



INSTRUCTIONS

FOR INSTALLING AND USING

Sensor connection box

January 2010

Sensor connection box

Description

The SE-SP10 connection box with over voltage protection should be installed to protect the solar collector temperature sensors against induced over-voltages caused by lightning strikes or other external sources.

During a local thunderstorm, voltage peaks which could potentially destroy the sensor are induced in the sensor cable.

The protection diodes in the connection box limit these over-voltages to a value which is harmless to the sensor. Whenever possible, we recommend installing the connection box adjacent to the collector sensor.

The box is rated to IP65 - which means that it can be mounted externally. Cable glands are supplied to facilitate weatherproof entry of the cables into the box.

Safety

Please pay special attention to the following safety advice to avoid danger to people and property.

The SE-SP10 sensor cable connection box provides an over-voltage protection to protect the susceptible temperature sensors (usually the solar collector sensor) against induced over-voltages in accordance with the technical data specified in these instructions. Improper use will invalidate all liability claims.

Technical specifications

Lower part of housing	Karilen E42D-H201
Upper part of housing	Luran S757R
Type of protection	IP65
Dimensions	111 x 68 x 40mm
Ambient temperature	-25° - 70°C

Installation

For optimum protection against moisture, the sensor protection box should be mounted vertically, with the sensor cable entry at the bottom. If fixed to a roof, you should also consider the possibility of snow and the levels of water puddles around the area where the box is mounted.

In some cases, the box can be mounted on the side of the collector, but always check with the collector manufacturer before doing so.

Unscrew the housing screw and remove the upper part of the housing.

Mark the fixing points on the wall and drill (5cm centres).

Fix the lower part of the housing to the wall using the screws.

Put the upper part of the housing onto the lower part and secure with a screw.



SE-SP10 sensor connection box



upper housing detail



lower housing detail

description	product code
Temperature sensor connection box	SE-SP10

Sensor connection box

Wiring instructions

Pierce the cable glands with a pointed object. Insert the sensor cables into the holes created and pull them slightly back, so that the edge of the gland is slightly turned to the outside.

Connect the sensor cable to the terminals.
Terminals 1 & 2 - polarity neutral.

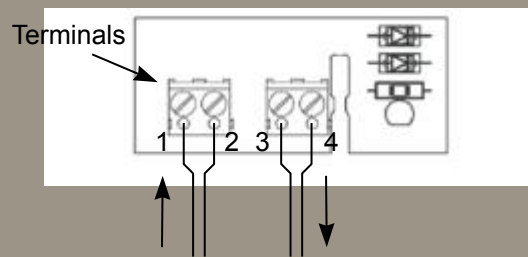
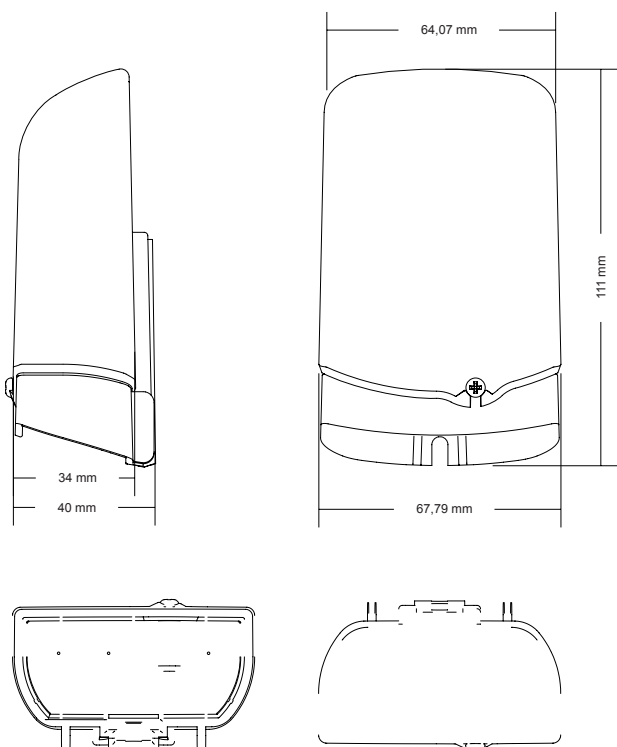
Connect the cable which goes back to the solar controller to terminals 3 & 4 - polarity neutral.

Note:

Temperature sensor cables carry safety extra low voltage (SELV) and must not be placed in a gland together with cables carrying 230V.

If the box is used externally, it's recommended to pierce the condensation water hole at the bottom after the device has been installed.

Dimensions



SE-SP10 terminal detail