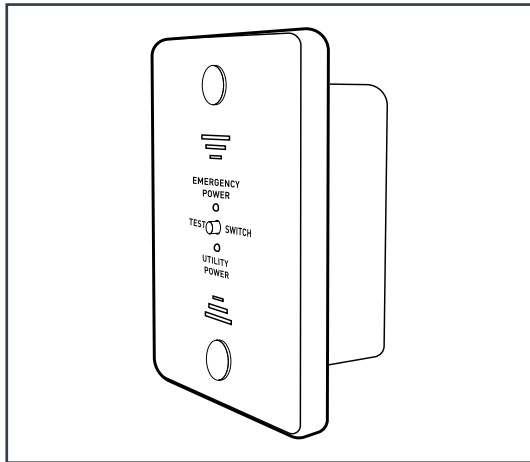


# EMERGENCY LIGHTING CONTROL RELAY 120/277 6A (ELCR 6A)



## APPLICATIONS

- Hallways • Classrooms • Conference Rooms

## SPECIFICATIONS

ELECTRICAL	
• cULus UL924 Listed	
• 120V / 277V Sensing Input	
• 120V - 277V (20A) Load Rating	
• 20A (120-277V) Ballast Load Rating	
• 1800W (120V) / 1500W (277V) Incandescent Load	
MECHANICAL	
• 4.69" Junction Box w/ single gang ring	
• UL94V-0 + UL2043 Plenum Rating	
• Shipping Weight/Color: 8 oz. / White	
• Temperature: 32°F - 140°F (0°C - 60°C)	
• Limited Five-Year Warranty	



## OVERVIEW

In the past, emergency lights were kept on 24 hours a day to meet life safety codes. Now, you can use a UL924 listed Emergency Power Control, Model ELCR 6A, to convert regular light fixtures into approved emergency lights. The ELCR saves energy and money while ensuring compliance with both life safety and energy codes.

During normal operation, the same room switch, occupancy sensor, relay panel, or lighting control switches regular and emergency fixtures on and off simultaneously.

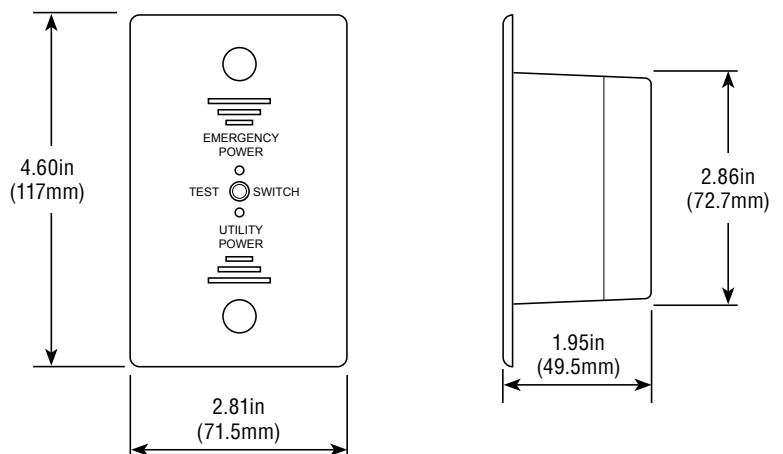
During a utility power interruption, the ELCR automatically bypasses the regular lighting controls, turning the emergency lights ON, regardless of switch position.

The ELCR 6A is ceiling or wall mounted in a junction box with a single gang plaster ring and is usually located in the area where the emergency fixtures are installed.

## FEATURES

- Unique, Patented Automatic Diagnostic Feature: When the room switch is turned off, the ELCR will run a 2.5 second self-test routine, verifying that the emergency power source was available and that the ELCR, ballast, and lamp(s) are all functioning correctly. This feature eliminates the need for time-consuming and costly manual monthly testing and is approved for this purpose. This also allows the unit to be installed in remote or inaccessible locations, because the unit does not rely on access to its manual test switch
- Fire Alarm, Remote Test & 0-10V Dimming Option (See spec for ELCR 6A-010D)
- Utility & Emergency Power Indicator LEDs
- Slim, attractive flush mount profile allows easy access to manual test switch and LEDs

## DIMENSIONS



## ORDERING INFORMATION

PART NO.	CAT. NO.	DESCRIPTION
649126	ELCR 6A	Emergency Lighting Control Relay 120/277 6A, Switched Load Override, Flush Mount



Project Name \_\_\_\_\_ Catalog # \_\_\_\_\_

1-800-436-7800 (Support, Option 8) [www.lsi-industries.com](http://www.lsi-industries.com)

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# EMERGENCY LIGHTING CONTROL RELAY 120/277 6A (ELCR 6A)

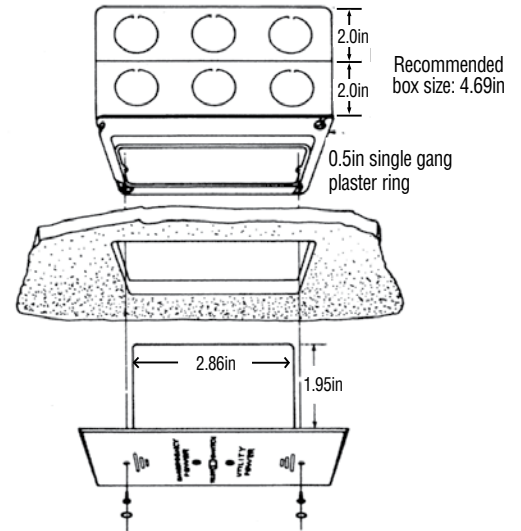
## EMERGENCY POWER SOURCE & METHOD OF OPERATION

- The emergency luminaire power is derived from a 24 hour central emergency power source. The local utility power company normally supplies the power through a UL1008 Transfer Switch or equal, but during a utility power failure, the transfer switch automatically switches to the emergency power source.
- The room switch turns on and off both regular and emergency luminaires simultaneously. This is accomplished by having the room switch leg power activate the Emergency Power Control, ELCR.
- Wire input #1 or #2 and neutral are connected internally to a sensing circuit. During a power interruption on the sensing input, this circuit causes contact X to drop into a N/C position and turns on the emergency load(s). Review wiring diagram, on reverse, for details.

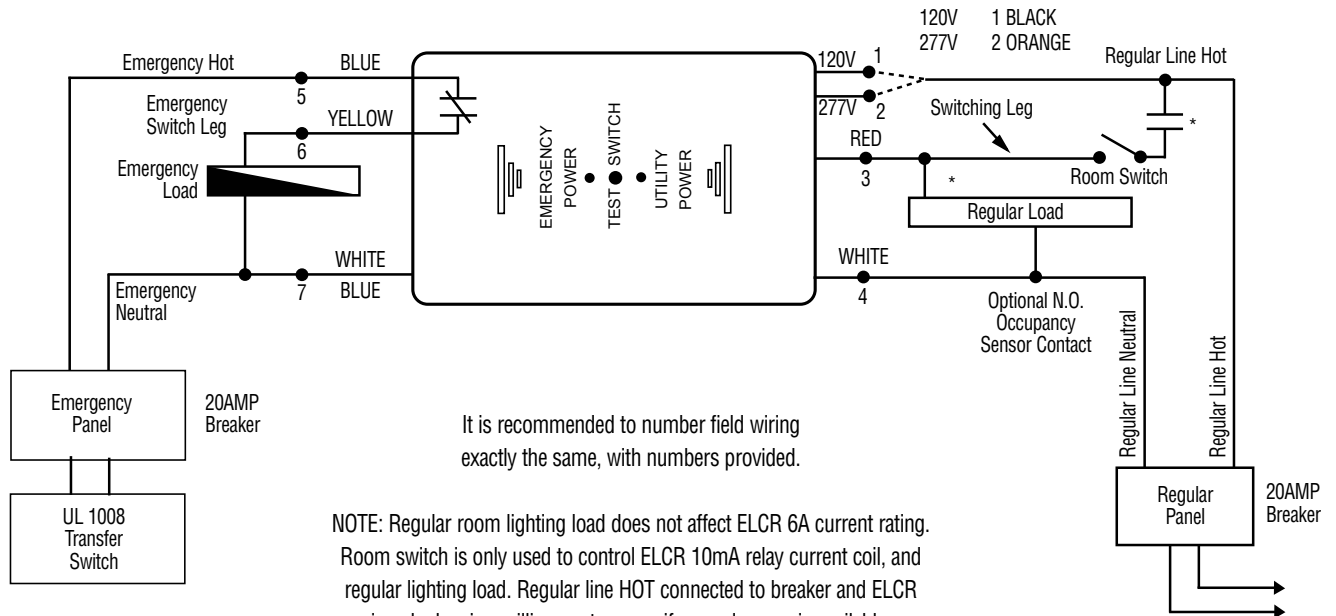
## INSTALLATION

In order to install the ELCR in accordance with national/local code requirements, a qualified electrician should review and understand the installation instructions: Check voltage and current requirements. Verify and lock out circuit breakers on both normal power and 24 hours emergency circuit. Install a self-adhesive 2in x 3in caution label in each fixture or load controlled by an ELCR unit cautioning that this load is supplied from 2 different power sources, regular and emergency. Review wiring diagram and connect wires, one group at a time, in accordance with the numeric identification.

## FLUSH-MOUNT CEILING INSTALLATION



## COMMON WIRING DIAGRAM



See alternate wiring diagrams on page 4



# EMERGENCY LIGHTING CONTROL RELAY 120/277 6A (ELCR 6A)

## IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed:

1. This product can be used with ballast, tungsten and general use loads
2. Assure connections are in accordance with the National Electrical Code and local regulations
3. To avoid electric shock, disconnect both normal and emergency power supplies before servicing
4. This product is intended to be used to control indoor and outdoor located loads
5. An unswitched AC power source is required (120 or 277VAC)
6. Do not install near gas or electric heaters
7. Do not attempt to service a sealed Emergency Power Control.
8. The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition
9. Do not use this product for other than intended use
10. Servicing should be performed by qualified service personnel
11. Equipment should be mounted in locations and at the heights where it will not readily be subjected to tampering by unauthorized personnel

## INITIAL TESTING AND TROUBLESHOOTING

In a new installation, where 10 or 100 separate devices may be used, each having as many as 14 wires to be correctly connected, it is important that a fast convenient method is used to check the connections. In order to test that the wires are connected correctly, without any inconvenience to other occupants, do not turn off regular utility supplied power or turn on the emergency generator until you have checked each ELCR device and light fixtures using the following methods.

## TROUBLESHOOTING & MAINTENANCE

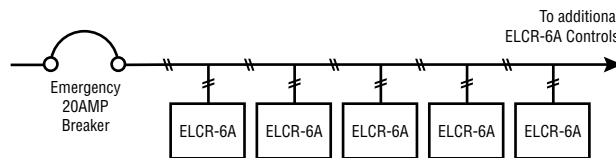
When the normal room or area switch is on, emergency load and regular load fixtures should all be illuminated. If ELCR does not function properly on startup perform the following tests:

1. To test normal operation, ensure branch circuit breaker is connected and utility power is available. If green LED is not illuminated, confirm wiring connections and continuity to branch panels.
2. To test emergency operation, ensure emergency source is connected and red LED is illuminated. Turn room switch to "OFF" position, and ensure that emergency lights stay illuminated for at least 2.5 seconds. If emergency lights do not stay on for at least 2.5 seconds, confirm wiring connections and perform testing on emergency panel and emergency power source.

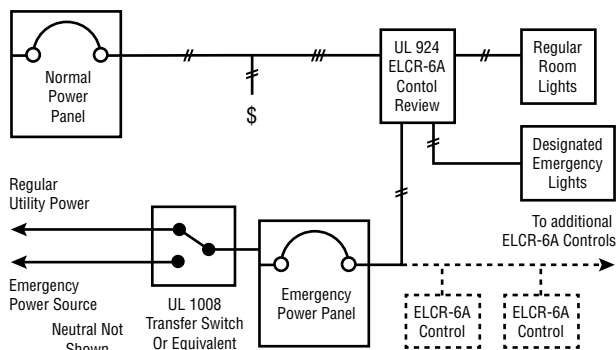
No maintenance is required to keep the ELCR functional. However, regular testing should be performed when the lamps or ballasts have been replaced or when facility remodeling has taken place.

## SINGLE LINE DRAWINGS

On a 20AMP circuit, 1 emergency power control (ELCR 6A) can control up to 20AMP of emergency lighting load, or 20 emergency power controls can each control 6AMP of emergency lighting load.



## STANDARD LINE VOLTAGE SWITCHING LINE DRAWING



## RELAY PANEL LOW VOLTAGE SWITCHING LINE DRAWINGS

From lighting control panel to emergency power control 3 #12 wires are necessary: 1) Hot, 2) Switch Leg, 3) Neutral

