

TECHNICAL SPECIFICATION

Type Value:	146
System Compatibility:	Use only with FC Fire Alarm Controllers
Environment:	Indoor Application only
Operating Temperature:	-25 to +70 °C
Storage Temperature:	-40 to +80 °C
Operating Humidity:	Up to 95% non-condensing
Dimensions (HxWxD):	87 x 148 x 14 mm
Mounting Requirements:	One FC backbox surface mount
Battery Requirements:	
From Addressable Loop	
Class B Standby Current:	0.28mA
From 24V (not including detector load)	
Class B Standby Current:	14.mA
Class B Alarm Current:	50mA for spur
24V Input Power Voltage Requirement:	
26.4V max., 21.9V min. This allows for 0.9V max. voltage drop between the power supply and the FC410DIM	
Addressable Device Conditions:	
	– Normal
	– Active
	– Short Circuit wiring fault
	– Open Circuit wiring fault
	– PSU fault
	– Device Type Invalid
	– Device No Response

Detector Circuit:

Min. Detector Voltage:	16V dc
Max. Standby Detector Load per FC410DIM Circuit:	3mA
Detector Circuit EOL:	4k7Ω
Max. Circuit Impedance:	50Ω
Recommended Wire Size:	Min. 1.5 mm ² Max. 2.5 mm ²

INTRODUCTION

Installation of the FC410DIM comprises the following:

- Installation of cables.
- Cable continuity, Insulation and Resistance checks.
- Installation of ancillary devices and connection.

The Addressable FC410DIM provides the ability to connect and Interface one or two zones of 24V dc 2-wire conventional detectors (non-addressable) to the Fire Alarm Controller.

The FC410DIM monitors the status of detectors and wiring to detectors and signals detector and wiring status back to the Controller.

FEATURES

The FC410DIM can be configured to:

- Monitor 1 or 2 Class B spur circuits.
- A Monitored Detector going into Alarm, on either spur circuit, will cause FC410DIM to report the Alarm State back to the Controller.

Status LED provides status of all detectors monitored by the FC410DIM:

- The LED is normally off.
- The LED turns ON when a detector monitored by the FC410DIM has gone into Alarm.
- The LED will pulse when the Controller polls the FC410DIM.

WIRING & INSTALLATION NOTES

The following notes apply:

- 1) There are no user-required settings on the FC410DIM.
- 2) All wiring must conform to the applicable standards.
- 3) All wiring must be free of earths.
- 4) Fit the PCB to the FC470CV cover.
- 5) Connect the wiring for the monitored circuit as shown in wiring diagrams.
- 6) When monitoring only one Class B circuit, terminate the unused circuit with the proper EOL resistor.
- 7) Verify the correct polarity of wiring before connecting FC410DIM to the addressable loop circuit.

☞ Refer to Fig.4.

- 1) If one spur circuit is used, the other circuit must be terminated by 4k7 EOL.

INSTALLATION TO FC470CV ANCILLARY COVER

- 1) Assemble the FC410DIM to FC470CV Double Gang cover, using the four screw and washers provided.
- 2) Fit cover onto FC backbox.

ADDRESS SETTINGS

The FC410DIM has a default factory set address of 255, this must be set to the loop address of the device using the FC490ST Loop Service Tool. The FC410DIM may be programmed with the address prior to being installed by using the internal programming port or after being installed by using the programming port on the front cover (see Fig. 2 and Fig.3).

☞ Note: once the address has been programmed, take note of the device location and address number, to include on site drawings.

☞ Note: this device use one address only on the loop.

CABLING

The maximum section of the cable that can be connected at any one terminal is 2.5mm². The section is calculated based on the characteristics of the cable and the load.

ORDERING INFORMATION

FC410DIM: Detector Input Module

FC470CV: Double-Gang cover

RECYCLING INFORMATION

Customers are recommended to dispose of their used equipments (panels, detectors, sirens, and other devices) in an environmentally sound manner. Potential methods include reuse of parts or whole products and recycling of products, components, and/or materials.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)**DIRECTIVE**

In the European Union, this label indicates that this product should NOT be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

The manufacturer reserves the right to change the technical specifications of this product without prior notice.

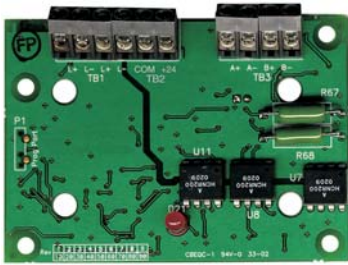


FIG. 1 FC410DIM Modulo d'ingresso per rivelatori convenzionali
 FC410DIM Detector Interface Module
 FC Adapter für Konventionelle Melder - FC410DIM

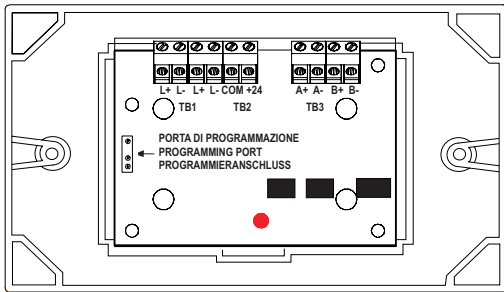


FIG. 2 FC410DIM fissata al coperchio
 FC410DIM fitted to cover
 FC410DIM ins Gehäuse eingebaut

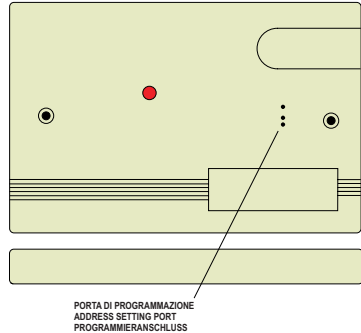


FIG. 3 FC410DIM Placca
 Facia Plate
 Kurzschlussisolator Vorderseite

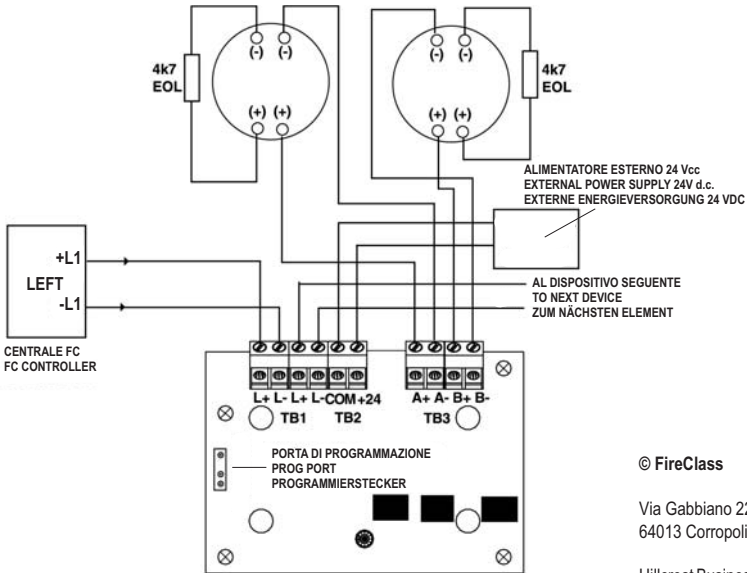


FIG. 4 Circuito SPUR (Classe B)
 'Spur Circuit' (Class B)
 Stich-Verdrahtung

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