POWER LOAD CONTROLLER - F SERIES

ER1C-FLU

Overview

The Power Load Controller is a versatile control device that can be used in a large number of applications. As a lighting controller, it provides: on/off lighting, timed light switch, daylight harvesting, photo inhibit, occupancy based or vacancy based lighting control.

Other vertical market applications include: process control and hospitality applications.

The controller activates electrical loads with received input from a linked sensor or switch. The controller acts on transmissions of:

- ambient light levels monitored by an wireless photo sensor
- occupancy/vacancy state monitored by a wireless occupancy sensor
- switch action from a wireless single or dual paddle wall switch, a wireless key card switch or a wireless door/window switch
- switch action from a gateway control implementing schedules or other events

The controller can be used in distributed process applications to eliminate troublesome wiring runs using linked wireless electrical switches. A low voltage or line voltage event can be transmitted to the load controller triggering the dry-contact relay connected to any electrical load.

The load controller fits equally as well into hospitality applications. Responding to linked key card switches that monitor suite occupancy, control can be added to lighting or other electrical circuits to disable the loads when the suite is vacant. The controller can also be used to enable and disable air-conditioning equipment based on the occupancy state and/or patio door position.

Other features include telegram repeating and BEMS system integration allowing the controller to be used both in distributed control applications or as a component of a centralized system.

The controller supports radio range confirmation, a feature that allows installers to test signal strength for optimal sensor placement and system integrity. This feature is supported with the Echoflex Resonate and 21-series of sensors.

Echoflex offers three methods of configuring the controller:

1. Use the linked sensors and Simple Tap to make quick changes to individual controllers.
2. Use Smart Click to access more configuration parameters using a linked switch.
3. To access the full menu of configuration parameters, Echoflex's Garibaldi software is a PC based tool that includes hands-free commissioning.

Features

- Use for controlling lighting or HVAC circuits or any miscellaneous electrical load
- Occupancy/Vacancy based lighting controls with auto-ON/OFF or manual ON, auto-OFF using wireless occupancy sensors
- Daylight harvesting and photo-inhibit modes
- Monitors linked battery-free wall, key card and proximity (reed) switches, photo sensors and occupancy sensors
- Range Confirmation (patent pending) allows optimal placement of linked sensors - (Resonate and 21 series sensors only)
- Central Command support for BEMS gateway control
- Supports commissioning via Smart Click, Simple Tap or Garibaldi (remote management) software
- Assign up to 20 battery-free wireless wall switches or sensors to one controller
- Reliable radio reception range of 24 m (80 ft) in most common indoor applications
- Low-cost alternative to running wires and conduit - ideal for retrofit projects
- Easy installation on electrical junction boxes with 1/2 " mounting nipple
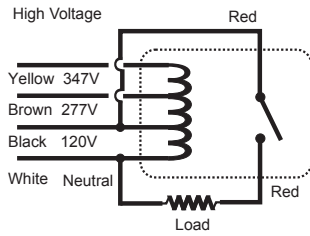- Doubles as a telegram repeater
- CEC - Title 24 Compliant

Ordering Information

Model	Description	Part # - 902 MHz
ER1C-FLU-120/277/347	120/277/347 VAC Power Load Controller	001-8292

ER1C-FLU

Wiring Diagram

High Voltage
Red

Yellow 347V
Brown 277V
Black 120V
White Neutral
Red
Load

Dimensional Diagram

91.35 mm (3.5") 49.40 (1.9")

48.00 (1.9")

Block Diagram

Neutral | Line | LEARN | CLEAR | A

Power Supply | Radio

Processor

Relay
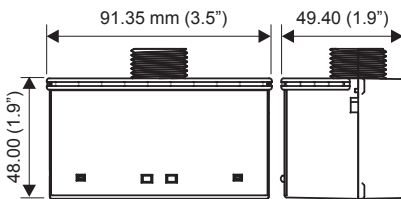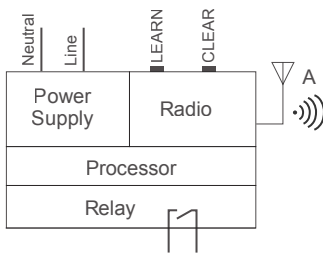
Equipment Profiles - remote devices supported

EEP: F6-02-02	Light and Blinds Control
EEP: A5-06-02	Light Sensor [range 0 - 1024 lux]
EEP: A5-07-01	Occupancy Sensor
EEP: F6-04-01	Key Card Activated Switch
EEP: A5-30-02	Single Input Contact (doors and windows)
EEP: A5-38-08	Central Command, switching (0x01), setpoint (0x03)
EEP: A5-10-0A/0B	Room Operating Panel
EEP: D5-00-01	1BS Contact and Switches

Hardware Specifications

Power Supply — 120/277/347 VAC, 60 Hz

Power Consumption — 5.0 W max. full load

Outputs — N.O. Relay rating 20A@120 or 277 VAC, 15A@347VAC

Communications

Radio Frequency — 902 MHz

Antenna — Integrated whip

Transmission Range — 24 m (80 ft) - commercial office space (typical)

Inputs — LEARN and CLEAR buttons for sensor assignment

Mechanical Specifications

Operating Temperature — -10 ° C to 45 ° C (14 ° F to 113 ° F) ambient

Relative Humidity — 5% to 95% RH (non-condensing)

Weight — 385 g (13.5 oz)

Dimensions — 91 x 48 x 49 mm (3.6 x 1.9 x 1.9")

Mounting — ½ " nipple

Listings

CEC — Title 24 compliant

Safety

ETL Listed Component
Conforms to UL Standard 508
Certified to CAN/CSA Std. C22.2 No.14
UL 2043 Plenum rated

Radio Frequency (902 MHz)
FCC Part 15.231 -Remote Control Transmitter
IC RSS-210