

# Stand Alone Rain Sensor

## Technical Information and Operating Instructions



### Introduction.

The stand alone rain sensor automatically detects rain or snow fall and signals the ventilation control system to close open vents.

The sensor is built into a plastic weatherproof enclosure. The mounting bracket system has been designed such that the sensor can be mounted on to any suitable external façade of a building and adjusted for optimum rain detection.

For correct operation, the sensor requires a 24VAC/DC  $\pm 20\%$  power supply @ 55mA to power the electronics and heater element. The signaling to the ventilation control system is via volt free contacts rated at 30VDC @ 1A resistive. The sensor is NOT suitable for operation at 230VAC.



Lancaster House  
Wellington Crescent  
Fradley Park, Lichfield  
Staffordshire WS13 8RZ

+44 (0)1543 443060  
[sales@secontrols.com](mailto:sales@secontrols.com)  
[www.secontrols.com](http://www.secontrols.com)





### **Important Notice**

- This equipment is intended for permanent connection and does not have an on/off switch.
- Do NOT adjust or alter the device or its enclosure (including labelling/markings).
- Do NOT use the device for any other purpose other than that intended by SE Controls.
- Do NOT allow installation of the device by unqualified persons.
- Failure to install the device in accordance with the manufacturer's instructions will invalidate any warranties.
- Unless otherwise indicated, you must not adjust or remove existing manufacturers cabling or use terminal outputs or inputs for purposes other than their design without written authorisation from SE Controls.

SE Controls accepts no liability for failure to comply with the above statements or the installation and operation guidance in the following sections of this guide and reserves the right to invalidate the warranty of the controller.



## Installation

### 2. Installation

#### 2.1 Packaging

The stand alone rain sensor assembly comes supplied in a polythene bag.

#### 2.2 Mounting location

The stand alone rain sensor should be mounted on an external façade of the building. It must be mounted in a location that is easily subjected to rainfall.

#### 2.3 Fixing

Loosen the two bracket adjustment lock screws and fold the bracket up toward the body of the sensor.

Offer the sensor up to the mounting surface with the sensor contacts facing upward. Mark through the three fixing holes with a marker pen and place the sensor to one side. Drill appropriately sized pilot/fixing holes and use suitable plastic plugs where appropriate. Note that it is recommended that 30mm No6 pan head screws are used to secure the body in place. These should preferably be brass or steel that has been treated for external use (e.g. black japanned). Fix the sensor bracket to the wall using three fixing screws.

Adjust the sensor body so that incident rain will readily run of the sensor's face and lock up the two bracket adjustment lock screws.

#### 2.4 Connection details

##### 2.4.1 Preamble

The stand alone rain sensor leaves the factory with all fixings pre-sealed to prevent water ingress. Should it become necessary to open the enclosure during the installation/configuration process, then it is important that this sealant is replaced using a suitable silicon-based sealant upon completion of the commissioning process.

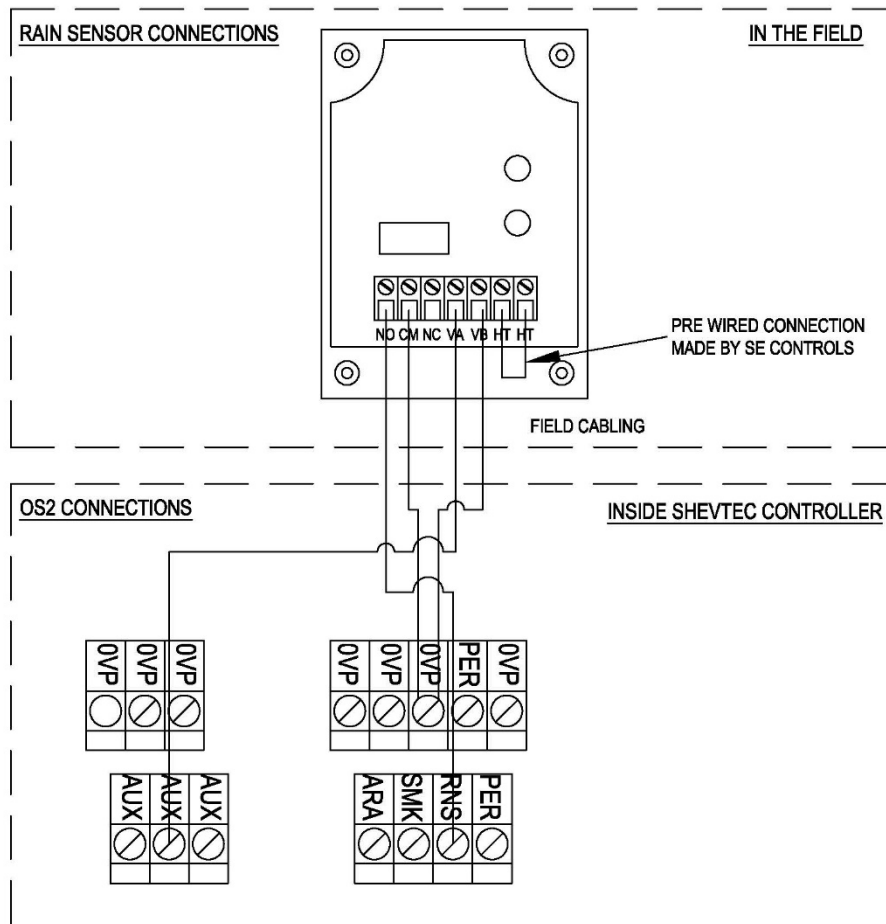
### 2.4.2 Standard factory configuration

The stand alone rain sensor is supplied from the factory pre-terminated with 3M of 4 core cable. These factory selected configurations and settings should be adequate for most installations.

Colour	Signal	Connect To	
Red	VA	24VDC/24VAC	
Black	VB	0VDC/24VAC	
Blue	CM	Volt Free Signal	Connected together when rain is detected.
Yellow	NO	Volt Free Signal	

Alternate Configurations.

- In the unlikely event that an alternate configuration is required, then the following information should be made reference to:





Main PCB Connection Detail.

Signal	Detail	
NO	Normally open contact	Volt free changeover relay
CM	Common contact	
NC	Normally closed contact	
VA	24VDC connection	Also suitable for 24VDC power if desired
VB	0VDC connection	
HT	Heater enable link	Link together to enable the heater circuitry
HT	Heater enable link	

## 2.5 Sensitivity Adjustment

The sensitivity of the rain sensor has been pre-set at the factory and does not normally require further adjustment.

## Notes.

SE Controls  
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Lichfield,  
Staffs. WS13 8RZ

Tel 01543 443060  
[www.secontrols.com](http://www.secontrols.com)