

ACE-G20-ALCR Emergency Lighting Automatic Load Control Relay



- Extended Temperature Range
- Dual-Zone Dimming Relay
- Remote Test/Trigger Switch Option
- UL 2043 Plenum Rated
- Damp Location Rated
- UL 924 Listed for U.S. and Canada

The **ACE-G20-ALCR** Emergency Lighting Automatic Load Control Relay is an emergency lighting control device which allows designated switched emergency luminaires to be powered in emergency-mode by an emergency source of power, such as a remote generator or inverter, upon the failure of normal power. When normal power is on, the **ACE-G20-ALCR** allows the emergency luminaires to be utilized as normal lighting luminaires in normal-mode and allows them to be switched on or off following the on/off state of the normal lighting on/off switch. When the normal power fails, the **ACE-G20-ALCR** senses the loss of normal AC power and energizes the emergency luminaires, powering them in emergency-mode directly from the emergency source of power circuit, regardless of the on/off state of control devices such as on/off switches, occupancy sensors, or timer-switches, etc. The **ACE-G20-ALCR** also includes a dual zone dimming relay which can accommodate two separate 0-10 V dimming circuits. The dimming relay allows the normal lighting dimming controller to dim the connected luminaires as normal while in normal-mode. When the normal power fails, the dimming relay bypasses the dimming controller(s) and allows the designated switched emergency luminaires to be powered to full light output in both zones during emergency-mode regardless of dimmer setting. When normal power returns, the **ACE-G20-ALCR** returns to the normal operating state. The **ACE-G20-ALCR** includes a momentary push-to-test switch, and an optional connection for an optional remote switch, which can be used as a remote test switch or remote trigger.

Specifications:

Model Name ACE-G20-ALCR
Input Voltage (Universal) 120-277V, 50/60 Hz.
Input Power (Normal-Mode) 3 W (max)

Load Control Relay Maximum Ratings (Relay type: SPST)

LED Driver
 8 Amps @ 120 – 277 Vac, 50/60 Hz. (tested per NEMA 410)
Fluorescent Electronic Ballast
 20 Amps @ 120 – 277 Vac, 50/60 Hz.
Incandescent Lamp 10 Amps @ 120 – 277 Vac, 50/60 Hz.

Dimming Relay Type
 DPDT (Optimized for Dual-Zone 0-10 V dimming circuits)

Dimming Relay Contact Rating 1A @ 30 Vdc / 277 VAC
Operating Temp -20° to 65° C
Weight 0.84 lb.
Dimensions 4.63 L x 2.25 W x 2.25 H Inches

Warranty 5 Years TC ≤ 60° C / 3 Years TC ≤ 66° C

Safety and Regulatory Compliance Certifications:

- UL 924 Listed for U.S. and Canada
- UL 2043 Plenum Rated
- Damp Location Rated
- EMI: Complies with FCC commercial limits
- RoHS

5-Year USA-Backed Warranty*

See complete AC Electronics/ACE LEDS Warranty information for details.

For questions or to place an order contact us at oemsales@aceleds.com or 800-375-6355 or your local WPG Americas Sales representative at inquiry@wpgamericas.com or 888-WPG8881

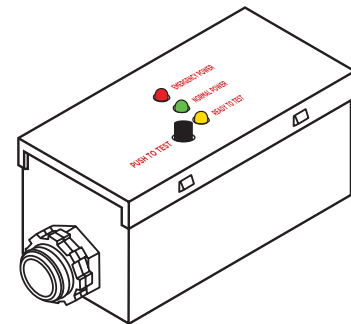
Features, Benefits, and Applications:

- **Increased Energy Savings:** Eliminates the need for the emergency luminaires to be operated as “always-on” (24/7) luminaires. The ACE-G20-ALCR allows the emergency luminaires to be utilized as normal lighting luminaires in normal-mode, switched on/off following the on/off state of the normal lighting on/off switch.
- **Restore Local Lighting Control:** Local control of illumination (such as on/off or dimming levels) are allowed without compromising normal lighting performance or emergency lighting performance.
- **Dual Dimming Zones:** The ACE-G20-ALCR includes a dual zone dimming relay which can accommodate two separate 0-10 V dimming circuits, which allows the normal lighting dimming controller to dim the connected luminaires as normal while in normal-mode. When the normal power fails, the dimming relay bypasses the dimming controller(s), the designated switched emergency luminaires are then powered to full light output in both zones during emergency-mode regardless of dimmer setting.
- **Remote Trigger Device Option:** The provided jumper (loop) allows for an optional connection to an optional remote switch, which can be used as a remote test switch or remote trigger, such as an alarm or fire panel.
- **LED indicators:** The LED indicators indicate functional status and operating modes, providing a quick visual for system checks.
- **Extended Temperature Range:** -20° to 65° C
- **Galvanized steel case**
- **Junction Box Mounting:** The metal enclosure includes an integrated 0.5-inch rigid conduit nipple for easy mounting to a standard junction box.
- **Plenum rated:** Rated for use in plenum applications.
- **Damp Location rated:** Rated for use in damp locations.
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements.
- RoHS Compliant
- Integral Test Switch mounted on the unit face plate.

Manual Testing:

With AC power applied, while the unit is in Normal-Mode, and with the READY TO TEST (YELLOW) LED ON, manual testing can be performed as follows

1. Push and hold the momentary Integral Test Switch. This transfers the unit into emergency-mode, and the Emergency Luminaire(s) should be ON. The unit will remain in emergency-mode while the test switch is held closed.
2. Release the test switch to transfer the unit back to normal-mode.



LED Indicators:

	Indicates that the unit is ready to test when the YELLOW LED is ON.
	Indicates that the unit is in Normal-Mode when the GREEN LED is ON..
	Indicates that power is connected to the Emergency Circuit of the unit. This LED will be ON when Normal power is ON or when Emergency power is ON.

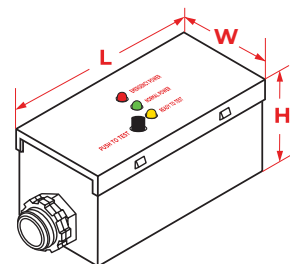
For questions or to place an order contact us at oemsales@aceleds.com or 800-375-6355 or your local WPG Americas Sales representative at inquiry@wpgamericas.com or 888-WPG8881

Lead Lengths

White	6"	Brown/Black	6"	Red	6"
Black/White	6"	Orange/White	6"	Gray	6"
Red/White	6"	Orange	6"	Black	
Brown/White	6"	Orange/Black	6"		

Enclosure Dimensions

Length (L)	4.63"
Width (W)	2.25"
Height (H)	2.25"

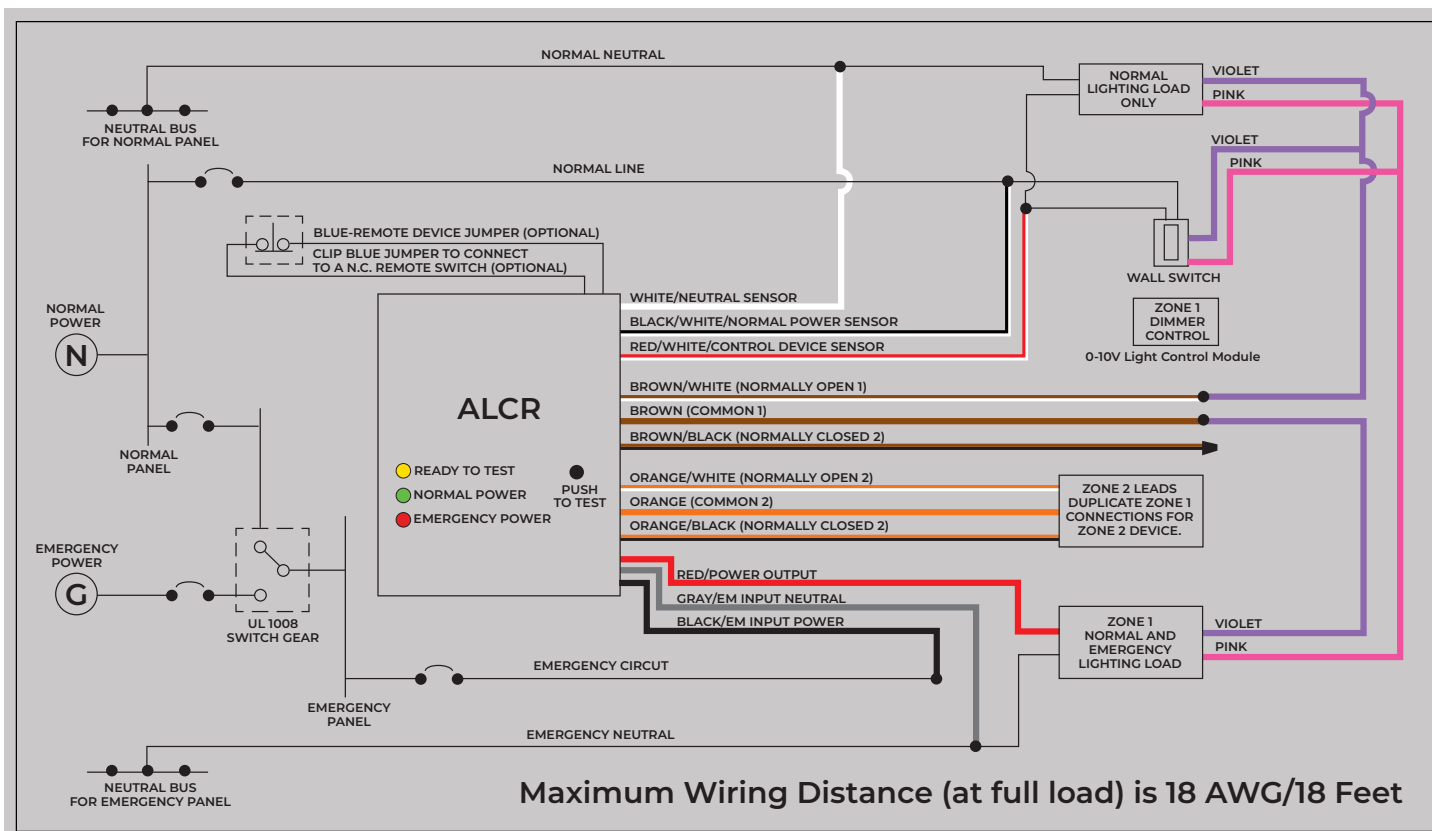


Installation:

The **ACE-G20-ALCR** is designed to be mounted directly to a junction box. It is rated for installation in plenum applications and for use in damp locations. Note that the **ACE-G20-ALCR** requires a direct (unswitched) connection from the Emergency panel to the large BLACK wire (EMERGENCY INPUT POWER connection).

The unit also requires a direct (unswitched) connection from the Normal panel to the BLACK/WHITE wire (NORMAL POWER SENSE connection). See the wiring diagram for details and for a typical installation.

Wiring Diagram:



*AC Electronics/ACE LEDS warrants to the purchaser that each Emergency LED Driver will be free from defects in material or workmanship for a period of 5 years when operated at max case temp of up to <60°C and 3 years warranty based on a maximum case temperature of ≤ 66 °C when properly installed and under normal conditions of use. See aceleds.com for complete warranty policy.

For questions or to place an order contact us at oemsales@aceleds.com or 800-375-6355 or your local WPG Americas Sales representative at inquiry@wpgamericas.com or 888-WPG8881