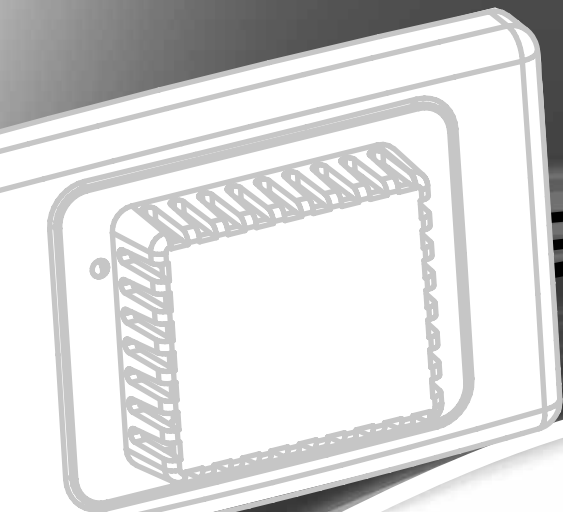


**CLIPSAL**<sup>®</sup>

by Schneider Electric



## C-Bus Remote Digital Temperature Sensor

**5031RDTSL**  
**E5031RDTSL**



Installation Instructions

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## 1.0 Product Range

**5031RDTSL** C-Bus Temperature Sensor Unit (Australian Pattern)

**E5031RDTSL** C-Bus Temperature Sensor Unit (British Standard Pattern)

## 2.0 Important Notes

The use of any non C-Bus Software in conjunction with the hardware installation without the written consent from Clipsal Australia may void any warranties applicable to the hardware.

## 3.0 Description

The Temperature Sensor is a C-Bus input device that measures the ambient temperature levels and converts this information into:

- command messages (ON/OFF as in the 5031TS mode)
- information messages broadcast to a set of Group Address (6031TS mode)
- information messages from applied zones with temperature readings (HVAC Mode, used in association with a C-Bus Thermostat)
- temperature measurement messages (measurement mode).

Depending on the mode, messages can be sent across the C-Bus network to control C-Bus output units (relays and dimmers), which can be configured to respond to such messages. This allows automatic regulation and control of temperature levels.

Consult Toolkit Help files for further information.

## 4.0 C-Bus Network Connection

Installation of the Temperature Sensor to the C-Bus network requires a two wire connection to the safe extra low voltage unshielded twisted pair C-Bus network cable. This connection is polarity sensitive, and is clearly marked on the terminal block of the Unit.

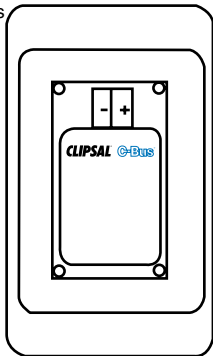


Figure 1 - C-Bus terminals, rear view

The illustration below (Figure 2) shows the recommended technique for cable termination giving the best electrical performance. Bootlace crimps may also be used to provide a highly reliable connection. It is recommended that Category 5 data cable is used (Clipsal catalogue number 5005C305B).

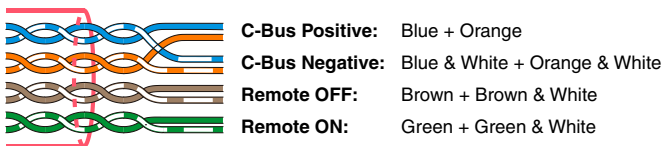


Figure 2 - C-Bus cable connector assignments

**Note:** The mutual twist of solid and dotted conductors of opposing coloured conductors. This ensures a good electrical termination, with favourable common mode noise characteristics.

## 5.0 Location Recommendations

When installing the Temperature Sensor, it is recommended that the user attempts to observe the following guidelines:

- Position the Sensor as far away as practical from heating or cooling sources (natural or artificial). See diagram below
- Avoid 'dead' or drafty areas of any room
- Position not less than 500mm from the ceiling), so as the sensor element will not give artificially high/low readings. Remember – hot air rises.
- Use for indoor applications only.

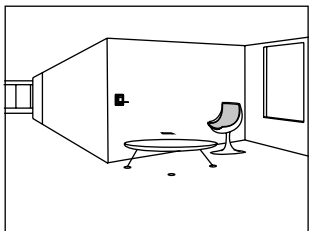


Figure 3 - Correct Installation

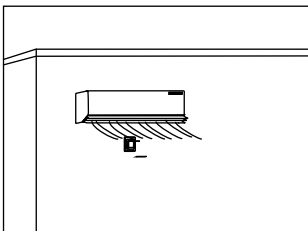


Figure 4 - Incorrect Installation

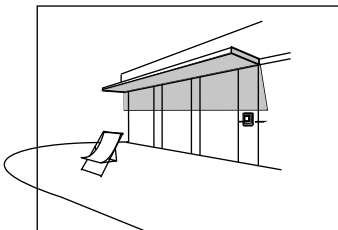


Figure 5 – Incorrect Installation

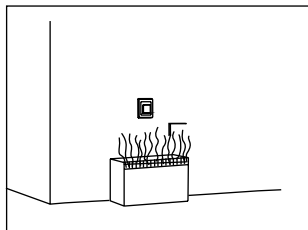


Figure 6 - Incorrect Installation

## 6.0 Programming Requirements

As with other C-Bus units, the Temperature Sensor Units must be programmed to set their unique identification and the modes of operation on the C-Bus network. The C-Bus Installation Software can be used to configure all operational parameters including the specification of target temperature levels. Please refer to the C-Bus Installation Software User's Guide for information relating to the programming of Temperature Sensor Units.

## 7.0 Product Specification

### 7.1 Electrical Specifications

Parameter	5031RDTSL /E5031RDTSL
C-Bus Input Voltage	15-36 V d.c. @ 18 mA Nominal
Resolution	$\pm 0.5^{\circ}\text{C}$
Accuracy	$\pm 1^{\circ}\text{C}$
Operating Temperature	0-50°C (32–122°F)
<b>Temperature Measurement Range</b>	
<b>5031TS Mode</b>	
Degrees Celsius	0°C to 50°C
Degrees Fahrenheit	32°F to 122°F
<b>6031TS Mode</b>	
Degrees Celsius	0°C to 50°C
Degrees Fahrenheit	32°F to 122°F
<b>HVAC Mode</b>	
Degrees Celsius	0°C to 50°C
Degrees Fahrenheit	32°F to 122°F
<b>Measurement Mode</b>	
Degrees Celsius	0°C to 50°C
Degrees Fahrenheit	32°F to 122°F

## 7.2 Mechanical Specifications

Parameter	5031RDTSL/E5031RDTSL
C-Bus Connection	Screw Terminals accommodate $6 \times 0.2\text{mm}^2$

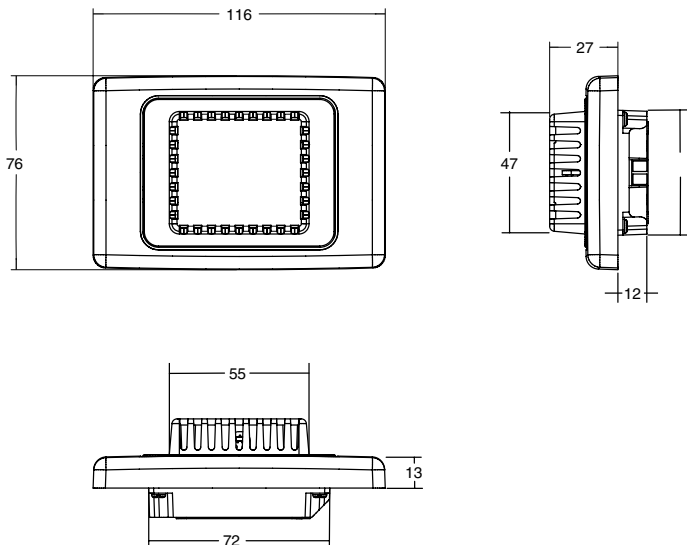


Figure 7 – 5031RDTSL Mechanical Specifications - dimensions in millimetres.



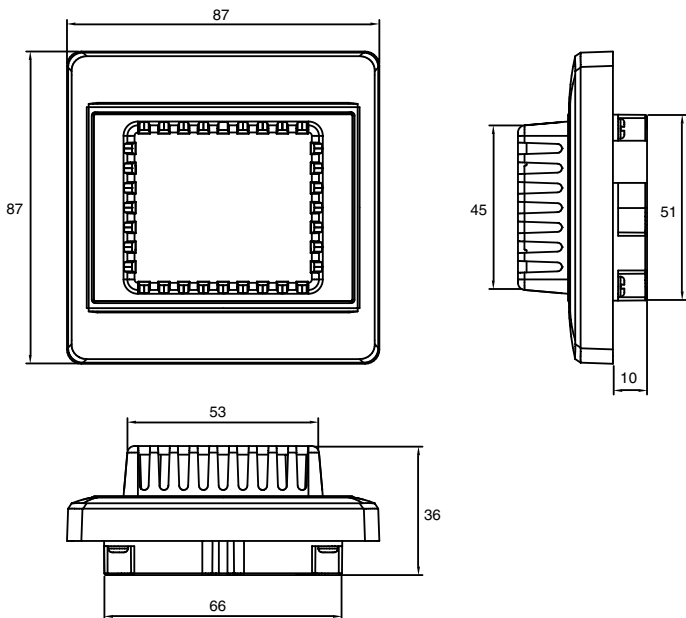


Figure 8 - E5031RDTSL Mechanical Specifications - dimensions in millimetres.

## 8.0 Warranty

The 5031RDTSL C-Bus Remote Digital Temperature Sensor carries a two year warranty against manufacturing defects.

### Warranty Statement

- 1) The benefits conferred herein are in addition to, and in no way shall be deemed to derogate; either expressly or by implication, any or all other rights and remedies in respect to Clipsal Integrated Systems Product, which the consumer has under the Commonwealth Trade Practices Act or any other similar State or Territory Laws.
- 2) The warrantor is Clipsal Australia Pty Ltd of 33-37 Port Wakefield Road, Gepps Cross, South Australia 5094. With registered offices in all Australian States.
- 3) This Clipsal Integrated Systems Product is guaranteed against faulty workmanship and materials for a period of two (2) years from the date of installation.
- 4) Clipsal Australia Pty Ltd reserves the right, at its discretion, to either repair free of parts and labour charges, replace or offer refund in respect to any article found to be faulty due to materials, parts or workmanship.
- 5) This warranty is expressly subject to the Clipsal Integrated Systems Product being installed, wired, tested, operated and used in accordance with the manufacturer's instructions.
- 6) All costs of a claim shall be met by Clipsal Australia Pty Ltd, however should the product that is the subject of the claim be found to be in good working order, all such costs shall be met by the claimant.
- 7) When making a claim, the consumer shall forward the Clipsal Integrated Systems Product to the nearest office of Clipsal Australia Pty Ltd with adequate particulars of the defect within 28 days of the fault occurring. The product should be returned securely packed, complete with details of the date and place of purchase, description of load, and circumstances of malfunction.

For all warranty enquiries, contact your local Clipsal sales representative. The address and contact number of your nearest Clipsal Australia office can be found at <http://www.clipsal.com/locations> or by telephoning Technical Support.

## 9.0 Technical Support and Troubleshooting

For further assistance in using this product, consult your nearest Clipsal Australia Sales Representative or Technical Support Officer.

Technical Support Hotline: (Australia) 1300 722 247

(New Zealand) 0800 888 219

(Northern Asia) +852 2484 4157 (Hong Kong)

(Southern Asia) +603 7665 3555 Ext 236

Ext 242 (Malaysia)

(South Africa) 011 314 5200

(United Kingdom) 0870 608 8608

Technical Support Email: [cis.support@clipsal.com.au](mailto:cis.support@clipsal.com.au)

A list of worldwide contacts, additional product information and technical resources is provided at <http://www.clipsal.com/cis>

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