts for the Customer Defined Output connectors 1-2 and 3-4.

Table 3-13 Customer Defined Output Connector Pins 1-2 and 3-4

Pin Number	Description	Pin Number	Description
Connector 1-2		Connector 3-4	
1	Customer Defined Output 1 NC	1	Customer Defined Output 3 NC
2	Customer Defined Output 1 C	2	Customer Defined Output 3 C
3	Customer Defined Output 1 NO	3	Customer Defined Output 3 NO
4	Customer Defined Output 2 NC	4	Customer Defined Output 4 NC
5	Customer Defined Output 2 C	5	Customer Defined Output 4 C
6	Customer Defined Output 2 NO	6	Customer Defined Output 4 NO

Access Point Hardware Installation

Installation Overview

Overview

This chapter provides procedures for Base Control Unit (BCU) and RF Head installation and associated cabling.

The following items are covered in this chapter.

- Assemble the BCU mounting hardware
- Assemble the RF Head mounting hardware
- Attach power cables to BCU and RF Head
- Attach signal cables to the BCU and RF Head
- Complete the installation completion checklist

Verify with site manager that what cabling has been installed and routed to the location of the BCU. Customer supplied cables should be available at time of installation.

Procedure Order

The process of installing the Base Control Unit (BCU) requires that the following procedures be completed in the order shown:

1. Attach the BCU mounting bracket assembly to pole/wall or mount on plinth.
2. Install BCU.
3. Connect Earth Ground Cable to BCU
4. Connect AC or DC power cable
5. Install RGPS or Local GPS (RF GPS) antenna
 - a. Connect ground to GPS
 - a. Connect GPS cables to BCU
6. Connect Ethernet cables
7. Connect Customer Input/Output cables

RF Head Installation

The process of installing the RF Head requires that the following procedures be completed in the order shown:

1. Attach the Pole Mounting Bracket Assembly to pole
2. Install RF Head (with side mounting brackets attached)
3. Connect Earth Ground cable between RF Head and tower
4. Connect DC power cables from RF Head to BCU
5. Connect Fiber Optic cable from RF Head to BCU

Other Installation Instructions

After the BCU and RF Head have been installed perform the following:

1. If required, power on units
2. Clean up site
3. Fill out the installation completion checklist

Installation Kits

The following items are the kits that may have been shipped to the site.

- STHX4003 — 3.5 GHz RF Head
- STLN6518 — 3.5 GHz RF Head Mounting Bracket
- SC1666 — Base Control Unit (AC)
- STLN6518C — BCU pole/wall Mount Bracket

GPS Kits

The following items are the Global Positioning System (GPS) kits that may have been shipped to the site.

- STRG4037 — RF GPS Module
- CGDSGPSKITF4NM50 — RF GPS Head
- T472AA — T472AF — Remote GPS Receiver Kit
- SGKN4386 — Remote GPS Cable Kit

Connector Locations

Base Control Unit Connector Locations

[Figure 4-1](#) shows the location of the cable connectors on the BCU.

RF Head Connector Locations

Refer to [Figure 1-4](#) for the location of the cable connectors on the RF Head.

Base Control Unit Installation

Overview

This section contains procedures for installing a Base Control Unit (BCU). Refer to [Figure 1-1](#) for an overall view of the BCU.

BCU Compartments

[Figure 4-1](#) and [Figure 4-2](#) show the two major compartments that make up the BCU.

Figure 4-1 BCU Card Cage Compartment

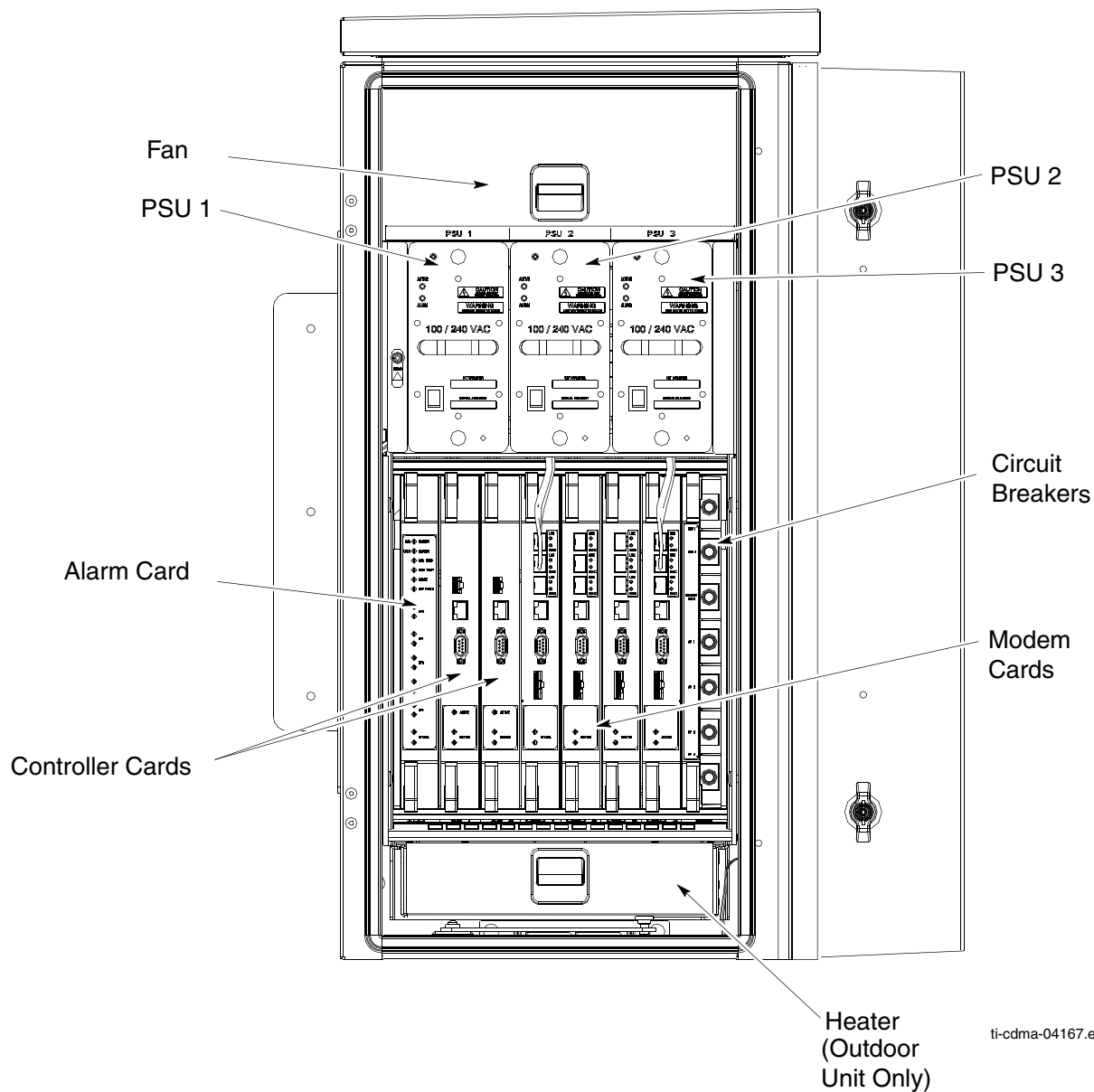
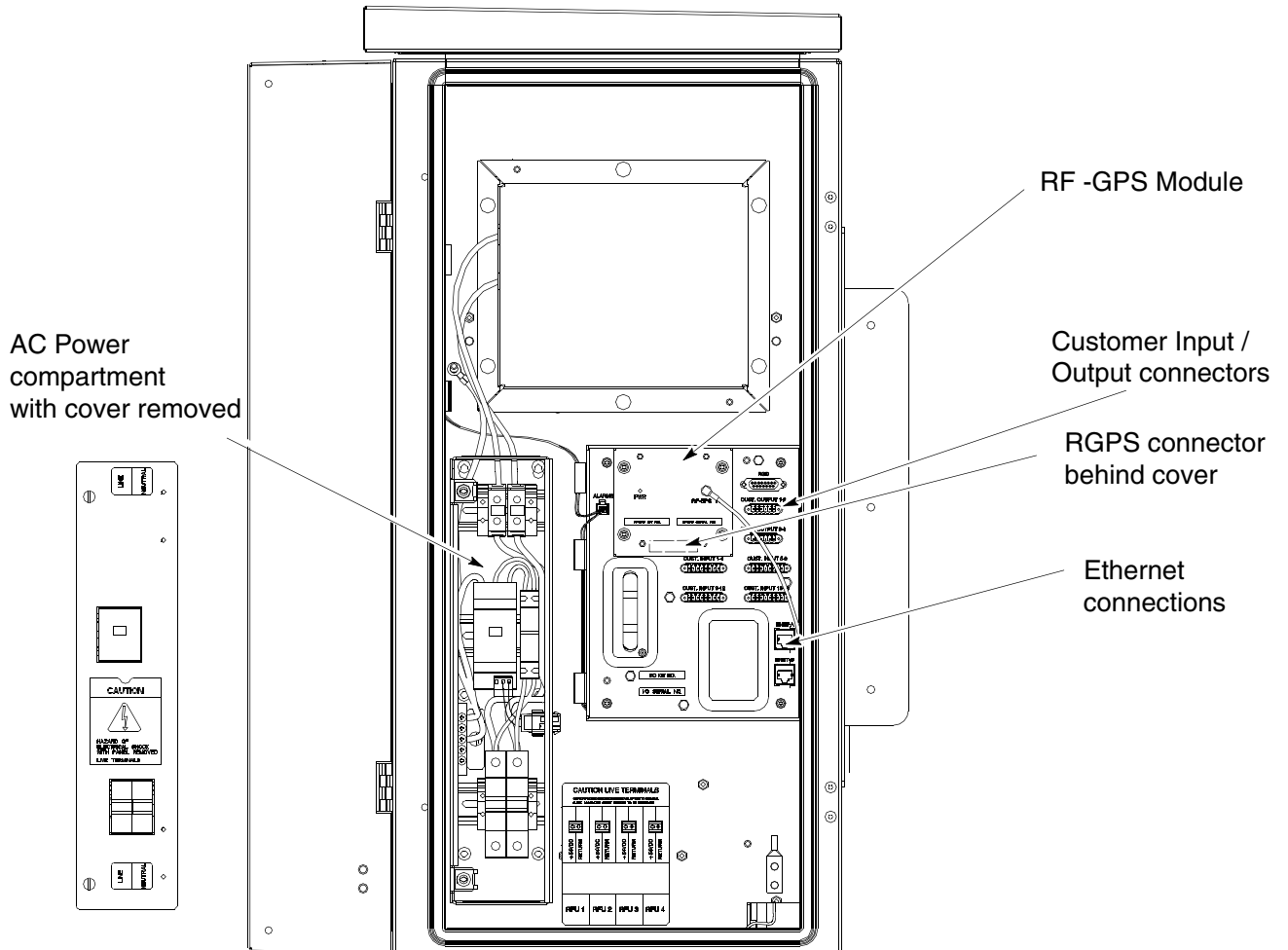


Figure 4-2 BCU Power and Customer Interface Compartment



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Electrical

The BCU is designed to use 100-240 VAC, +27 VDC, or -48 VDC.

If powered by single phase AC voltage (customer supplied), the range is 100/240 VAC @ 50/60 Hz, 16A max., +20 to +30 VDC, 78A max., or -60 to -30 VDC, 38A max.. The AC voltage is converted to +54 VDC within the Power Supply Modules (PSM).

If powered by +27 VDC (customer supplied) the range is +21 to +30 VDC. See [Figure 4-11](#)

If powered by -48 VDC (customer supplied) the range is -60 to -40 VDC. See [Figure 4-11](#)

Battery Backup

Battery backup or associated charging/control circuitry for the AC version of the BCU is not supported.

Dimension and Weight



CAUTION

If the BCU must be physically adjusted/moved, Motorola recommends that a minimum of two people perform this function.

- Dimension: 508 mm (20 in.) **D** x 482.6 mm (19 in.) **W** x 810.8 mm (32 in.) **H**
- Weight: 68 kg (150 lbs)

The dimension measurements do not include connectors, hinges, handles, or latches.

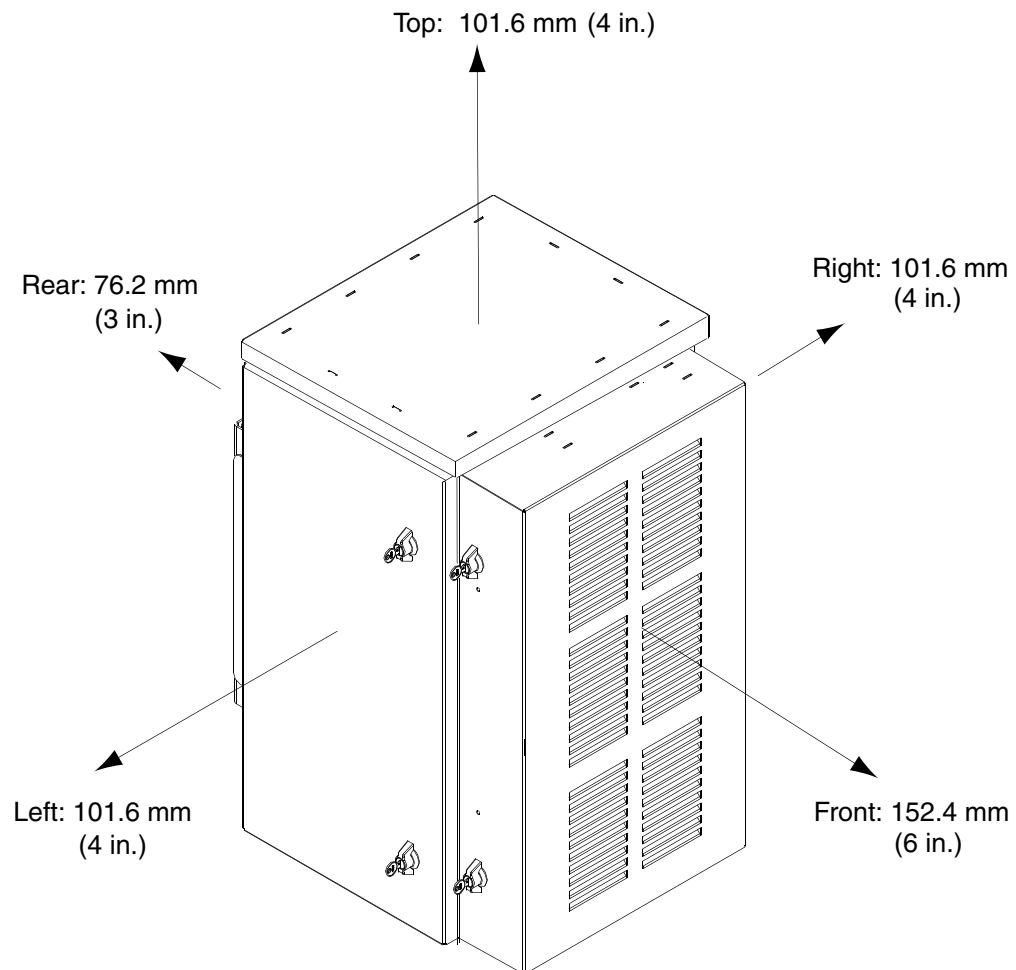
Environmental

The operational temperature range for the BCU is -40 to +55 degrees centigrade.

Operational Clearances

For *proper air flow*, the BCU requires the following minimum clearances:

- Top — 101.6 mm (4 in.)
- Front — 152.4 mm (6 in.)
- Rear — 76.2 mm (3 in.)
- Left and Right — 101.6 mm (4 in.)

Figure 4-3 Air Flow Clearances

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For *proper door opening*, the BCU requires the following minimum clearances:

- DACS Door — 431.8 mm (17 in.)
- Customer Interface Door — 406.4 mm (16 in.)
- Card Cage Door — 406.4 mm (16 in.)

For *proper Fiber Optic Cable routing*, the BCU requires following the minimum clearance:

- Fiber Optic Cable — 308.4 — 457.2 mm (12–18 in.)