ULCSUM355 - UL shop monitor unit



An extensive range of interfaces are available to support the Eaton 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 Eaton 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 and benefits

- Soft addressed
- Integral short circuit isolator
- Single address
- Accepts a zone of UL approved conventional detectors and pull stations
- Provides 2 conventional sounder circuits
- Inputs monitored for open, short circuits and ground trouble
- 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

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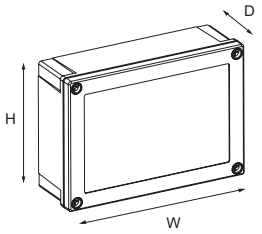
Dimensions



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

Installation

1. Separate the two halves of the unit and remove the PCB.
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. Refit the PCB.
4. Connect the unit according to the standard connection diagram supplied with the unit.

Operation

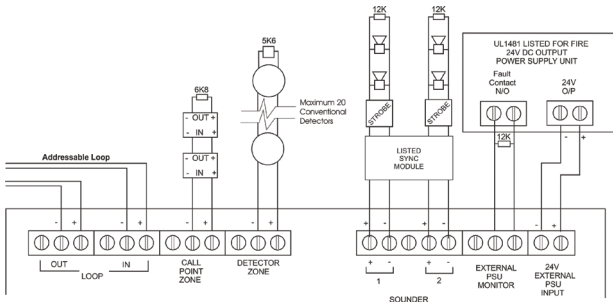
Pull station zone:

Normal standby / alarm / nac silenced / alarm reset / fault / supervisory / drill

Detector zone:

Normal standby / alarm / fault.

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.

Technical specification

Code	ULCSUM355
Description	Shop monitor unit
Standards	UL864 9th edition
Signalling line circuit (Style 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-2W, UCHT-2W, UCHR-2W, UCHTI-2W
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, Class 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 (Supervised, 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)	129mm x 180mm x 60mm
Weight	0.28kg
Ingress protection	IP65
Compatibility	
Suitable for use with	Eaton UL fire systems

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 Style 7	Class B Style 7	Class B Style C	Class B Style C	N/A Style Y	N/A
Ground fault impedance	0.1 ohm	0.1 ohm	0.1 ohm	0.1 ohm	TBD Power Supply	TBD Power Supply
Supervised, Power limited	Yes	Yes	Yes	Regulated supervised Power	Supervised power limited	Supplementary

Catalogue numbers

Description	Code
Shop monitor unit	ULCSUM355

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