

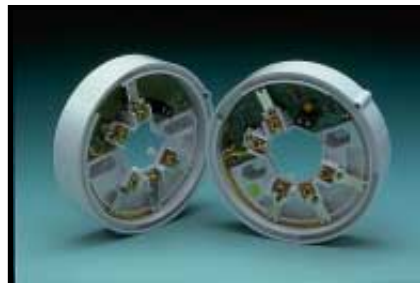
## SHORT CIRCUIT ISOLATORS, MODELS SCI-5 AND SCI-6

### DESCRIPTION

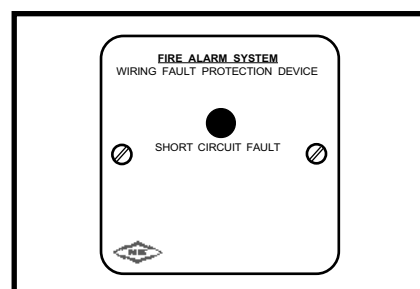
The SCI-5 and SCI-6 Short Circuit Isolators are designed for use within Nittan analogue-addressable fire alarm systems. Analogue-addressable systems are commonly wired in a loop configuration and a short circuit fault occurring on the loop wiring, without short circuit isolators, will inhibit signalling on that cable, effectively rendering the entire loop disabled.

However, installing Short Circuit Isolators on the loop the section of wiring containing the short circuit may be isolated from the remainder of the loop, this limits the extent of the disablement to only that cable between two adjacent Short Circuit Isolators. The remainder of the loop may thus continue to function as normal.

The SCI-5 base version is supplied built inside our STB-4SE deep base and is fully compatible with our 'AS' protocol smoke and heat sensors. The SCI-6 version is built into a single gang electrical plate and is fully compatible with any single gang, surface or flush electrical mounting box.



Model Number:- SCI-5  
Computer Part Number:- F16N\*81425



Model Number:- SCI-6  
Computer Part Number:- F16N\*81430  
Model Number:- SCI-6 BACK BOX (White)  
Computer Part Number:- F16N\*81442

### OPERATION

The SCI-5 and SCI-6 short circuit isolators contain a solid state switching device which is situated between the incoming and outgoing SIG+ wires of the loop. When power is applied, either the SCI-5 or SCI-6 checks to see if there is a short circuit on its other side ("beyond" it) and, if there is no short circuit, it will operate it's switching device feeding power through to the remainder of the loop. If, however, a short circuit is present, the isolator will not close it's circuit. The amber led indicator will illuminate to show the existance of a short circuit cable fault.

When power is removed from the loop, as happens when a short circuit fault occurs, the isolator's switching device operates, allowing the control panel to attempt to feed power around the loop as described above, only up until the isolator adjacent to the short circuit.

### DIMENSIONS

#### SCI-5 (Base version)

105 Diameter x 22 H (mm).

#### SCI-6 Plate inclusive of electrical box.

85 W x 42 D x 85 H (mm).

#### SCI-6 Plate only

85 W x 15 D (21mm c/w terminals) x 85 H (mm).

#### Back Box Only

85 W x 32 D x 85 H (mm)

### SENSORTEC-ANALOGUE FAMILY:-

#### SENSORS:-

- ST-I-AS** - Analogue Ionisation Smoke Sensor
- ST-P-AS** - Analogue Photoelectric Smoke Sensor
- ST-H-AS** - Analogue Heat Sensor
- STB-4** - Standard Base for above sensors

#### DEVICES:-

- ST-NCP-AS** - Addressable Call Point
- MCM-AS3** - Zone Monitor/Control Unit
- SCM-AS3** - Addressable Sounder Control Module
- NAM-AS2** - Addressable Input Module
- OCM-AS2** - Output Control Module
- SCI-5** - Base mounted Short Circuit Isolator
- SCI-6** - Plate mounted Short Circuit Isolator

#### ADDRESSABLE SOUNDERS:-

- VCT-NTAS-CP-R/W** - Addressable Wall Sounder c/w Vector Plate/Cap (R = Red, W = White Plate/Cap).
- VCT-03-CP(W)** - Spare Vector Plate/Cap (White)
- VCT-03-CP(R)** - Spare Vector Plate/Cap (Red)
- VCT-03-NT-AS** - Addressable Sounder c/w STB-4 Base pre-wired to the sounder.

# INSTRUCTION MANUAL FOR SCI-5 AND SCI-6 SHORT CIRCUIT ISOLATORS

No: NISM/SCI5-6/01

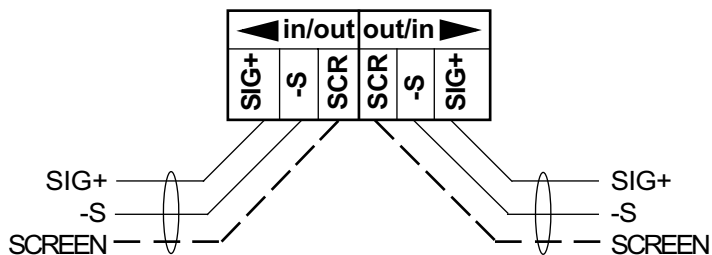
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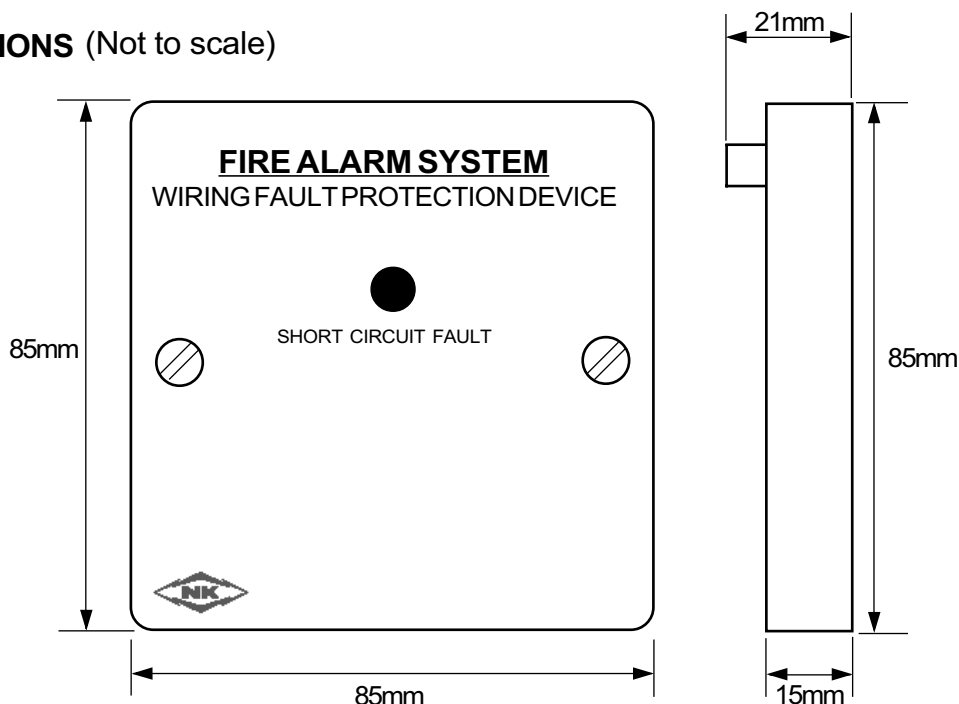
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## SCI-6 CONNECTIONS

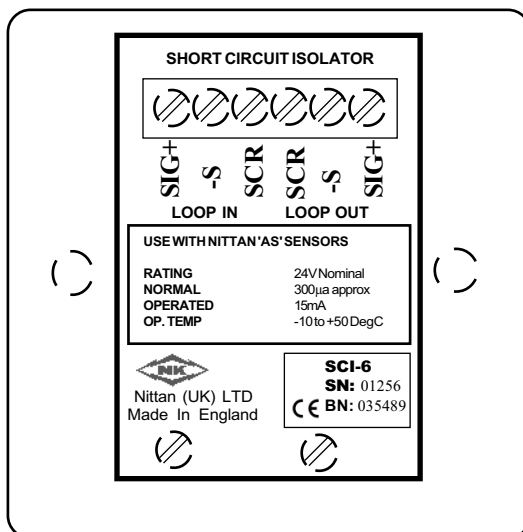
Terminals are provided for the loop cables SIG+, -S 'in' and 'out' and also for the screen cable for continuity purposes.



## DIMENSIONS (Not to scale)

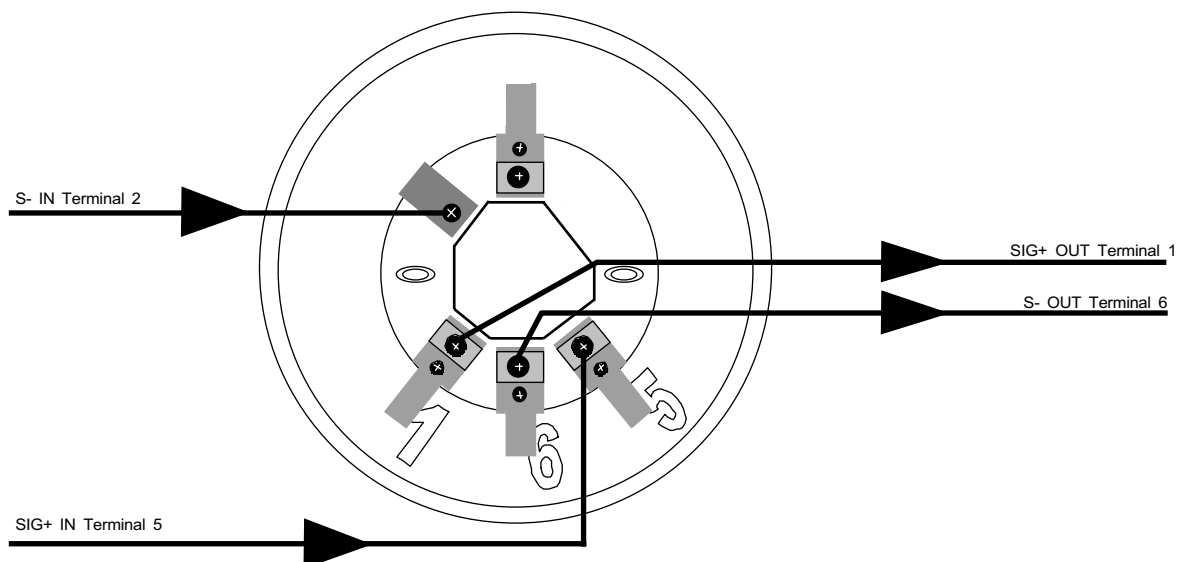


## REAR VIEW



# INSTRUCTION MANUAL FOR SCI-5 AND SCI-6 SHORT CIRCUIT ISOLATORS

## SCI-6 CONNECTIONS



## SCI-5 AND SCI-6 TECHNICAL SPECIFICATION

### Part Numbers:-

Model Number	-	SCI-5 (Base mounted version)
Computer Reference Number	-	F16N*814525

Model Number	-	SCI-6 (Plate mounted version)
Computer Reference Number	-	F16N*81430

Model Number	-	SCI-6 BACK BOX
Computer Reference Number	-	F16N*81442

### Protocol:-

Communication Protocol	-	NISM/WFM/02 (Nittan AS Protocol)
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### Ratings:-

Voltage	-	24V Nominal
Current Consumption (quiescent)	-	300μA
Current Consumption (Operated)	-	15mA
LED Indication	-	Yellow <b>SHORT CIRCUIT LED</b>
Operating Temperature	-	-10 Deg. C. to +50 Deg. C..

*From world leaders in **SENSOR TECHNOLOGY**  
comes **SENORTEC.....***

## **SCI-5 & SCI-6 SHORT CIRCUIT ISOLATOR INSTRUCTION MANUAL**



Quality System Certificate No. 041  
Assessed to BS EN ISO 9002

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