# EMERGENCY LIGHTING CONTROL UNIT

**ELCU-100** 

Guarantees emergency lighting remains ON or is turned on when power to the control device is lost

"Watchdog" feature allows emergency loads to be controlled in tandem with normal power loads

> Interfaces with fire alarm panel or security system



Integrated push-to-test button

UL listed for use in emergency circuits

### **Description**

Wattstopper's Emergency Lighting Control Unit (ELCU) is a self-contained, emergency lighting control device. The ELCU provides all required functionality to allow any standard lighting control device to control emergency lighting in conjunction with normal lighting in any area within a building.

## Operation

The ELCU monitors a single circuit that provides normal lighting to an area. As long as normal power is present, the ELCU permits lighting control devices (i.e., occupancy sensors, panels, dimmers, or wall switches) to control the emergency lighting fixtures as well as the general lighting. If power is lost for any reason, including the tripping of a single branch circuit breaker, the ELCU will force the emergency fixtures for that area on. The ELCU can be wired either as a control device, so that emergency lighting follows the control of normal lighting, or as a bypass device to shunt emergency power around a control device when normal power fails.

# **Mounting**

The ELCU is equipped with an integral DIN rail mounting groove and retaining clip mechanism. It can be installed on the DIN rail track provided within a Wattstopper enclosure (i.e., LS-E8, LS-E12), or in a Wattstopper lighting control panel.

## **Applications**

The ELCU is designed to control lighting in areas where emergency lighting fixtures are connected on dedicated emergency lighting circuits that are typically on 24 hours per day. The ELCU allows normal control of emergency lighting for energy savings and/or task related reasons while strictly adhering to National Electric Code requirements. It is suitable for any application where enhanced energy saving is desired.

#### **Features**

- Eliminates energy waste caused by "always ON" emergency lighting
- Integral push-to-test button activates emergency mode for a true test condition
- Connects to remote test switch or other input to activate emergency ON from a remote location
- Operates as a control device or as a shunt
- Senses local single circuit power failure

- Zero cross switching technology for reliability and increased product life
- Compatible with Wattstopper occupancy sensors, daylighting controls, lighting control panels, and dimmers
- LED indication for emergency and normal power
- Half-second delayed ON positively identifies emergency fixtures for required maintenance
- Provides absolute fail-to-on emergency lighting
- UL924 listed, meets NEC, OSHA and NFPA safety codes

LOCATION/ PROJECT



# **Specifications**

- 120/277 VAC; 60Hz
- · Maximum load:

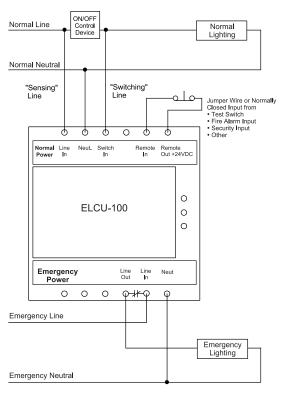
Ballast: 20A @ 120/277 VAC
Incandescent: 10A @ 120/277 VAC
Motor: 1HP @ 120 VAC

Remote activation: supplies 24 VDC source for dry contact closure

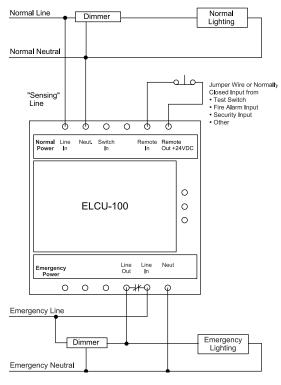
- Integral control: push-to-test button on unit
- Housing: fire rated V-0,176°F (80°C)
- Terminal torque: 4/428 inch pound-force (0.5Nm)
- Dimensions: 2.78" x 3.44" x 2.63" (71mm x 87mm x 67mm) L x W x D
- UL, cUL listed Emergency Lighting and Power Equipment; five year warranty

## **System Wiring**

#### **ELCU Wiring Diagrams**



When wired as a control device, the ELCU receives a switching signal from the output of the control device (relay, switch, power pack, etc.)



When wired as a shunt, the switching line is not used. Note: Use with Wattstopper universal dimmers or contact dimmer manufacturer to determine the suitablity of the specified dimmer for shunt operation.

- 1. You can connect as many NC contacts (including EMTS-100) in series on the jumper loop wire as you want to a single ELCU. You cannot connect the NC devices in any other manner.
- 2. At no time can more than 5 ELCU devices can be controlled together by commoning their Test Loop wires to a Normally Closed Test Switch (EMTS-100) and/or other NC contact closure.
- 3. If connecting ELCUs together via their test loop wires, you must maintain the polarity of their wires.

# **Ordering Information**

| Catalog # | Description                                     | Voltage                        |
|-----------|---|--------------------------------|
| ELCU-100  | Emergency Lighting Control Unit                 | 120/277 VAC; 60Hz              |
| EMTS-100  | Remote test switch on single gang plate         | 24VDC, normally closed contact |
| LS-E8     | Surface Mount Enclosure for 1 or 2 ELCU units*  | N/A                            |
| LS-E12    | Surface Mount Enclosure for up to 6 ELCU units* | N/A                            |

<sup>\*</sup>LS-E8 and LS-E12 enclosures include screw cover and DIN rail