

SCU Fast Forward Service Boxes and Optional SCUFF Power Kit

Product Description

The SCUFF service box transforms either 115 Vac or non-isolated 230 Vac to 24 Vac as part of a Fast Forward Migration. The service boxes mount directly inside a SCU Enclosure on the existing SCU power supply studs.

The service boxes are Smoke Control and Energy Management listed when installed per this instruction.

Service box assemblies consist of:

- Adapter plate for mounting inside SCU enclosure on SCU power supply studs
- Transformer for converting either 115 Vac or 230 Vac to 24 Vac sized for 192 VA
- ON/OFF Circuit breaker for transformer
- Two Class 1 power limited 24 Vac outputs including one terminal for earth ground for use inside enclosure only
- One Class 2 output with circuit breaker to distribute up to 96 VA for use outside enclosure
- Duplex Service Outlet (115 Vac models only)
- Power Cord (115 Vac models only) or four power/ground wires (230 Vac models only)


The optional power kit (sold separately) allows reuse of the existing service box from a previously installed SCU Migration. Power Kit consists of:


- Adapter plate for reuse of service box from a previous SCU to Modular Building Controller (MBC) or SCU to Modular Equipment Controller (MEC) Migration
- MEC Power Termination Block (MEC PTB)

Product Numbers

PXA-SCU115SB	Service Box 115V, 24 Vac, 50/60 Hz, 192 VA
PXA-SCU230SB	Service Box 230V, 24 Vac, 50/60 Hz, 192 VA
PXA-SCUFF.PWRKIT	SCUFF Power Kit

Warning/Caution Notations

WARNING:  Personal injury or property damage may occur if you do not follow procedures as specified.

CAUTION:  Equipment damage or loss of data may occur if you do not follow procedures as specified.

Required Tools

- 11/32 socket and drive
- 7/16 socket and drive

Expected Installation Time

- 5 minutes for installation of service box
- 5 minutes for installation of power kit

Compliance



CAUTION:

Use of the SCUFF Service Boxes without the SCU enclosure voids all UL, CSA, and FCC approvals, as well as European EMC and LVD compliance.



NOTE:

A SCU Migration Kit is required for Smoke Control applications.

Smoke Control Application Requirements

UL864 and NFPA92A compliant installations require the 115V or 230V SCUFF Service Box Assembly installed inside the SCU Enclosure.

For smoke control installations, the 24 Vac Actuator Output is a supplementary circuit intended for general HVAC equipment only. It can not power smoke control devices.

Prerequisites

Existing hardware has been removed and new parts ordered.

Installing the Power Kit

If reusing a service box, perform following steps before installing service box in the SCU enclosure.

1. Secure the three service box ground cables on the mounting bracket ground stud using 11/32 drive and three lock washers, flat washer, and locknut previously set aside.

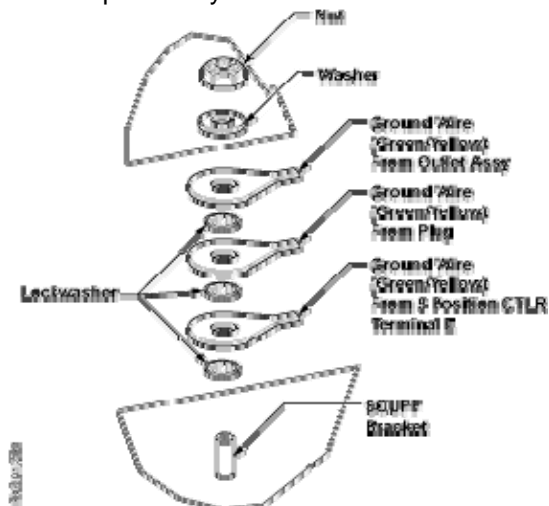


Figure 1. Exploded View.

2. Secure service box to bracket using 7/16 drive and three locknuts previously set aside.
3. Plug MEC PTB into service box CTRL terminal to ground the transformer secondary neutral.

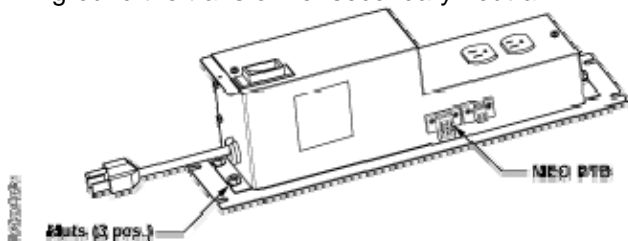


Figure 2. Service Box.

Installing the Service Box



WARNING:

This installation should only be done by a qualified electrician or an authorized Siemens Industry, Inc. representative.



WARNING:

Turn off AC power to the SCU enclosure at a circuit breaker panel.

4. Secure service box mounting bracket to SCU enclosure using 7/16 drive and four locknuts supplied.

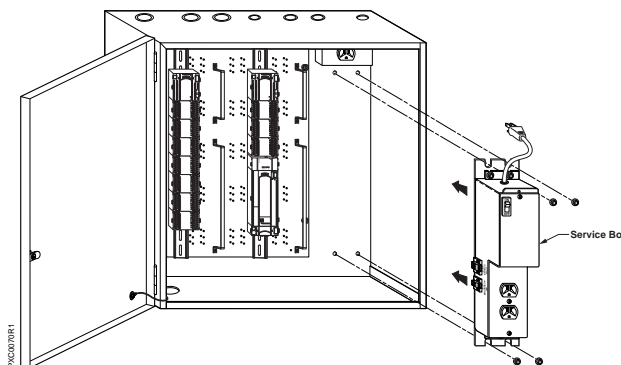


Figure 3. SCUFF Migration Kit.

5. Ensure service box power switch is off before connecting power plug to enclosure outlet.



CAUTION:

The green wire grounds the transformer secondary neutral. This is required whenever the primary side is greater than 150 Vac, required by local code or if used to power TX-I/O Modules.

Do not use the TX-I/O Modules with an isolated earth ground.

6. Do one of the following:
 - **115 Vac models:** Plug the AC power cord into the enclosure outlet assembly. All wiring is completed inside the service box.
 - **230 Vac models (non-isolated earth ground installation only):** Remove the cover of the enclosure outlet assembly. Connect AC hot (black wire) to L terminal and AC neutral (white wire) to N terminal on the terminal block. Strip and connect earth ground (green/yellow) and transformer secondary neutral ground (green) wires at earth ground terminal on terminal block.

The installation is complete.

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