

CFC301

Eaton's Cooper Technical I/O Unit



This device has been designed to meet the requirements of today's building management systems, switching controls and dampers offering manual control, cause & effect programming and monitoring capability's when integrated with the Cooper range of control modules.

The technical I/O unit (CFC301) was designed to be installed in any convenient position on the loop local to the various elements of building services and provides a cost effective installation solution.

The device is associated to the relevant Cooper control & display device by utilizing Cooper site installer software and coupled with the Cooper device's makes programming effortless and reliable. Data linking the two devices is sent via the addressable loop.

Further flexibility is offered to the installer & end user with the ability to change the CFC301's relay output configuration with 3 mode settings available; this is easily selected by terminating a 22K resistor across Input 2 or 3.

Features

- Soft addressed
- Integral short circuit isolator
- Requires two address
- Designed to operate in conjunction with the Cooper fan controller unit (FC6/18)
- Simplified BMS interface for system control
- Meets the requirements of today's building management systems
- 3 mode settings available

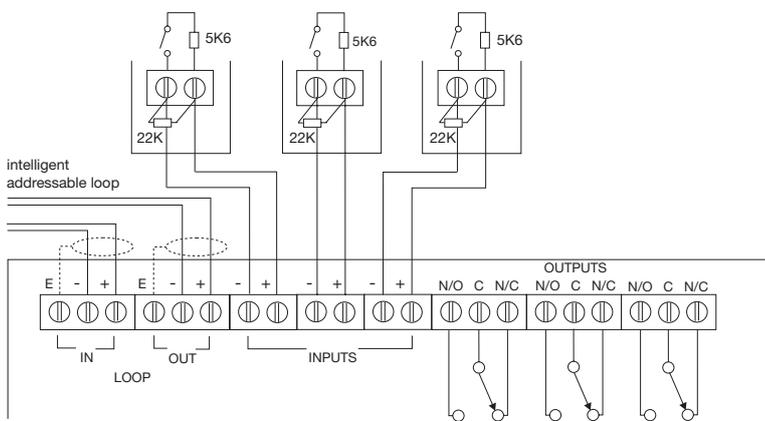
Benefits

- Quick and simple to install
- No hard addressing required (Plug and play)
- Control and feedback in one unit
- Cost effective installation solution

Technical Specification

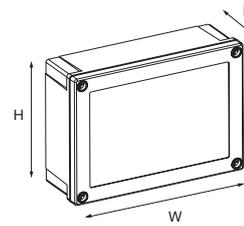
Code	CFC301
Description	Technical I/O Unit
Standards	BS5839: Pt1 (installation) & AS1668
Specification	
Operating Voltage	18V dc to 30V dc
Quiescent Current	310µA
Addressing Mode	Auto addressed
Output Relay Contact Rating	1A at 30V resistive, 0.5A inductive
Maximum Switching Voltage	50V ac or 30V dc
Cable Size (Min-Max)	0.5 to 2.5mm ²
Recommended Cable Types	(UK) Draka - FIRETUF, Pirelli - FP200
Number of Input Circuits	3
Number of Output Circuits	3
End of Line Resistance (input cct)	22K
Short Circuit Fault Threshold Resistance	1K
Open Circuit Fault Threshold Resistance	33K
Output Relays	3 sets change over contacts
Maximum Relay Contact	1A at 30V resistive, 0.5A inductive
Switching Voltage	50V ac / 30V dc
Switching Power	30W
Environmental	
Operating Temperature	-10°C to +60°C
Humidity (non condensing)	0 to 95% RH
Physical	
Construction	ABS
Dimensions (H x W x D)	129mm x 180mm x 60mm
Weight	0.6kg
Ingress Protection	IP65
Compatibility	
Suitable for use with	Cooper Intelligent Addressable Fire Systems

Standard Connections



- NOTES:
1. Earth (Screen) cable must be connected to its adjacent earth terminal.
 2. The end of line resistor must always be fitted, even if input is not used.
 3. Input circuit is monitored for wiring open and short circuit.
 4. Output relay is a set of changeover volt free-contacts and is not monitored.

Dimensions



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

Mode Settings

Mode 1

22k across all inputs	Relay 1	ON when a fire occurs fan control in automatic mode)
	Relay 2	ON when the fan control start button is pressed (fan control in manual mode)
	Relay 3	ON relay 2 de-activated when the fan control stop button is pressed (fan control in manual mode)

Mode 2

22k across input 1 & 2	Relay 1	ON when system is in alarm or when the fan control start button is pressed OFF when system is healthy or when the fan control stop button is pressed
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Short Circuit Across Input 3 Relay 2 & 3 **N/A**

Mode 3

22k across all inputs	Relay 1, 2 & 3	Same as Mode 1
Input 2 alarm	Relay 1 & 2	Turns off if the system was in alarm
	Relay 3	ON
Input 2 cleared	Relay 1	ON after 60s provided system is still in alarm
	Relay 2 & 3	OFF

Catalogue numbers

Description	Code
Technical I/O Unit	CFC301