

UL1008BCELS1277 INSTALLATION INSTRUCTIONS

PRECAUTIONS

- This product can be used with LED, ballast, tungsten, and general use loads.
- Make sure all connections are in accordance with the National Electrical Code and local regulations.
- To reduce the risk of electric shock, disconnect both normal and emergency power supplies before servicing.
- This product is intended to be used to control indoor and outdoor located loads.
- An unswitched AC power source is required (120-277VAC).
- Do not install near gas or electric heaters.
- Do not attempt to service a sealed Emergency Lighting Transfer Switch. When malfunctioning, return to the manufacturer: LVS, Inc. 2555 Nicholson Street, San Leandro, CA 94577.
- The use of accessory equipment is not recommended by the manufacturer and may cause unsafe condition.
- Do not use this product for other than its intended use.
- Servicing should be performed by qualified service personnel.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.

SAVE THESE INSTRUCTIONS!

DESCRIPTION

Electrical Specifications	Mechanical Specifications
120-277V Sensing Input	Mounts in 4-11/16" Junction Box with Extension Box
16 Amp Ballast Load Rating (120-277V)	UL94-5VA Plastic Flame Rating
16 Amp General Use Rating (120-277V)	Shipping Weight: 22 oz Color : White
1920W Incandescent Load Rating (120V)	Temperature: 0°C-60°C (32°F - 140°F)
4432W Incandescent Load Rating (277V)	Flush Mounted Size: 6" x 6" x 1/2"
UL1008 Listed (usUL/cUL)	Body Size: 4-1/4" x 4-1/4" x 2-1/4"

APPLICATION

In the past, all emergency lights were left on 24 hours a day to meet safety codes. Now you can specify & install a UL1008 Listed Emergency Lighting Transfer Switch UL1008BCELS1277, which converts up to 16A of normal light fixtures to approved emergency lights. During normal operation, the UL1008BCELS1277 feeds designated emergency lights from the normal power circuit and allows them to switch or dim with the same control as your normal lights. During a utility power interruption, the UL1008BCELS1277 feeds designated emergency lights from the emergency power circuit, at full brightness, regardless of switch or dimmer position.

Intended for use with 2 WIRE, 3 WIRE, and 4 WIRE DIMMABLE LOADS (includes line voltage and 0-10V dimming, as well as ON/OFF Loads).

Three testing methods:

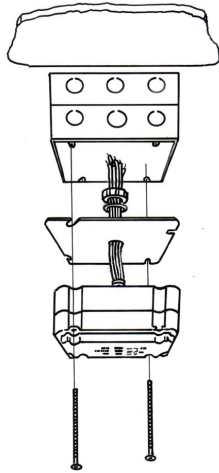
- Integral Test Switch provides convenient anytime testing.
- Automatic Test Option provides automatic and monthly self-testing.
- Fire Alarm/Dry Contact Option allows emergency lighting activation from fire, security alarm or remote test switch.

Four safety and reliability interlocks:

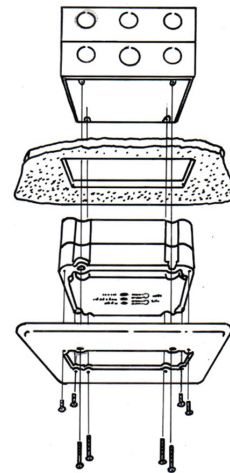
- Voltage Sensing Interlock senses back-feed or erroneous voltage on load terminals during transfer through optically isolated sensors.
- Time Delay Interlock ensures break-before-make transfer operation. Reduces or eliminates phase-phase arcing risk.
- Relay Position Detection detects relay malfunction (such as welding) and alerts microprocessor to stop transfer to prevent phase-phase shorting across relays.
- Mechanical Interlock unique contact arrangement of relays prevents normal and emergency sources from being connected, even if all other interlocks fail.

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Surface Mount Installation



Flush Mount Installation

UL1008BCELT51277 Includes:

- Flush adaptor ring
- Plastic 1/2" lock nut

Suggested Box (Not included):

- 4-11/16" (2-1/8" deep) and 2-1/8" Extension Box

For plenum applications:

- Suggested Box: 6x6 or 8x8 box with blank cover (Not Included)
- Plenum rated test switch is available upon request

METHOD OF OPERATION

The model UL1008BCELT51277 is a single-zone silent transfer switch for emergency lighting applications. Versatile, small, and cost effective, and designed to work with all modern dimming types including 2-wire and 3-wire line voltage, 0-10V and DALI low voltage. UL1008BCELT51277 is compatible with all lighting types including LED, fluorescent, and incandescent. The UL1008BCELT51277 allows emergency and normal lighting to be dimmed from the same dimmer during normal operation. During emergency operation (power interruption), the UL1008BCELT51277 will transfer the emergency lighting to the emergency power source and bypass all dimming controls, bringing the emergency lighting to 100% (full) brightness, regardless of dimmer level. A momentary test switch on the front cover allows the user to simulate a power interruption when pressed.

INSTALLATION

In order to install the device in accordance with national/local code requirements, a qualified electrician should review & understand the installation instructions. Check voltage & current requirements. Verify & lock out circuit breakers on both regular (utility) power & 24 hour emergency generator or inverter circuit. Install a self-adhesive 2" x 3" caution label in each fixture or load controlled by an UL1008BCELT51277 unit caution-ing that this load is supplied from 2 different power sources, regular & emergency. Review wiring diagram & connect wires, one at a time, in accordance with the numeric identification.

INITIAL TESTING

1. Turn on normal power circuit breaker, utility power GREEN LED should be illuminated.
2. Turn on emergency power, emergency power RED LED should be illuminated.
3. Do not turn dimmer system on yet. Press test switch on EPC-F-ATS. Designated emergency fixtures should come on at full brightness. Alternatively, you may turn off the normal power breaker to test the UL1008BCELT51277 .
4. With normal power breaker on, operate the dimmer control and observe if all fixtures turn on, including designated emergency fixtures. Load BLUE LED should be illuminated when load is on.

FINAL TESTING

1. Coordinate a convenient time to turn off the main circuit breaker with building occupants.
2. With main circuit breaker off, emergency circuits will be powered by the generator, inverter, or UPS.
3. Emergency luminaires connected to UL1008BCELT51277 should be ON at full brightness, regardless of dimmer system setting. This is the intended function of LVS Model UL1008BCELT51277 and conforms to UL1008, NEC, and NFPA101 requirements.

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CAUTION: This light fixture is powered by 2 circuits: the 24-hour nightlight / emergency circuit must be turned off in addition to the regular power branch circuit breaker before servicing this light fixture.

Notes for use:

USE CU WIRE ONLY

Utiliser des fils en cuivre uniquement

Suitable for total system transfer.

Input: 120-277VAC 50-60Hz

Unit Power Consumption: 7W Max

Continuous Load Current not to exceed 100% of switch rating

120-277 volt 16 Amp Ballast

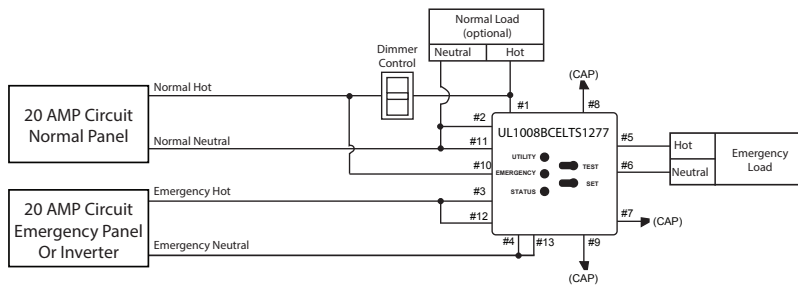
120-277 volt 16 Amp Tungsten

120-277 volt 16 Amp General Use

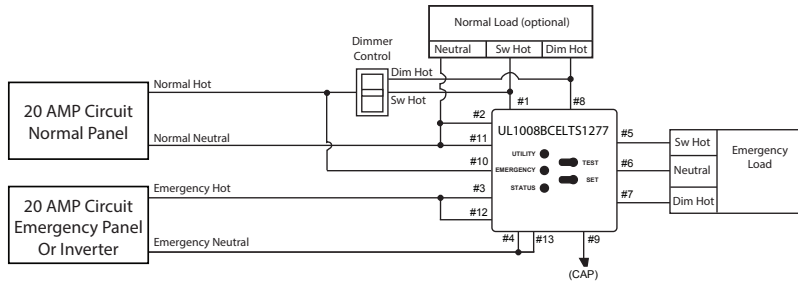
When protected by a fuse of the specific manufacturer, type, and ampere rating as marked below, this transfer switch is suitable for use in circuits capable of delivery 5000A at 277V.

Littelfuse	KLK-30	30 Amps
Littelfuse	KLKR-30	30 Amps

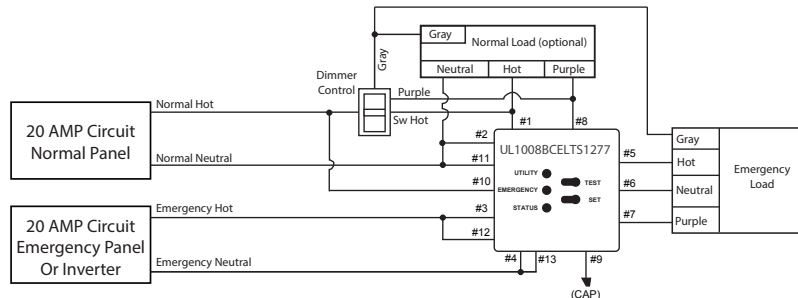
UL1008BCELT51277 WIRING DIAGRAMS



2-Wire Dimmable Loads



3-Wire Dimmable Loads















4-Wire Dimmable Loads

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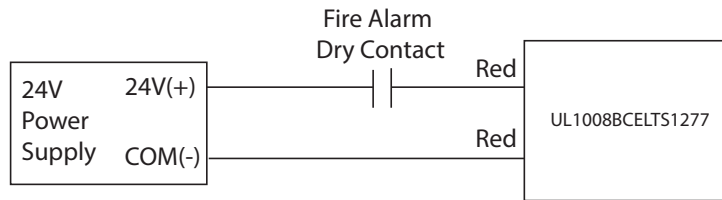
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UL1008BCELT51277 DIP SWITCH SETTINGS

<p>ON  No Monthly Automatic Test No Fire Alarm/Remote Test Switch</p> <p>OFF  Default (replaces UL1008BCELT51277)</p>	<p>No Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/C)</p> <p>ON </p> <p>OFF </p>
<p>ON  YES Monthly Automatic Test No Fire Alarm/Remote Test Switch</p> <p>OFF </p>	<p>YES Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/C)</p> <p>ON </p> <p>OFF </p>
<p>ON  No Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/O)</p> <p>OFF </p>	<p>YES Monthly Automatic Test YES Fire Alarm/Remote Test Switch (N/O)</p> <p>ON </p> <p>OFF </p>

The model UL1008BCELT51277 is a single-zone silent transfer switch for emergency lighting applications. Monthly Automatic Test feature will test UL1008BCELT51277 for 40 seconds every 25 days and record result on microprocessor. Test results may be played back by holding test button for 3 seconds. Once green LED flashes once, release test button. Every green flash signals a passed test, every red flash signals a failed test. Annual testing for 90 minutes is still required and recommended.

Fire Alarm/ Remote Test switch input is optional. Cut red jumper wire and connect 24V DC power to it through a dry contact. For N/C type, when contact is closed UL1008BCELT51277 will transfer to emergency source. For N/O type, when contact is open UL1008BCELT51277 will transfer to emergency source.



Note: UL1008BCELT51277 red wires are polarity independent