SILENT SINGLE ZONE AUTOMATIC EMERGENCY POWER CONTROL FOR 2 WIRE, 3 WIRE, & 4 WIRE DIMMABLE LOADS

>> Applications <<
Designated dimmable emergency luminaires in public places such as auditoriums, restaurants, conference rooms, theaters, and classrooms.

>> Electrical Specifications / Approvals <<
LVS Emergency Power Controls are tested and listed by Underwriters Laboratories under the UL924 Standard. They meet and exceed all pertinent requirements for installation approval per the NEC (NFPA 70), Life Safety Code (NFPA 101), International Building Code (IBC), and other major municipal / local codes.

>> EPC-D-F Features <<

Integral Test Switch
Integral Test Switch provides convenient anytime testing.

Voltage Surge Protection
Voltage Surge Protection insures reliable performance under adverse conditions.

Status Indicators
Separate indicating LED’s for regular and emergency power allow verification of correct wiring connections.

Emergency Power Supervision
Exclusive LVS Feature
An EPC-D-F uses internal supervision circuits to prevent emergency luminaires from illuminating during normal times if Emergency Hot or Neutral conductors have been interrupted. This gives warning that a problem exists with emergency supply, which would otherwise be unnoticed, especially when controls are mounted above ceiling tile.

Triple Safety & Reliability
EPC-D-F consists of 2 contactors, C-1, and C-2.
C-1 is energized during normal times, and is deenergized when regular power is interrupted.
C-2 is energized when regular power is interrupted, and is deenergized when regular power is restored.

Internal C-1 Contactor
Voltage sensing interlock with C-2
Electrical contact interlock with C-2
1.5 second time delay interlock with C-2

Internal C-2 Contactor
Voltage sensing interlock with C-1
Electrical contact interlock with C-1
1.5 second time delay interlock with C-1

MODEL EPC-D-F

Universal Mounting: Can be mounted surface, above suspended ceiling, or flush.

4-11/16" Back-up Box, no plaster ring required

General Specifications
Flush Mounted Size : 6" x 6" x 1/4"  
Color: White  
Weight: 16 oz.  
Ambient Temp. Rating: 32° F - 140° F
UL 94V-0 Flame Rating on all EPC products. Safe for installation above suspended ceiling.

Electrical Specifications

Model EPC-D-F 120V
120 VAC Ballast 20 Amp
120 VAC Tungsten 1800 Watt
General Use 20 Amp

Model EPC-D-F 277V
277 VAC Ballast 20 Amp
General Use 20 Amp

All model EPC-D-F units are tested during production and upon completion are burned in.

5 YEAR LIMITED WARRANTY

LVS, Inc. 2555 Nicholson St., San Leandro, CA 94577
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Method of Operation

Model EPC-D-F single zone silent operating control is a versatile, cost effective unit, specifically designed for dimmable lights in public places where critical light levels of at least 1 foot candle must be maintained during a loss of normal utility power. The EPC-D-F senses a loss or voltage drop and within 1.5 seconds bypasses switches & dimmers on the emergency circuit. When the normal power is restored, the EPC-D-F senses this and allows the load to be switched or dimmed within 1.5 seconds. Momentary incorporated test switch simulates normal power failure and can be performed anytime. Any interruption of normal utility power will automatically illuminate designated emergency lights to the full bright condition regardless of whether the dimming system is in operation or turned off.

Installation

EPC-D-F is designed to be installed as a wiring device in the area the dimmable lights are, or in a central location. A qualified electrician should review and understand installation instructions before installing or servicing the EPC-D-F in accordance with national/local codes and requirements.

CAUTION: This unit shall be wired with a conductor that has an insulation rating of at least 75°C. The unit shall not be installed in j-boxes with through branch wiring. Check voltage and current requirements. Verify and lock out circuit breakers on both normal power and emergency inverter or generator circuit. Install a self-adhesive 2” x 3” caution label outside of ballast channel in each fixture/load controlled by an EPC-D-F unit, cautioning that load is supplied from the emergency power source.

CAUTION

This light fixture is powered by the emergency circuit. Turn off both the normal power and emergency power branch circuit breakers before servicing this light fixture.

NOTE: Regular Panel is used only for sensing purposes, never to power the load itself.

Review wiring diagram and connect wires, one wire at a time, in accordance with the numerical identification. In order to provide a safe light level, when regular power is interrupted, it is recommended that a minimum of two 4’ fluorescent tubes providing approximately 5000 lumen are controlled by a 24 hour emergency circuit and are spaced no farther than 24’ in any direction from each other in a normal 9’ white ceiling environment.
SILENT SINGLE ZONE AUTOMATIC EMERGENCY POWER CONTROL FOR 3 WIRE DIMMABLE LOADS

Initial testing after installing EPC-D-F

1. Turn on regular power circuit breaker and if all wire connections are correct, utility power green LED will be illuminated.
2. Turn on 24/7 emergency circuit breaker. At this time emergency circuit power is still derived from utility power, and if all wire connections are correct, emergency power red LED will be illuminated.
3. Do not turn dimmer system on but only press test switch on EPC-D-F. Designated emergency light fixtures should then come on full bright. These fixtures would also come on full bright if regular utility power circuit breaker is turned off. This is another testing method to use.
4. When regular utility breaker is on, operate dimmer control and observe if all fixtures light up, including designated emergency fixtures and if dimmer system lights respond normally when adjusted from low to high level.

Final Testing

A. Coordinate with occupants a convenient time that the main circuit breaker can be turned off, and test all emergency lights.
B. When main circuit breaker is turned off UL 1008 transfer switch or equivalent will automatically change position and emergency circuits will now be powered from either a generator, inverter, or UPS emergency source system.
C. All designated emergency light fixtures will now be full bright regardless of whether the dimming system was turned on or off, and this is the intended function of the LVS Model EPC-D-F and conforms to UL 924 standards.

Review wiring diagram and connect wires, one wire at a time, in accordance with the numerical identification. In order to provide a safe light level, when regular power is interrupted, it is recommended that a minimum of two 4’ fluorescent tubes providing approximately 5000 lumen are controlled by a 24 hour emergency circuit and are spaced no farther than 24’ in any direction from each other in a normal 9’ white ceiling environment.

NOTE A: #1 & #2 wires feed internal voltage sensing circuit inside EPC-D-F and are isolated.
NOTE B: 20 Amp emergency circuit can feed several EPC-D-F’s to supply the connected emergency load provided the total emergency load does not exceed a safe load.
NOTE C: 20 Amp circuit from panel can also be from a 20 Amp breaker in dimmer cabinet.
SILENT SINGLE ZONE AUTOMATIC EMERGENCY POWER CONTROL FOR 4 WIRE DIMMABLE LOADS (0-10V & DIGITAL BALLASTS)

NOTE: Regular Panel is used only for sensing purposes, never to power the load itself

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