


<b>Technical Specifications</b>	
<b>Load Control Relay (LCR)</b>	
<b>UL924 AUTOMATIC LOAD CONTROL / BYPASS RELAY 20 AMPS</b>	

## 1. GENERAL

### 1.1 SCOPE

This guide provides technical information and specifications for OnLine Power’s Automatic Load Control Relays (LCR). This document will provide information for the LCR20 and LCR20-B.

Online Power Emergency Lighting UL924 Listed LCR Devices Automatic Load Control / Bypass Relays allows the use of auxiliary generators and inverters to turn ON emergency lighting loads in the event of normal power interruption or emergency situation.

Note: This Guide Specification is subject to change without notice due to product improvement and/or enhancement.

Please use this document as a guide specification and do not hesitate to contact our Application Engineering Department if you have any further questions or special requirements.

You can contact us at: (800) 227-8899 or via email: [sales@onlinepower.com](mailto:sales@onlinepower.com).

# LCR20/LCR20-B

## Technical Guide Specifications

### 2. DESCRIPTION

The Online Power automatic load control / bypass relay LCR20 and LCR20-B allows the use of auxiliary generators and inverters to turn ON switched lighting fixtures to full power in the event of a power failure or emergency situation.

### 3. SPECIFICATIONS

Emergency lighting shall be provided by using existing lighting loads equipped with an Online Power LCR20-B automatic load control relay. The device shall be capable of serving as an Automatic Load Control Relay or bypass for local switching means when normal utility power has been lost. The LCR device shall work in conjunction with auxiliary generators and inverters to turn ON switched or 0-10 Vdc dimmed lighting fixtures to full power in the event of a normal power failure.

These load control relays shall consist of relay switching circuitry, a Quick Connect IP65 rated normal power indicator light test switch and 9.5" L x 1.7" W x 1.14" H aluminum enclosure; shall sense normal power (universal input 120 through 277 Vac, 50/60Hz) and switch up to 20 amps (@120 or 277 Vac) for LED drivers or magnetic ballast lighting loads; shall be compatible with 0-10 Vdc dimming controls and allow for override to full illumination; and shall be comply with the current National Electrical Code. The device shall be UL Listed (UL924) for factory or field installation with indoor luminaires, and plenum or damp locations and warranted for a full 5 years from date of purchase.

### 4. OPERATION

#### 4.1 NORMAL MODE

AC power is present. The AC driver or ballast operates the lamp(s) as intended. The closed dimming relay allows operation of the luminaire(s) at the desired setting of the connected 0-10 Vdc dimming signal (if provided).

#### 4.2 EMERGENCY MODE

**EMERGENCY MODE** - Failure of normal AC (utility) power. The LCR device senses the AC power failure and automatically bypasses the wall switch with an internal relay controlling the AC Driver/Ballast, ensuring the flow of emergency power to the controlled emergency lighting load regardless of the wall switch's "on" / "off" state. The LCR Device dimming relay contacts open and forces the emergency lighting load to operate at full lumen output regardless of the dimmer setting. This light level will continue for the duration of the provided emergency or auxiliary power or until normal power is restored.

# LCR20/LCR20-B

## Technical Guide Specifications

### 5. TESTING & MAINTENANCE

The LCR Device is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule: Insure that the AC Indicator light is illuminated monthly. “Written records of testing shall be kept by the owner for inspection by the authority having jurisdiction.”

**SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL!**

### 6. SPECIFICATION

<b>Approvals</b>	UL Listed to UL924
<b>Normal Power Supply Voltage</b>	Universal Input 120 - 277 Vac
<b>Normal Power Supply Frequency</b>	50/60 Hz
<b>Emergency Power Supply Voltage</b>	120/277 Vac
<b>Emergency Power Supply Frequency</b>	50/60 Hz
<b>Relay Contact Ratings</b>	20 A Electronic LED Driver @ 120Vac or @277 Vac
	20 A Magnetic Ballast @ 120Vac or @277 Vac
<b>0-10 Dimmer Vdc Override</b>	For emergency full illumination
<b>Dimmer Contact Switching</b>	120mA @250V
<b>Test Switch and Normal Power Indicator</b>	Quick Connect IP65 rated
<b>Weight</b>	0.85 lb (LCR20); 1.0 lb (LCR20-B)
<b>Mounting</b>	Ballast channel
	Stud Mount remote with Plenum Rated Harness (LCR20-B only)
<b>Dimensions</b>	9.5”L x 1.7”W x 1.14”H
<b>Case</b>	Aluminum Case
<b>Operating Temperature</b>	-4° to 131°F (-20° to 55°C)
<b>Warranty</b>	5 years full

All Specifications are subject to change without prior notification.3