

## DIMMABLE EMERGENCY LIGHTING CONTROL DEVICE

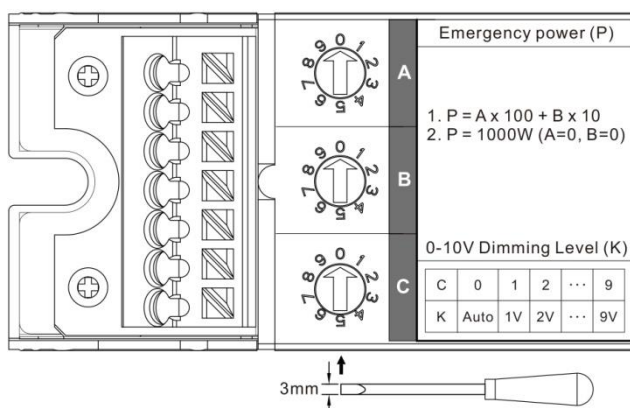
18010-1



### FEATURES



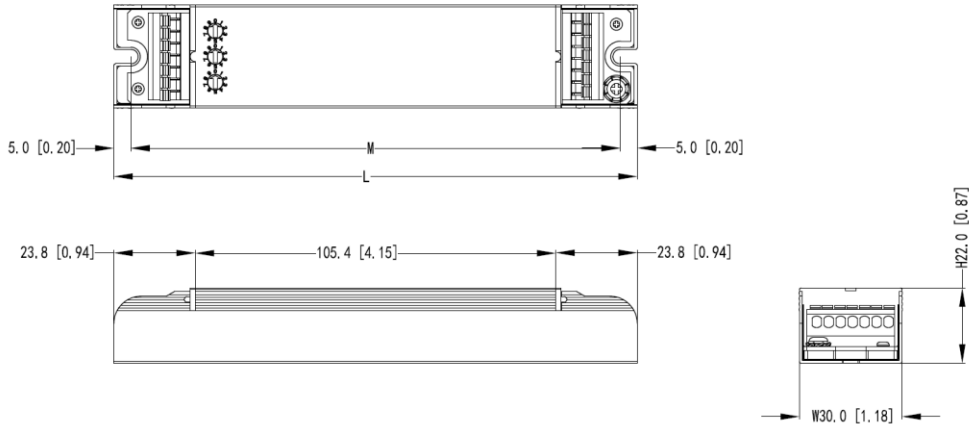
1. Patented APD technology allows generator or inverter supplied emergency lighting to work under auto or preset 0-10V dimming level regardless of wall switch position
2. Great energy and cost saving benefits by reduce the power consumption for the emergency lighting
3. Flexible and precise setting to distribute or make the utmost use of the power of a 10-1000W generator or inverter
4. Supports lighting load up to 5A
5. Dimmer, sensor or other lighting controls override capable
6. 24VDC fire alarm override capable
7. Terminal block
8. Slim size
9. Suitable for indoor, dry and damp applications
10. Factory or field installation



**CHARACTERISTICS**

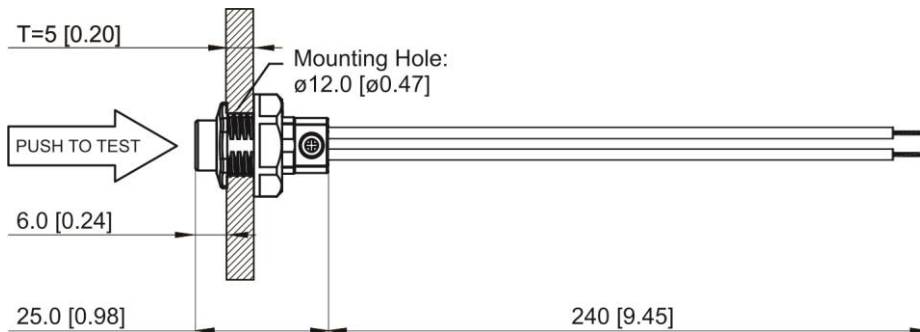
Type	18010-1
Rated voltage	120-277VAC 50/60Hz
Rated current	20mA
Max. Throughput current	5A
Input emergency power	10-600W@120V, 10-1000W@277V (Set by the dipswitch A and B)
Output 0-10V dimming level	Auto dimming or preset of 1V, 2V -- 9V (Set by the dipswitch C)
Max. 0-10V Load power	600W@120V, 1385W@277V
Life time	5 Years
Operating temp	-20-65°C (4° F- 149° F)
Wire	16-18AWG/1.0-1.5mm <sup>2</sup>
EMC& FCC IC standard	EN 55015, EN 61547, EN 61000-3-2, EN 61000-3-3, FCC part 15, ICES-005
Safety standard	EN 61347-1, EN 61347-2-7, UL924, CSA C.22.2 No. 141
Meas. mm [inch]	L153 [6.02] x W30 [1.18] x H22 [0.87] Mounting center: 143 [5.63]

## DIMENSION



Item No.	L mm [inch]	M mm [inch]	W mm [inch]	H mm [inch]
18010-1	153 [6.02]	143 [5.63]	30 [1.18]	22 [0.87]

## LED TEST SWITCH

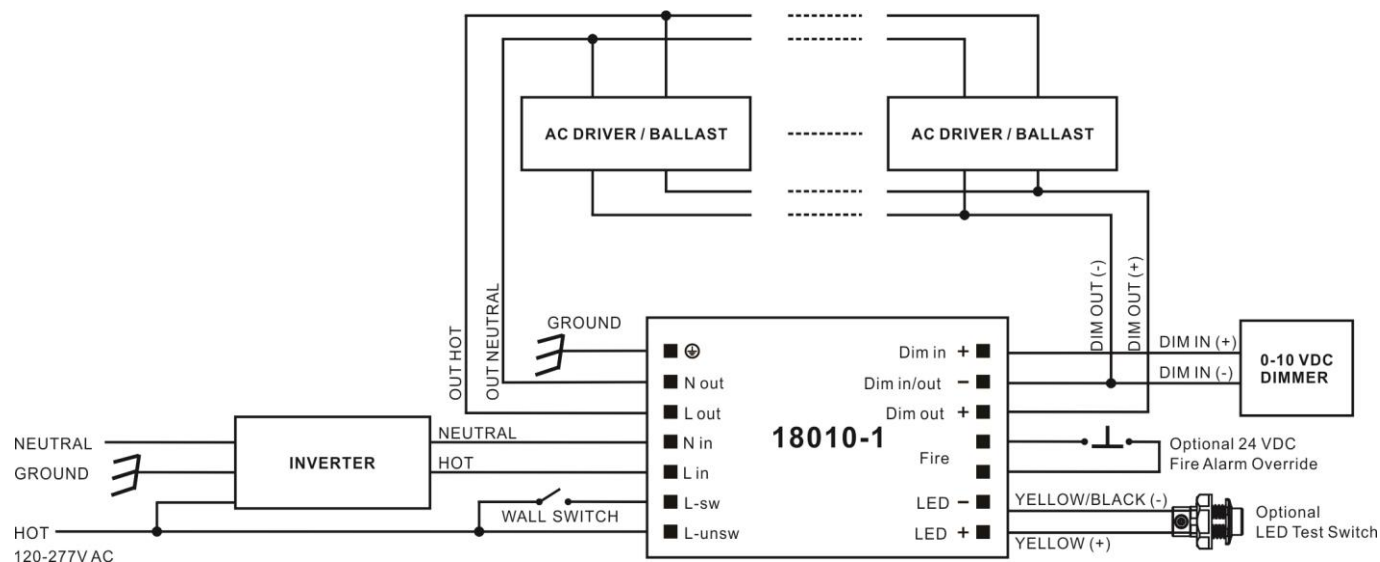


Dimension unit: mm [inch]

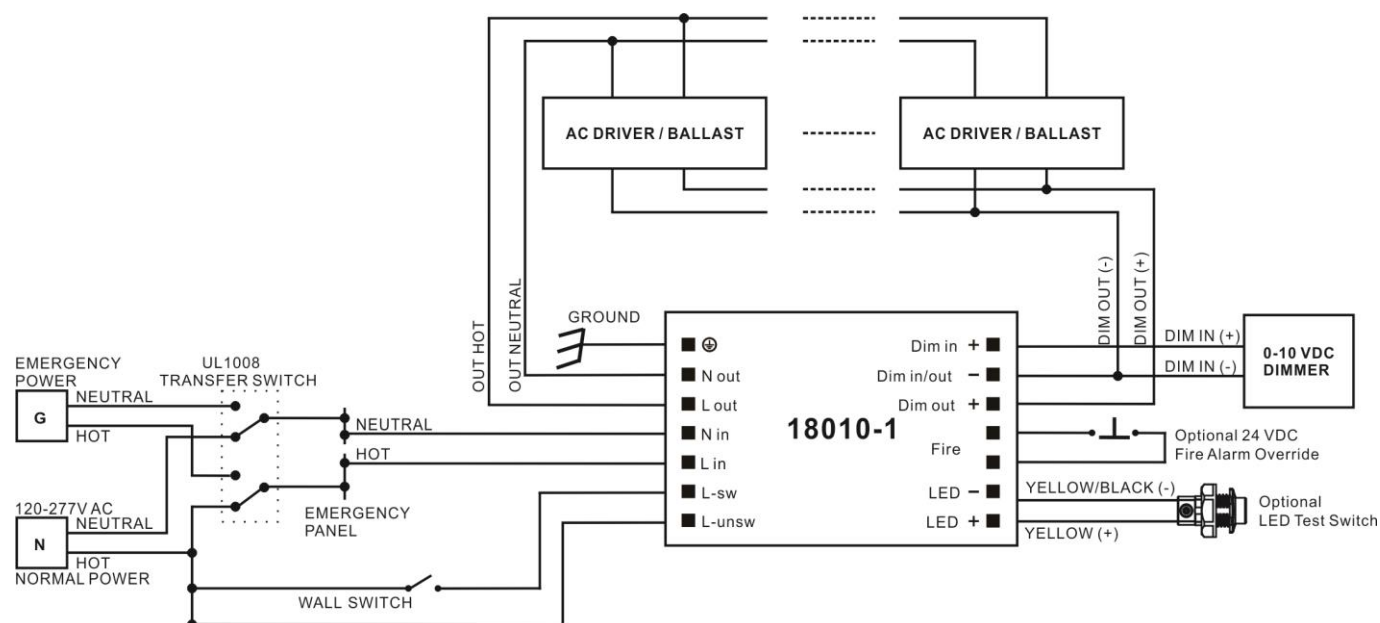
Tolerance:  $\pm 1$  [0.04]

## WIRING DIAGRAM

### EMERGENCY POWER SUPPLY BY SINGLE INVERTER



### EMERGENCY POWER SUPPLY BY GENERATOR OR CENTRAL INVERTER



## **OPERATION/TESTING/MAINTENANCE**

### **OPERATION**

The 18010-1 dimmable emergency lighting control device can work in conjunction with both an auxiliary generator or a central inverter system and single inverter to power existing fluorescent or LED fixtures for emergency lighting at full or reduced illumination with designed or preset dimming level regardless of the wall switch position or normal dim setting.

### **TESTING AND MAINTENANCE**

#### **1. APD (Auto Preset Dimming) technology (The dipswitch C is set to 0)**

##### **a) Initial Auto Test**

When the system is connected properly and powered on after a power failure, the 18010-1 will perform an initial Auto Test:

Bypassing the wall switch and overriding the dimmer to detect the connected dimmable load's maximum power -  $P_{Max. load}$ , calculating the dimming level -  $K$  (which will dim the load in emergency mode) base on the  $P_{Max. load}$  and the emergency power (Set by the dipswitch A and B), dimming the load with the dimming level  $K$  to simulate emergency mode.

##### **b) Auto adjusting**

18010-X is constantly detecting the  $P_{Max. load}$  in normal mode, the Initial Auto Test will be restarted automatically when  $P_{Max. load}$  increases.

#### **2. Preset dimming (The dipswitch C is set to 1-9)**

The dimming level  $K$  is preset to 1-9V.

### **MANUAL TEST (Optional)**

- Press the LED test switch (LTS) one time to simulate emergency mode.
- Press the LTS 2 times continuously within 3 seconds to restart the Initial Auto Test.

### **LED TEST SWITCH (LTS) CONDITIONS**

- LTS On: Normal Condition
- LTS Off: Power Failure
- LTS Gradual Change: In Testing Mode