

### CORESINC EMERGENCY LIGHTING BYPASS

#### **READ AND FOLLOW ALL SAFETY INSTRUCTIONS**

**This Unit Must be installed by a qualified electrician**

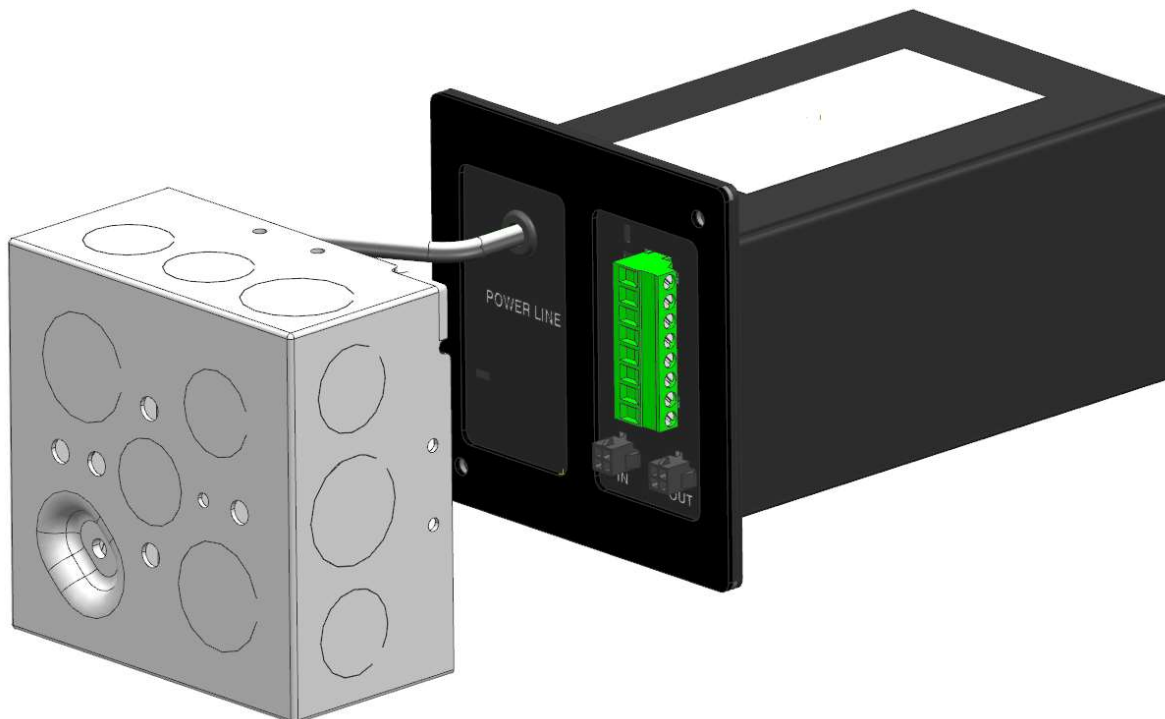
#### **WARNINGS:**

- **DO NOT** DISASSEMBLE EMERGENCY LIGHTING BYPASS.
- **DO NOT** connect the CoreSync Harness when Gateway is energized
- **DO NOT** handle energized unit with wet hands or when standing on wet or damp surfaces.
- **Risk** of electric shock.
- **DO NOT** use in elevated temperature environment – more than 55°C
- **DO NOT** use Outdoors
- Only to be used with CoreSync System
- Use appropriate Junction Box depending on the installation space (Plenum / Non-plenum)

**CAUTION:** Observe precautions for handling electrostatic sensitive units

**WARRANTY:** Voided if the unit has been MODIFIED/DISASSEMBLED from original configuration

Conforms to UL2108 Standard • UL 2108 STANDARD FOR LOW VOLTAGE LIGHTING SYSTEMS  
Edition 2 - Revision Date 2017/05/30 • CSA C22.2 NO. 250.0-08 LUMINAIRES- Edition 3 Revision  
Date 2012/10/17



ENGINEERING RECORD NO:	SAP NO: <b>187000546</b>	Doc No: <b>187000546</b> Doc part: <b>AS</b>	<b>REV- 1</b>
	<a href="http://www.molexces.com/">http://www.molexces.com/</a>		

## 1.0 Scope

This document provides information on installation instruction of the CoreSync POE Emergency Lighting Bypass.

## 2.0 Required Hardware

**The following outlet and junction boxes should be used with Emergency Lighting Bypass:**

### 1) OUTLET BOXES

- A. Sheet Metal Outlet Boxes: NEMA OS 1, UL 514A; galvanized steel with stamped knockouts:
  - 1. Luminaire and Equipment Supporting Boxes: Rated for weight of equipment supported 1/2" male fixture studs, where required
  - 2. Concrete Ceiling Boxes: Concrete type
- B. Cast-Metal Outlet Boxes: NEMA FB 1, cast aluminum or cast iron (galvanized), Type FD, with  
  
gasketed cover and threaded hubs Gang-able type boxes are not allowed

**Following box manufacturers are recommended:**

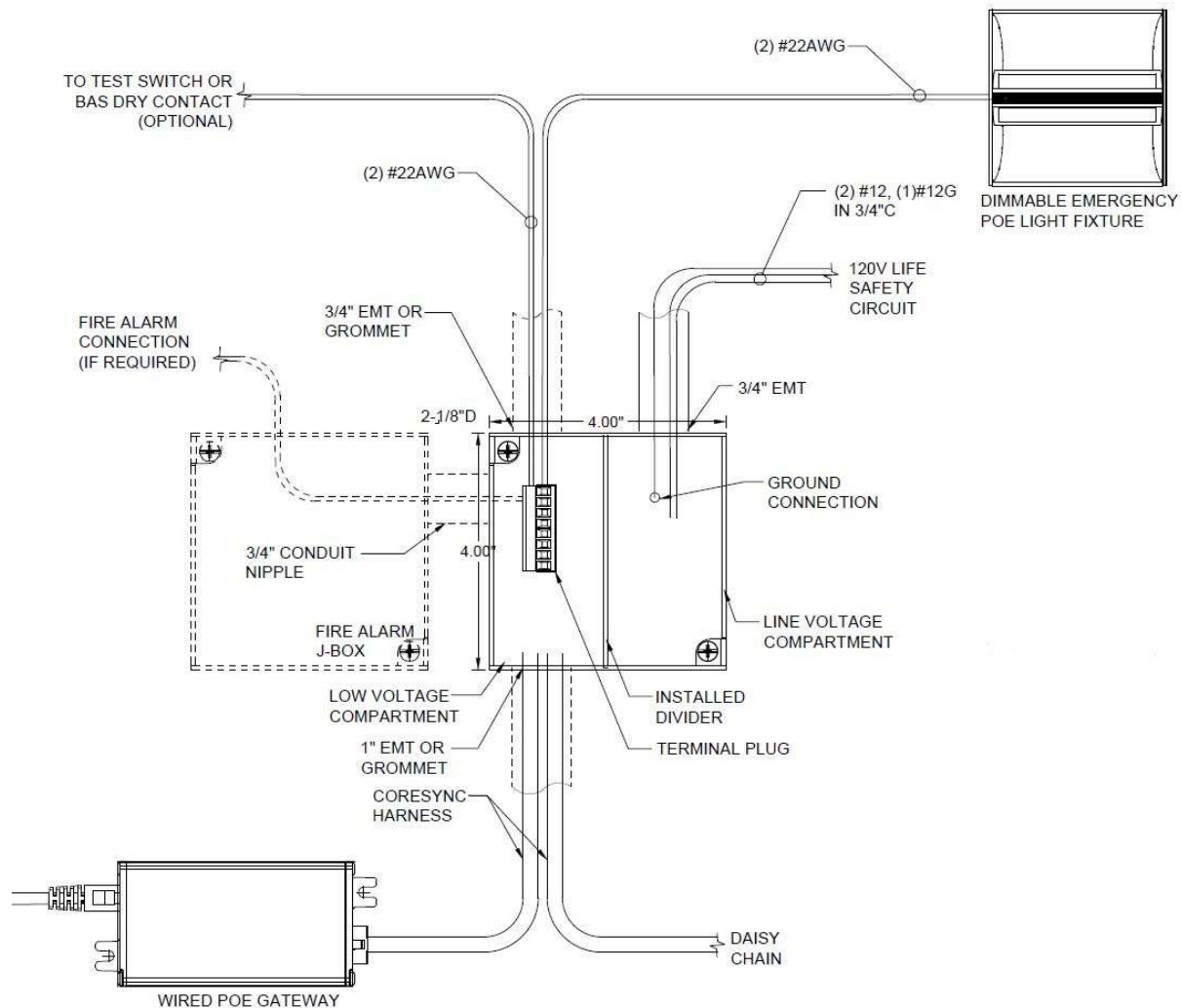
- a) Raco 233 box with partition #707RAC
- b) Crouse-Hinds TP436 box with partition
- c) OZ-Gedney-Appleton 4SD-1 box with partition
- d) Thomas & Betts 52171-1 box with partition
- e) Garvin Industries 52171-1-VT box with partition #707RAC for planum rated environment

### 2) PULL AND JUNCTION BOXES

- A. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1; galvanized steel
- B. Metal, Pull, and Junction Boxes: NEMA FB 1; cast aluminum or galvanized, cast iron with ground
- C. Flanged boxes not allowed without prior approval of local authority having jurisdiction

### 3.0 Procedure

#### A. Installation Procedure

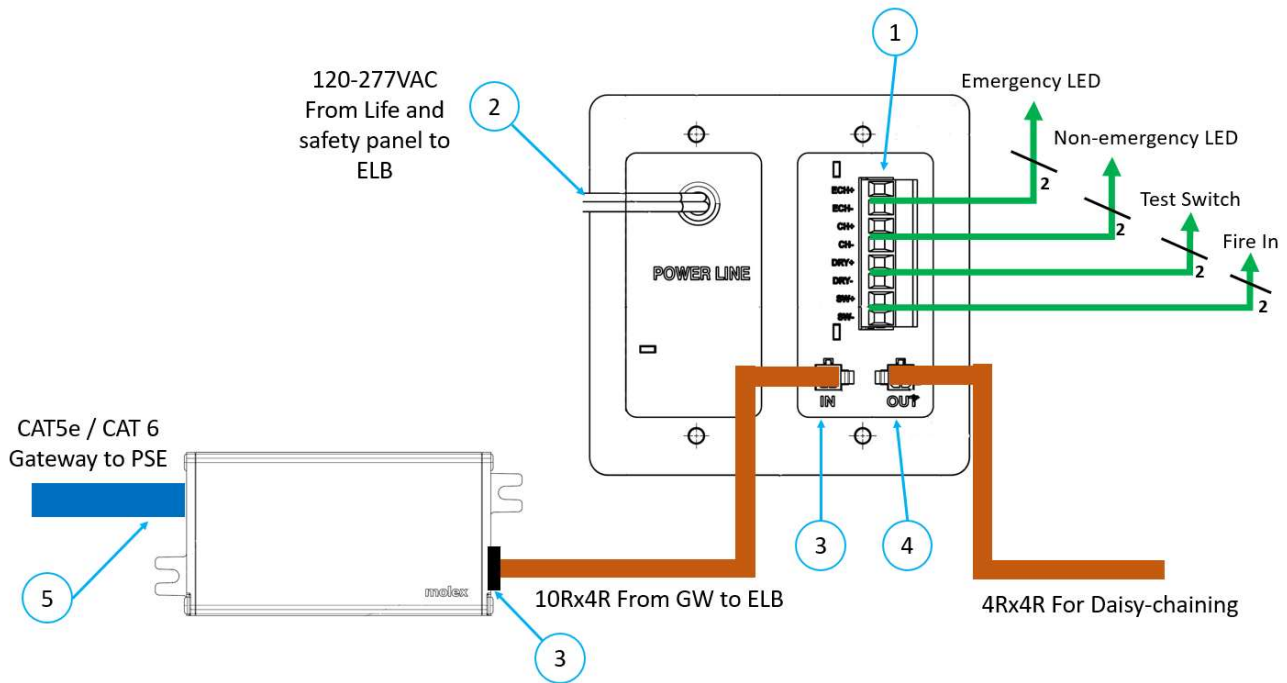


Diagrams to complete the wiring installation

1. Confirm if Plenum rated junction boxes are required with air tight knockouts, and gasketed covers prior to install
2. Refer to emergency Lighting Device Installation Instruction and required pinouts prior to junction box and raceway installation
3. A barrier between the line voltage and low voltage compartments to be installed by EC
4. EC to provide and install standard 4x4 junction box and terminate conduit as required
5. EC to provide grommets where required

6. EC shall terminate line voltage wiring to Emergency Lighting Bypass Device as required per NEC
7. Terminate low voltage wires to the terminal plug as required , and plug in CoreSync harness
8. Secure terminal plug onto device terminal block
9. Mount Device onto the junction box via two screws supplied with the junction box
10. Please refer to the wiring and connection diagrams as shown in 3.A and 3.B

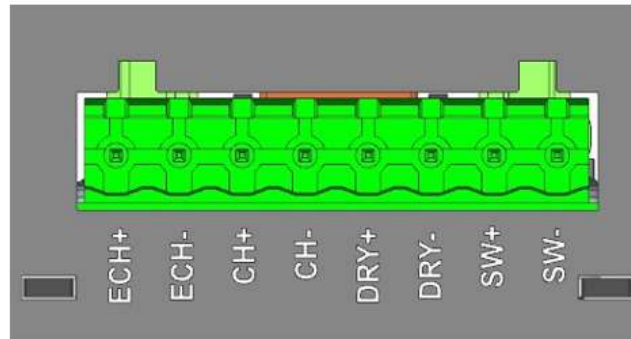
## B. System Level Connection



**Connection Diagram**

- 1) Connection to LED load, fire alarm and test switches
- 2) 120-277V AC power from life and safety panel to ELB
- 3) Molex harness from the PoE gateway to the panel mount micro-fit input on the ELB
- 4) Molex harness from the panel mount micro-fit output connector on ELB to the next CoreSync device in the daisy chaining
- 5) Molex harness CAT5e /CAT 6 PoE input from the PoE switch (PSE) to the CoreSync PoE gateway

### C. Terminal Block Connection



- 1) **ECH** - Constant Current LED Out to drive the emergency channel (Fixture)
- 2) **CH** - Constant current LED Out to drive non-emergency channel (Only when used with a tunable driver)
- 3) **DRY** - Normally-open dry-contact input connects to the fire alarm system. On activation, the ELB changes to emergency mode, turning on the luminaire to maximum brightness.
- 4) **SW** - This is a illuminated round shaped pushbutton used to simulate emergency operation. The LED stays on as long as PoE is present and goes off in cases of emergency.