Sensor protection

SP10

Function

The SP10 sensor protection device should be used to protect the sensitive collector temperature sensor against external over-voltages. In the case of thunderstorms, lightning strikes can destroy the collector sensor and differential temperature controller. The SP10 protector diodes limit these over-voltages and maintains a stable noise-free connection between sensor and controller.

The best way to protect the collector sensor is to install the SP10 device close to the collector sensor. The SP10 is designed as a weather-resistant connecting terminal block in a dripping water-protected housing which can be used outdoors. Soft thermoplastic elastomers in the bottom of the lower housing protects the sensor cables and allow easy installation.

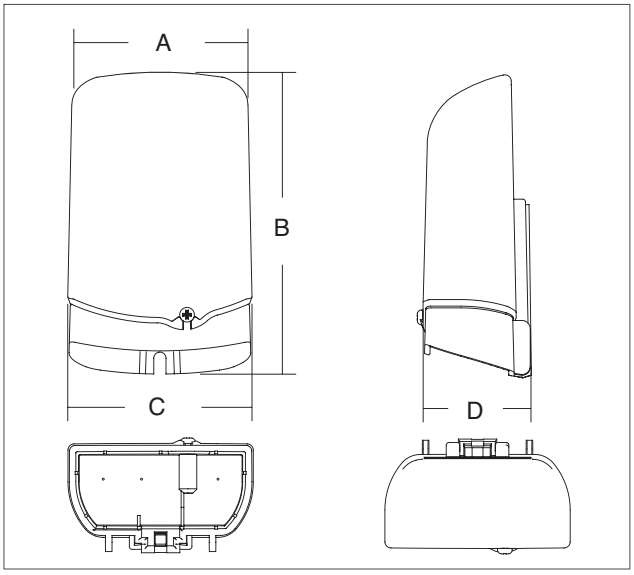
Product range

Code NA15006 SP10 sensor protection device for protecting collector sensor and controller from lightning or other over-voltages

Technical specifications

Upper housing:	ASA thermoplastic
Lower housing:	thermoplastic elastomers
Protection type:	NEMA 4 (IP 65)
Ambient temperature:	-15 ... 160°F (-25 ... +70°C)
Mounting:	vertically
Agency approvals	CE

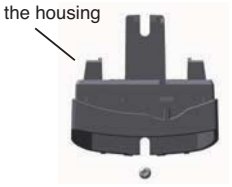
Dimensions

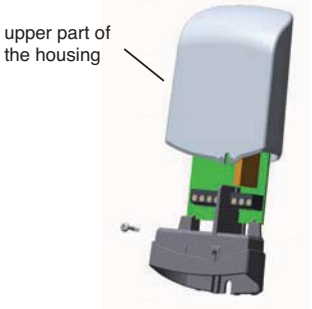


Code	A	B	C	D	Weight (lb)
NA15006	2 1/2"	4 3/8"	2 5/8"	1 1/2	0.3

Mounting

For optimum protection against moisture, the SP10 sensor protection device must be fitted vertically. Unscrew the housing screw and remove the upper part of the housing. Mark the fastening points on vertical surface and drill. Attach the lower part of the housing using the screws. Install the upper part of the housing onto the lower part and attach housing screw.



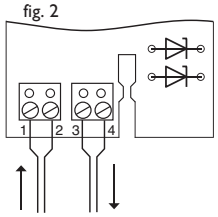


Electrical connection

Pierce the lower housing with a pointed object (fig.1). Insert the cables into the holes and pull them slightly back, such that the edge of the material is slightly turned to the outside. Thus the device is protected against moisture. Connect the sensor cable to the terminals 1 and 2 with either polarity (fig. 2). Connect the cable which leads to the controller at the terminals 3 and 4 and to the corresponding controller terminals.

fig. 1

fig. 2



Note: If the connecting box is used outdoors, it is recommended to pierce a condensation water hole at the bottom after the device has been installed.