UCP 3500

Universal Control Panel for On/Off/EPO

Consolidated Control

Marway's UCP 3500 consolidates into a single control panel the on, off, and EPO control features to manage one or more power distribution units. PDUs with remotely switchable outlets can therefore provide power on/off of downstream equipment switched in unison. Additionally, the EPO circuit improves safety of the combined power system.

Feature Highlights

- Connects to one or multiple PDUs.
- On/Off power control to connected PDUs.
- EPO for all connected PDUs.
- EPO reset/silence button.
- Built-in lamp test button.
- Local "Breaker On" lamp indicates UCP has power.
- Local circuit breaker protects UCP circuitry.
- Front panel 125 VAC, 5-15R convenience outlet.
- Back panel 125 VAC, 5-15R convenience outlet.
- UL Listed.

On/Off Circuit

The power on/off circuit is the primary feature of the UCP 3500. Lighted on/off switches provide easily recognized status on the UCP, and connections on the back of the chassis allow for remote indication as well. Dry contacts, connected at the back panel, provide two channels of on/off control (each can be of a unique power spec), which can be externally branched, to provide a power on signal to as much downstream equipment as needed.

EPO Circuit

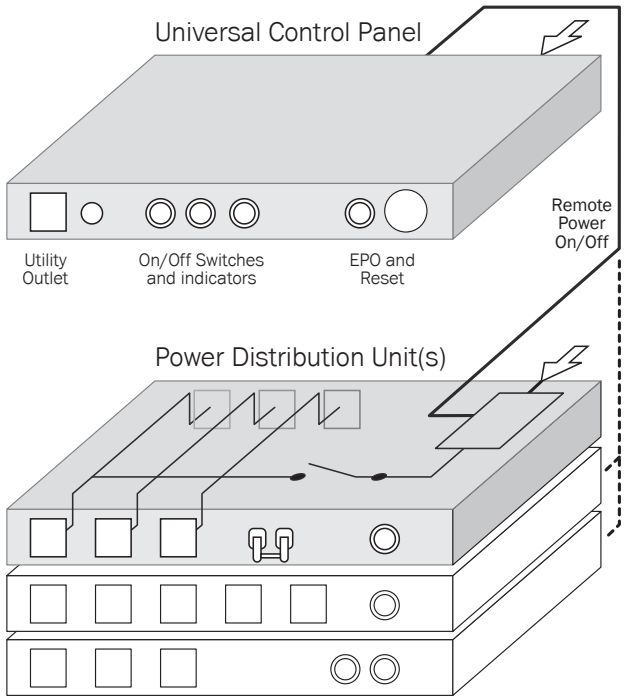
In some applications, particularly those with machinery connected to a PDU, an Emergency Power Off (EPO) may be required. An EPO is a large, prominently placed push button used to disconnect power to all devices connected to the PDU. These buttons are intended to be easy to find and press in an emergency scenario, such as when a person identifies a hazardous condition not handled by the end-point equipment itself. The UCP 3500 provides this EPO circuit including remote capabilities to allow additional EPO buttons to trigger the same shutdown.

Order Information:

UCP 3500-000 – Black, all features

UCP 3500-001 – Gray, all features

Universal control panels (UCPs) provide on, off, and EPO control for one or more PDUs to consolidate control of up to an entire rack of application-specific equipment.



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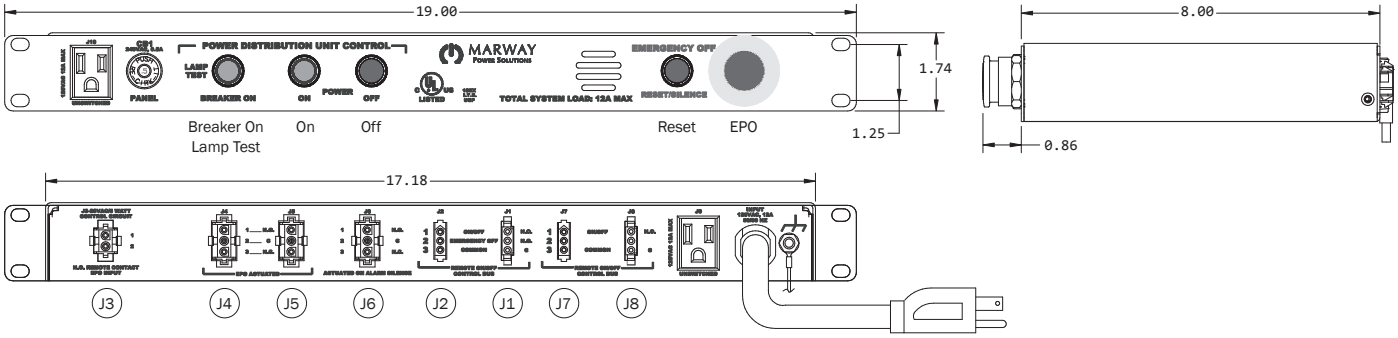

When Switched Off

The front panel:

- Breaker On lamp will be lit.
- Power On lamp will *not* be lit.
- Power Off lamp will be lit.
- Reset lamp will *not* be lit.*
- J10 will have facility power.

The back panel:

- J3 has 20 VAC power.
- J2 common is not returned.
- J1 common is not returned.
- J7 common is not returned.
- J8 common is not returned.
- J9 will have facility power.
- J4, J5, J6 are unused.

* The Reset circuit will be in effect when the UCP is first powered. The lamp will be lit, and the Reset button must be pressed. After that, when the unit is switched off, the Reset lamp will not be lit.

When Switched On

The front panel:

- Breaker On lamp will be lit.
- Power On lamp will be lit.
- Power Off lamp will *not* be lit.
- Reset lamp will *not* be lit.
- J10 will have facility power.

The back panel:

- J3 has 20 VAC power.
- J2 common is returned to pin 1.
- J1 common is returned to pin 1.
- J7 common is returned to pin 1.
- J8 common is returned to pin 1.
- J9 will have facility power.
- J4, J5, J6 are unused.

When EPO is Activated

The front panel:

- Breaker On lamp will be lit.
- Power On lamp will *not* be lit.
- Power Off lamp will be lit.
- Reset lamp will be lit.
- J10 will have facility power.
- On/Off are ineffective until after the Reset switch is pressed.

The back panel:

- J3 has 20 VAC power.
- J2 common is returned to pin 2.
- J1 common is returned to pin 2.
- J7 common is not returned.
- J8 common is not returned.
- J9 will have facility power.
- J4, J5, J6 are unused.

Dimensions	Electrical	Environment
1U Rack-mount chassis Weight: 9.0 lbs Front Width: 19.00” Chassis Width: 17.18” Chassis Height: 1.74” Chassis Depth 8.00”	Input power rating: 125 VAC, 50/60 Hz Maximum Load: 12 A J1: AMP #1-480304-0, 250 VAC, 4 A max. J2: Molex #03-09-1081, 250 VAC, 4 A max. J3: AMP #1-480699-0, 20 VAC, no load J4, J5, J6: populated, but unused J7: Molex #03-09-1081, 250 VAC, 4 A max. J8: AMP #1-480304-0, 250 VAC, 4 A max. J9: NEMA 5-15R, 125 VAC ** J10: NEMA 5-15R, 125 VAC ** ** combined load of J9 and J10 is 12 A max.	Operating Temperature: 32°F to 122°F Maximum Altitude: 25,000 feet Relative Humidity: 5% to 85% non-condensing

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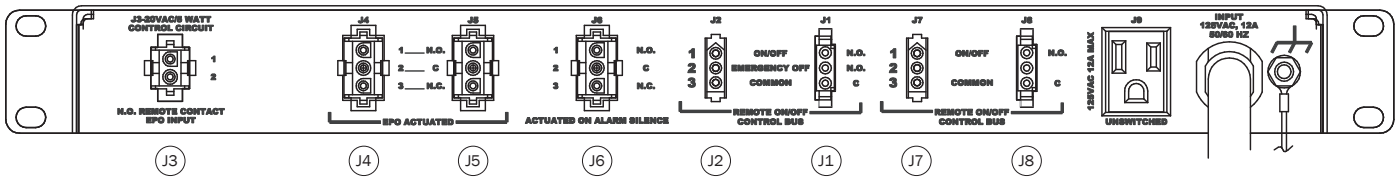
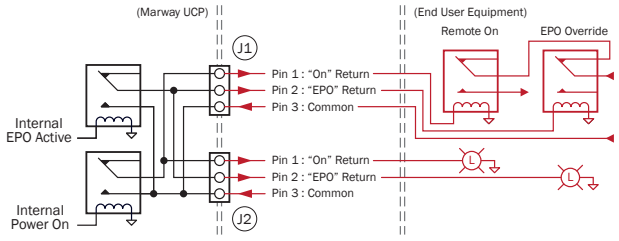


Using J1 / J2 for Remote On/Off/EPO Control

Connectors J1 and J2 are wired in parallel. They are effectively identical except that they are physically different types of connectors. Pin 1 becomes activated when the UCP is On, and pin 2 becomes activated when the UCP is in an EPO state. Pin 3 is the remote power input ("common" to both pins 1 and 2). Use these connectors to drive Marway PDUs and other equipment.

- J1 Connector: AMP #1-480304-0, mating #1-480305-0
- J2 Connector: Molex #03-09-1081, mating #03-09-2032
- Voltage 250 VAC maximum
- Current 4.0 Amps maximum

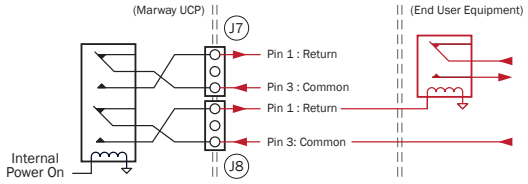


This diagram shows conceptually what's inside the UCP, and a simplified example of how to use the J1 and J2 connectors for remote control of Marway PDUs, other equipment, or indicators.

Using J7 / J8 for Auxiliary Power On

Connectors J7 and J8 are independent (not wired in parallel), but operate in exactly the same way. Pin 1 on each connector becomes active when the UCP is On. Pin 2 is unused. Pin 3 is the remote power input. Use these connectors to generate remote power on signals to PDUs or other downstream equipment.

- J7 Connector: Molex #03-09-1081, mating #03-09-2032
- J8 Connector: AMP #1-480304-0, mating #1-480305-0
- Voltage 250 VAC maximum
- Current 4.0 Amps maximum

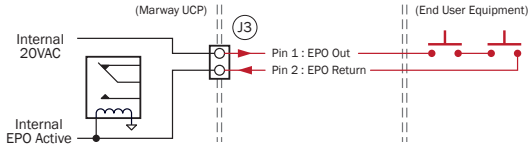


This diagram shows conceptually what's inside the UCP, and a simplified example of how to use the J7 and J8 connectors for auxiliary power on signals.

Using J3 for Remote EPO

Connector J3 is used to provide one or more remote EPO switches. Each switch, if there is more than one, would be wired in series. Shorting J3 pin 1 to pin 2 returns the 20 VAC signal, and creates an EPO Activated state. There is no remote reset. For safety, there is only the one reset at the UCP.

- J3 Connector: AMP #1-480699-0, mating #1-480698-0



This diagram shows conceptually what's inside the UCP, and how to use the J3 connector to attach one or more external EPO buttons.

Using J9 / J10 Outlets

These two outlets are wired directly to the input power, and are always powered. They are not subject to the On/Off/EPO controls of the UCP, nor are they subject to the front panel circuit breaker. The combined load of J9 and J10 cannot exceed 12 A.

MARWAY POWER SOLUTIONS

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