

LISTED 4AC5 FIRE ALARM FOLIPMENT

Shop Monitor Unit





ULCSUM355 - Shop Monitor Unit

Overview

An extensive range of interfaces are available to support the Cooper range of UL intelligent addressable control panels, providing solutions for most design requirements.

The UL shop monitor unit (ULCSUM355) is designed to enable small units with conventional fire detection to be fully integrated with a main intelligent addressable fire system.

This unit is ideal for applications such as connecting individual shop units into a main shopping centre system.

The UL shop monitor unit provides a zone of detection with up to 20 Cooper UL conventional detector/bases supported. It also supports a zone of pull stations as well as 2 conventional sounder circuits.

An external power supply is required to drive the 2 conventional sounder circuits. This power supply must be UL1481 listed, regulated for fire and current limited.

Features

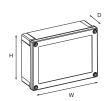
- Soft addressed
- Integral short circuit isolator
- Single address
- Accepts a zone of UL approved conventional detectors and pull stations
- Provides 2 conventional sounder circuits
- Includes a set of output changeover contacts (fire relay)
- Inputs monitored for open, short circuits and ground trouble

Benefits

- · Quick and simple to install
- No hard addressing required (Plug and play)
- Easy to expand a system using existing wiring
- Reduced installation cost by using the 2 sounder circuits



Dimensions



| H (mm) | W (mm) | D (mm) |
|--------|--------|--------|
| 129 | 180 | 60 |

Installation

- 1. Separate the two halves of the unit.
- 2. Drill out (or knock out) the required cable entries in the surface mounting back-box.
- 3. Fit the back-box in position and pass the wires into it.
- 4. Connect the unit according to the standard connection diagram supplied with the unit.

Notes:

No hard addressing of the interface is required. (See control panel operation for details).

Technical Specification

| Code | ULCSUM355 | | |
|----------------------------------|--|--|--|
| Description | Shop Monitor Unit | | |
| Standards | UL864 9th edition | | |
| Signalling Line Circuit (Style 7 | 7, Class A, Supervised, Power Limited) | | |
| Voltage | 24V dc | | |
| Current | 4.9mA to 5.0mA | | |
| Line Impedance | 50Ω (max) | | |
| Detector Zone (Style C, Class | B, Supervised, Power Limited) | | |
| Voltage | 21V dc to 26V dc, 22.9 V dc (nom) | | |
| Current (Alarm) | 17mA to 40mA | | |
| Line Impedance | 2.5Ω (max) | | |
| End of Line Resistor | 5.6kΩ | | |
| Fire Input Trigger | 680Ω | | |
| | UPCD-2W, UCPT-2W, UCHRI, UCHT | | |
| | any combination thereof | | |
| Compatibility Identifier | ULCV1 | | |
| Sounder 1, Sounder 2 (Style ' | Y, Class B, Supervised, Power Limited) | | |
| Voltage | 24V dc | | |
| Current | 1A (max) | | |
| Line Impedance | 8Ω | | |
| End of Line Resistance | 12kΩ | | |
| Pull Station Zone (Style C, Cla | ass B, Supervised, Power Limited) | | |
| Voltage | | | |
| (8.4 Vpp pulsed every 1 sec) | 8.4V | | |
| Current | 1.2mA | | |
| Line Impedance | 16Ω | | |
| End of Line Resistor | 6.8kΩ | | |
| Trigger Resistor | 680Ω | | |
| 24 V external PSU (Supervise | d, Power Limited) | | |
| Voltage | 24V dc | | |
| Current | 2A (max) | | |
| End of Line Resistor | 12kΩ | | |
| Line Impedance | 4Ω | | |
| Gauge Wire | 12 AWG | | |
| | UL 1481 listed regulated for fire, | | |
| | current limited | | |
| Environmental | | | |
| Operating Temperature | 0°C to 49°C | | |
| Humidity (Non Condensing) | 0 to 93 %RH | | |
| Physical | · | | |
| Dimensions (H x W x D) | 180mm x 129mm x 60mm | | |
| Weight | 0.28kg | | |
| Ingress Protection | IP65 | | |
| Compatibility | | | |
| Suitable for use with | Cooper UL Fire Systems | | |

Operation

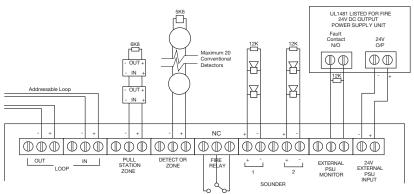
Pull Station Zone:

Normal Standby / Alarm / NAC Silenced / Alarm Reset / Trouble / Supervisory / Drill

Detector Zone:

Normal Standby / Alarm / Trouble.

Standard Connections



Note:

- 1. The end of line resistor must always be fitted, even if the inputs are unused.
- 2. Recommended cable type FPLP (plenum cable), type FPLR (riser cable), or type FPL.

| Description | SLC Field Wiring (Input) | Pull Station Zone | Detector Zone | Sounder 1 Sounder 2 | 24 V dc External Supply | PSU External Monitor |
|-----------------------------|--------------------------------|----------------------|------------------|------------------------|-------------------------------|----------------------------|
| Wiring | 12 | 12 | 12 | 12 | 12 | 12 |
| Gauge | Max AWG | Max AWG | Max AWG | Max AWG | Max AWG | Max AWG |
| Wiring | Class A | Class B | Class B | Class B | N/A | N/A |
| | Class | Style 7 | Style C | Style C | Style Y | |
| Ground | 0.1 ohm | 0.1 ohm | 0.1 ohm | 0.1 ohm | TBD | TBD |
| Fault | | | | | Power | Power |
| Impedance | | | | | Supply | Supply |
| Supervised, | Yes | Yes | Yes | Regulated | Supervised | Supplementary |
| Power | | | | Supervised | Power | |
| Limited | | | | Power | Limited | |
| | | | | | Limited | |
| Compatibility Identifier | ULC | V1 Compatible D | Detectors: UPCD | D-2W, UCPT-2W, | UCHRI, UCHT, | UCHTI |

Product Codes

| Code | Description |
|-----------|-------------------|
| ULCSUM355 | Shop Monitor Unit |