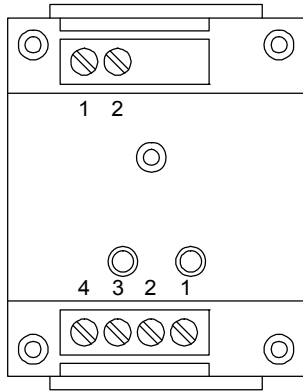# CTM City Tie Module Installation Sheet

Description

The CTM City Tie Module provides a single municipal box connection for activating a local energy type master box connected to a public fire alarm reporting system.

Installation

Install the CTM in accordance with NFPA 70 National Electrical Code.

WARNING: This device will not operate without electrical power. As fires frequently cause power interruptions, we suggest you discuss further safeguards with your fire protection specialist.

The CTM is shipped from the factory as an assembled unit; it contains no user-serviceable parts and should *not* be disassembled.

For more information, refer to the technical reference manual listed inside the control panel door.

To install the module:

1. Verify that all field wiring is free of opens, shorts, and ground faults.

2. Make all wiring connections as shown in the wiring diagram. See Figure 1.

4. Using the 4-24 × 1/2 in (13 mm) self-tapping screw provided, mount the wall plate to the module.

5. Using the two 6-32 × 1/2 in (13 mm) machine screws provided, mount the module to the electrical box.
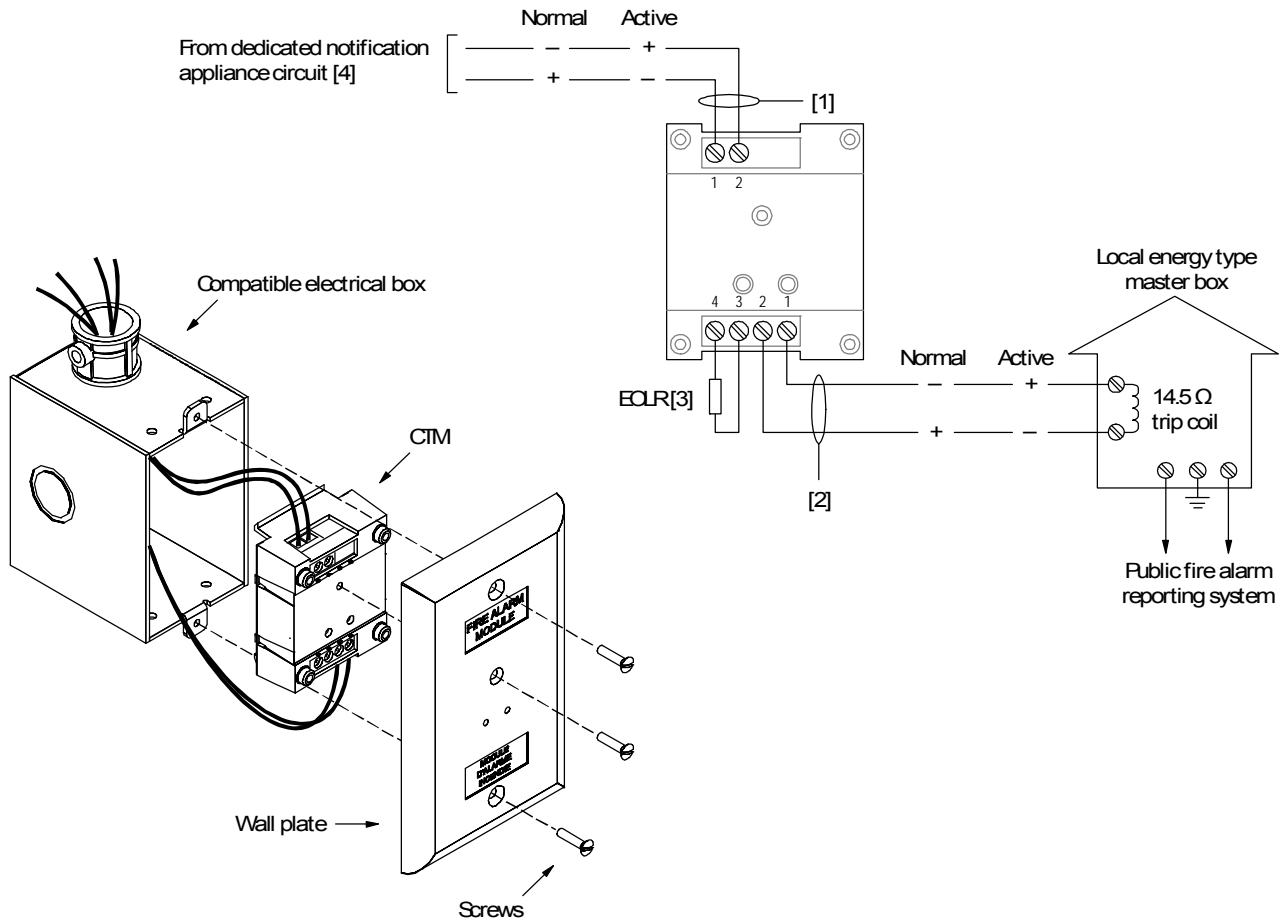
Wiring

Wire the CTM to a dedicated notification appliance circuit (NAC) as in Figure 1 on page 2. Do not install other notification appliances on the same circuit.

Specifications

Voltage	24 VDC nom.
Current	
Standby	20 mA
Alarm	300 mA, max.
Ground fault impedance	0 Ω
Wire size	12 to 18 AWG (0.75 to 2.5 sq mm)
Mounting	North American 2-1/2 in (64 mm) deep 1-gang box
Municipal box connection	
Wire resistance:	26 Ω
Trip current:	200 mA into a 14.5 Ω coil
Operating environment	
Temperature	32 to 120°F (0 to 49°C)
Relative humidity	0 to 93% noncondensing

Normal   Active

From dedicated notification appliance circuit [4]

Compatible electrical box

CTM

Wall plate

Screws

[1]

1 2

4 3 2 1

ECLR [3]

[2]

Local energy type master box

Normal   Active

14.5 Ω trip coil

Public fire alarm reporting system

[1]   Power-limited and supervised for opens, shorts, and ground faults

[2]   Nonpower-limited and supervised for opens and ground faults only. 26 Ω, max. 4.4 A, max.

[3]   Use end-of-line resistor value required by the notification appliance circuit

[4]   NAC output signal must be compatible with the input rating of the local energy type master box.