

UG8 models with aluminium ST (Sampling Tube)

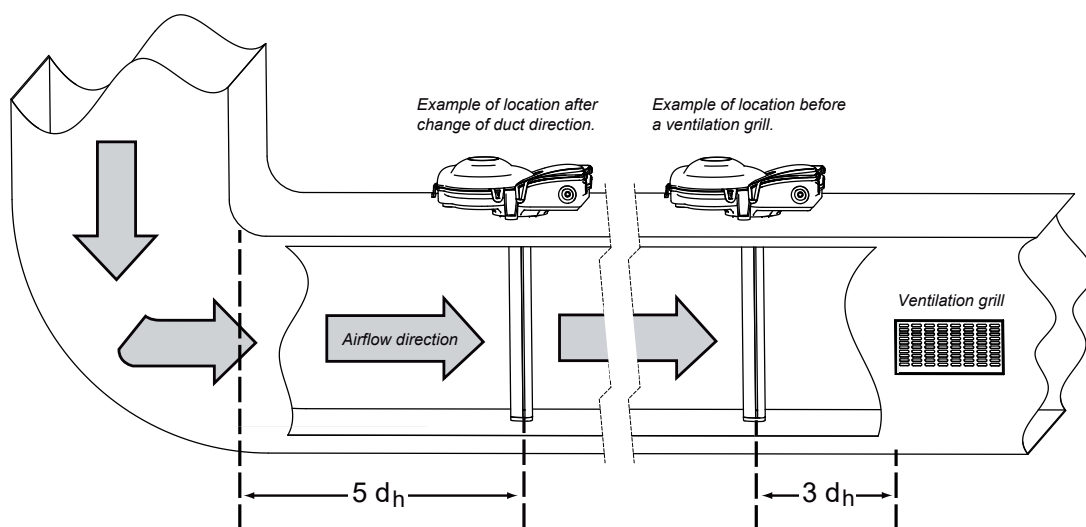
Installation instruction

Uniguard 8

Mounting and positioning

The Uniguard should be installed according to the drawing below. The Uniguard can be installed on any side of the duct.

We recommend that the Uniguard is mounted at an equal distance from sources of interference, and similar to the siting of flow monitors. A distance of 3 times the duct hydraulic diameter should be left before a source of interference, and 5 times the hydraulic diameter after.



Where large temperature variations occur, e.g. on outdoor locations or in areas subject to outside temperatures (roof, attics), the Uniguard should be insulated, see para 8.

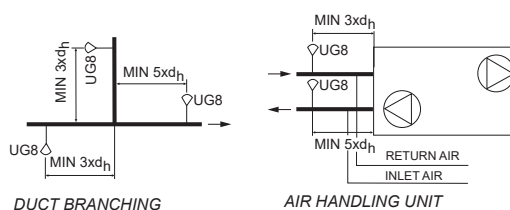
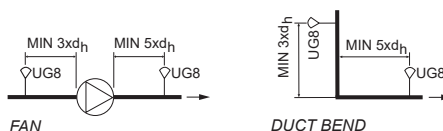
Hydraulic diameter (d_h)

CIRCULAR DUCT

$$d_h = D$$

RECTANGULAR DUCT

$$d_h = \frac{2 \times H \times W}{H + W}$$

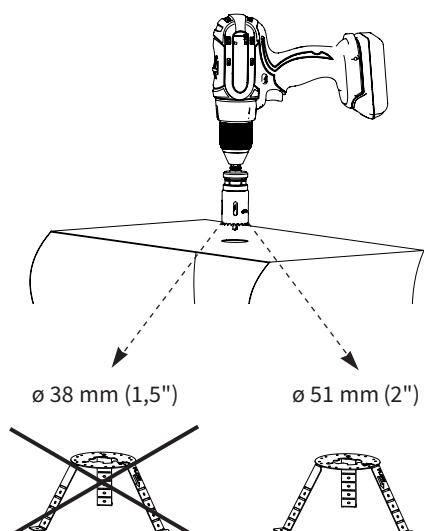


Example of installation at sources of interference:

- fan
- damper
- silencer
- battery
- air handling unit
- duct bend
- duct branching
- duct narrowing or expansion

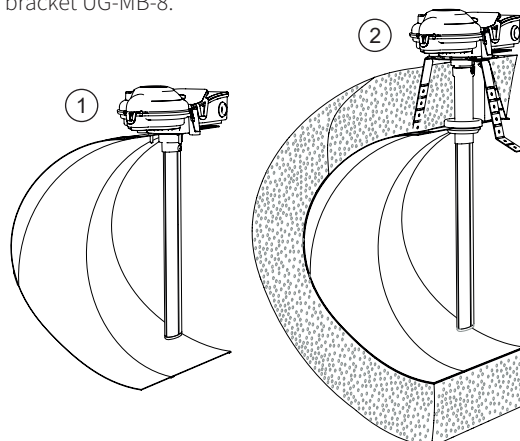
1

Drill a hole in the duct



Ø > 200 mm (2/3 ft)

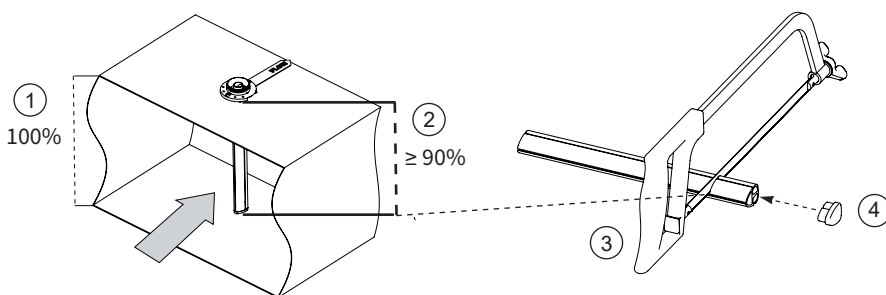
1. For all ducts larger than 200 mm (2/3 ft) hydraulic diameter, the UG8 can be mounted directly on the duct. For rectangular ducts, the minimum width is 100 mm (1/3 ft).
2. If the duct is insulated or smaller than 200 mm (2/3 ft), use mounting bracket UG-MB-8.



2

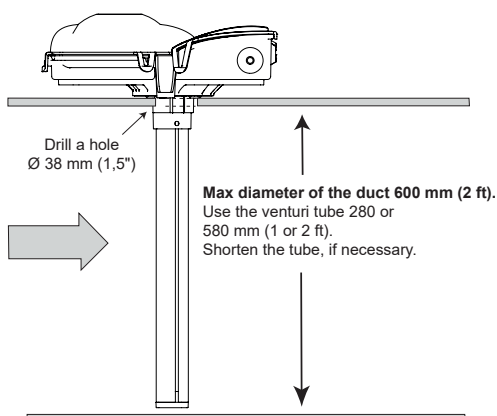
Cut the venturi sampling tube

1. Measure the diameter of the duct.
2. The tube should penetrate at least 90% of the width of the duct. **NOTE! See para 3.**
3. Shorten the sampling tube, if necessary.
4. Insert the end plug.



3

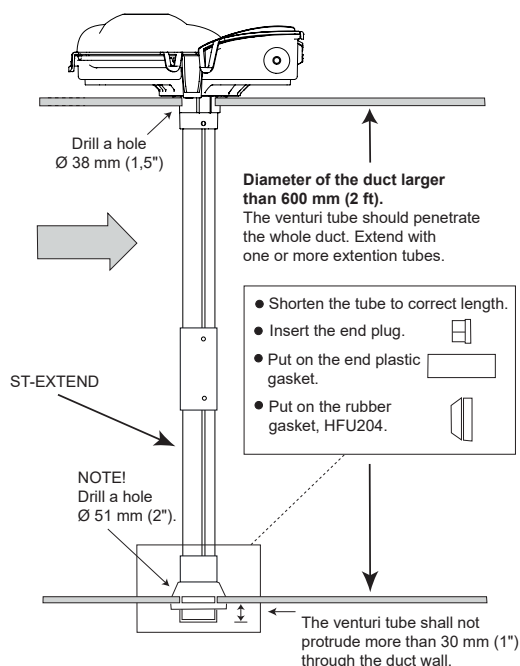
Fitting of tubes in ducts with different diameters



For ducts up to 300 mm (1 ft), use ST280.
For ducts between 300-600 mm (1-2 ft), use ST580.
For ducts over 600 mm (2 ft), extend the tube with ST-EXTEND.

When using ST-EXTEND, the tube must always be attached to the opposite duct wall, together with rubber gasket HFU204.

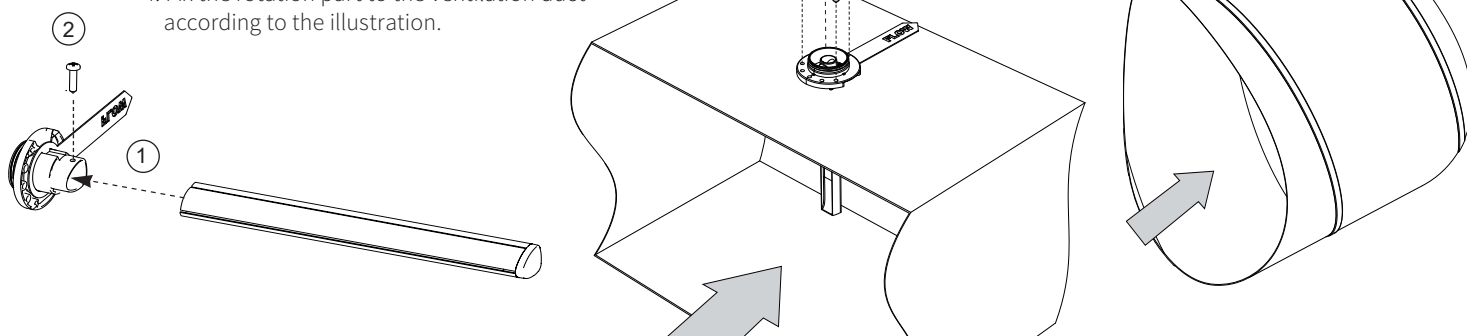
If strong vibrations occur in the venturi tube, we recommend stabilizing the tube further, e.g. with mounting strap.



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Mount the sampling tube and the rotation part

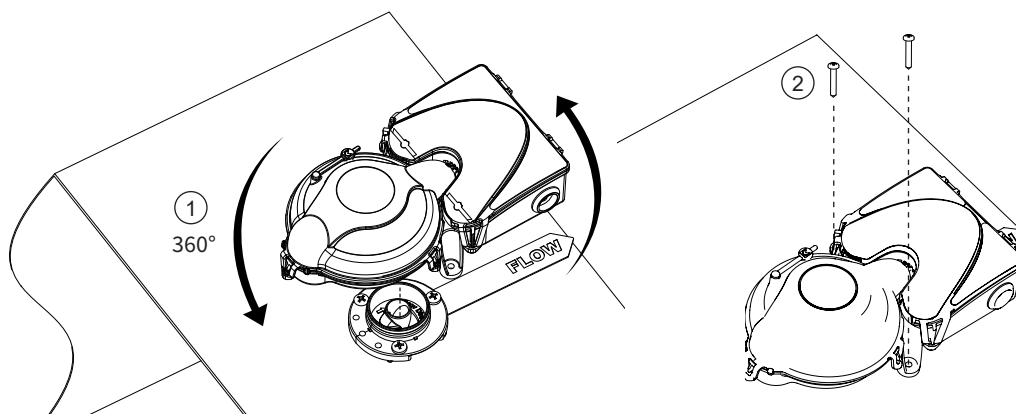
1. Insert the sampling tube into the bottom of the rotation part.
2. Secure the tube with the locking screw.
3. Turn the rotation part in the correct air-flow direction, so that the white FLOW-arrow and the air-flow direction of the duct correlate.
4. Fix the rotation part to the ventilation duct according to the illustration.



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Installation on the duct

1. Mount the Uniguard on the rotation part and rotate it to the desired direction.
2. Secure the Uniguard with the two screws.



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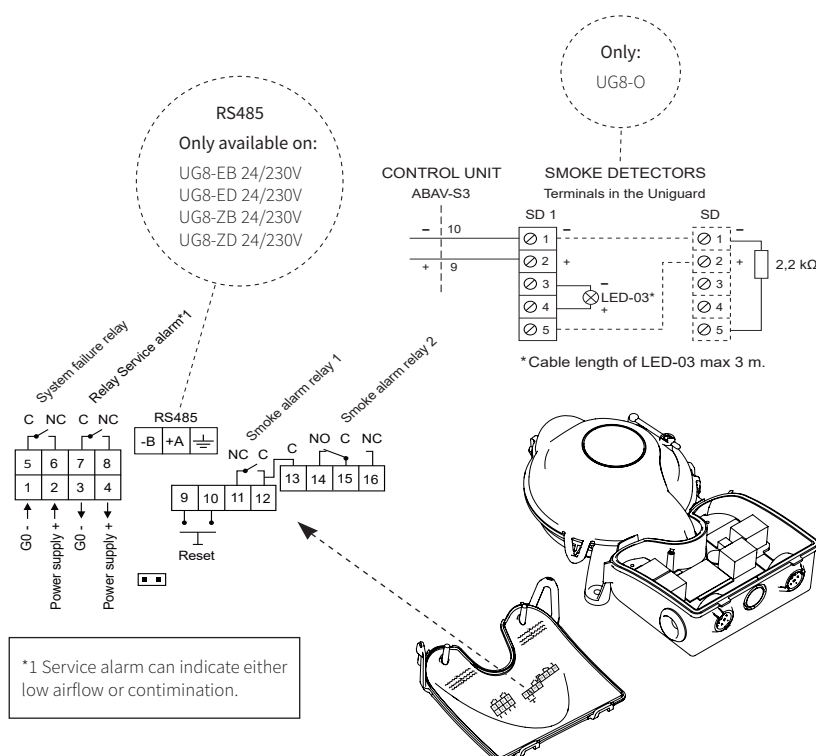
Electrical installation

1. Remove the cover over the connection housing by gently releasing the snap locks. Uniguard 8 has two pre-mounted IP67 approved glands for cable diameter 4-11 mm, type Klikseal.

NOTE! The cable must only be pulled through the Klikseal in one direction: into the Uniguard. To exchange a mounted cable, cut the cable outside of the Uniguard and pull out the rest from the inside.

2. Connect the cable wires according to the wiring diagram, inside the cover.

The relay outputs are shown in power off/ alarm condition. For complete technical product information, see the product data sheet.



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Test of detector

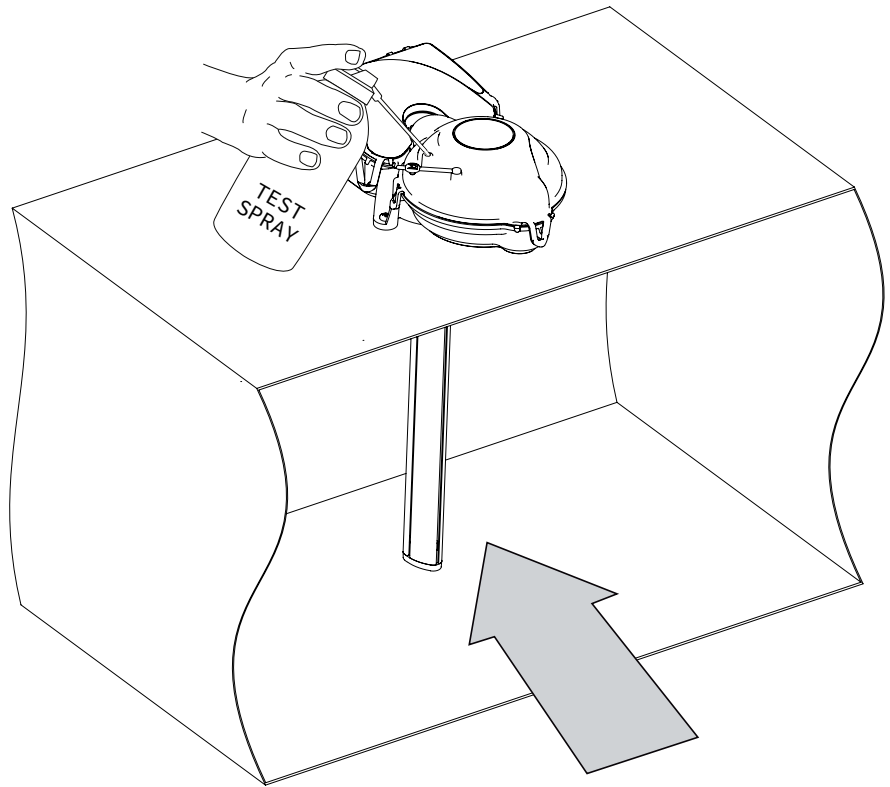
1. Check the detector with smoke detector aerosol test spray (e.g. SOLO A5).
2. Move the "test hole plug" to the side and briefly release a spray of aerosol. When alarming, the LED lits red on the detector and when service alarming (contamination) it lits green.

IMPORTANT!

Reassemble the "test hole plug".

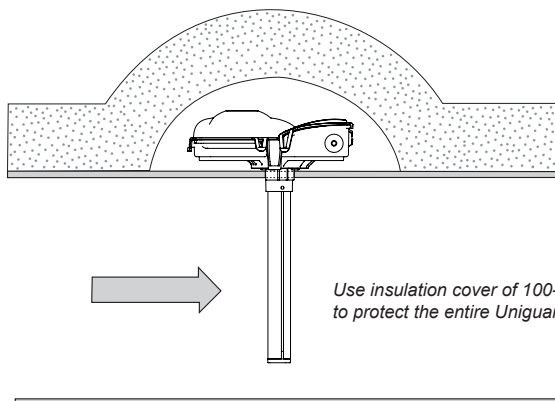


Do not drill any holes in the cover for signs etc.
Holes will cause air leakage and seriously disturb the function of the detector.

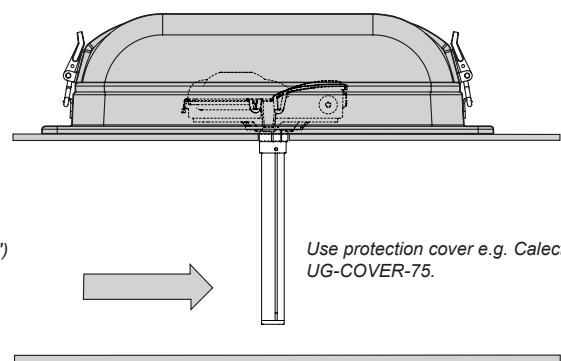


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Mounting in places where possible condensation problems could arise, e.g. cold attics.



Use insulation cover of 100-200 mm (4-8")
to protect the entire Uniguard.



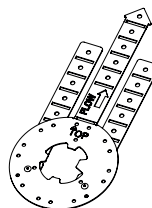
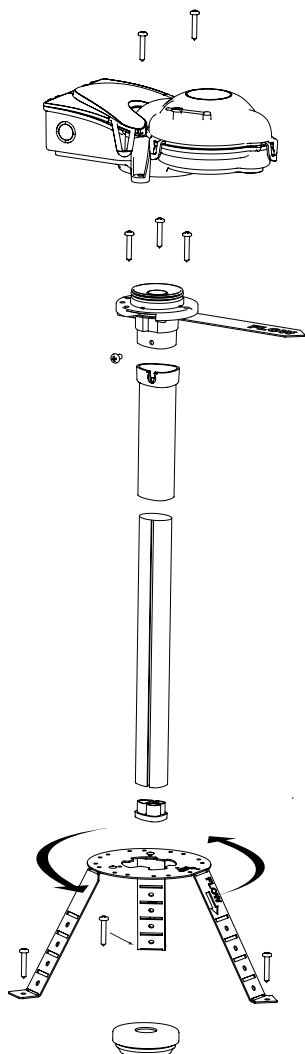
Use protection cover e.g. Calectro's
UG-COVER-75.

A sign should be used to show location of the detector.

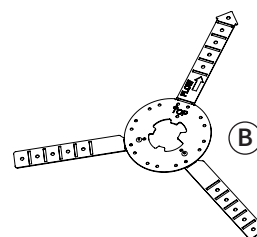
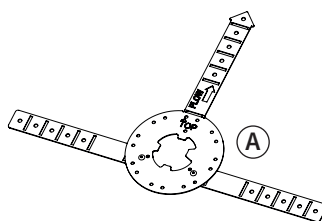
For UG8-O: A remote LED alarm indication is recommended when the Uniguard is hidden.

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Mounting bracket for insulated ducts and ducts smaller than 200 mm (2/3 ft).



The mounting bracket is supplied flat.

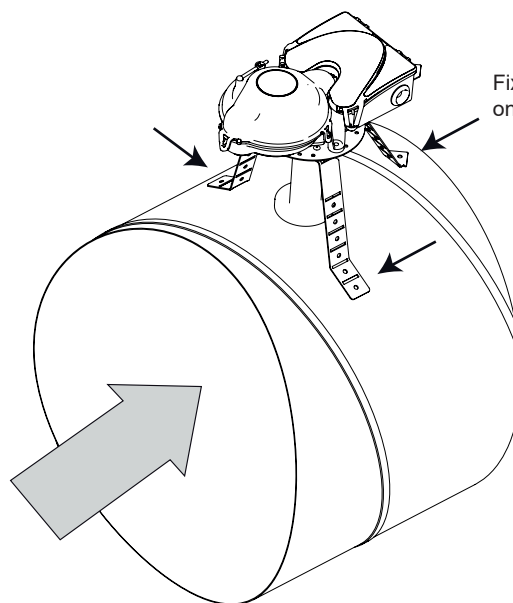
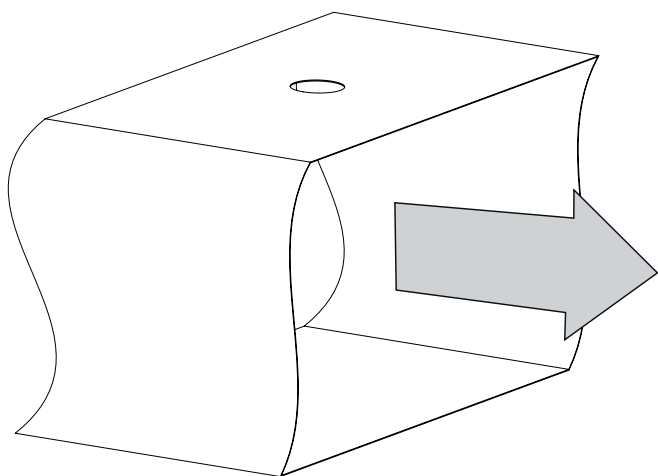


Shape the mounting bracket in position A or B. The mounting bracket can then easily be bent to fit circular or rectangular ducts.

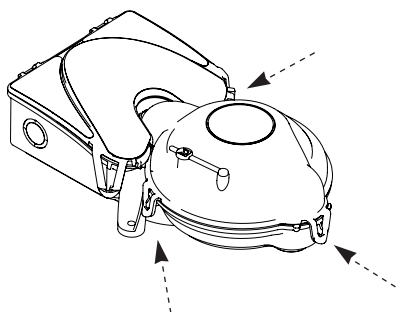
The position of the legs of the mounting bracket will be locked with the mounting screws from the rotation part.



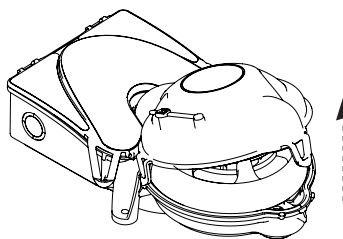
Turn the mounting bracket in the correct airflow direction.



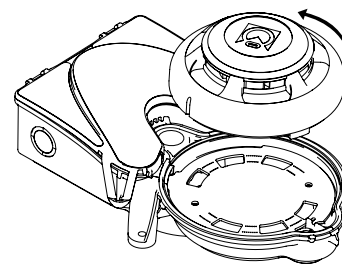
Fix the bracket on to the duct.



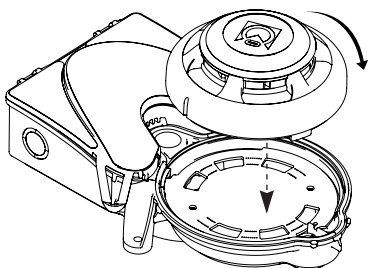
1. Remove the cover by gently bending the snap locks outwards.



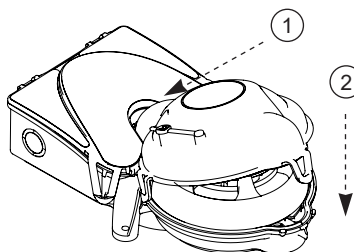
2. Detach the cover.



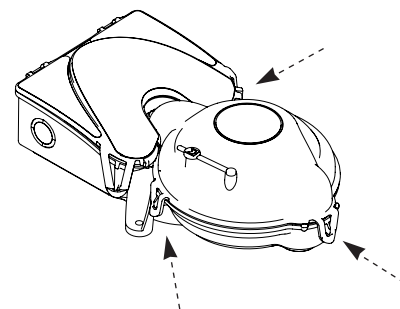
3. Remove the smoke detector by rotating it counterclockwise approximately 1/5 turn.



4. Insert the new detector and rotate it clockwise.



5. Reattach the cover. (1) Start by placing the "lip" of the cover in the cavity next to the air inlet. (2) Then press down the cover.



6. Check that all three snap locks are properly pressed in place.

FINAL CHECKS

- Check that the rotation part of the Uniguard is correctly installed according to the air flow in the duct.
- Check that the plastic plug of the test hole is properly installed.
- It is recommended that smoke from a smoke generator is introduced into the duct to check the detector's function.

Trouble shooting

The smoke detector indicates alarm without smoke.

- Smoke detector is faulty or contaminated. The detector needs to be replaced.



According to WEEE (Waste of Electrical and Electronic Equipment) directive, you must at the end of life of the product dispose of it separately at an appropriate collection point and not place it with unsorted waste. Alternatively return it to Calectro for recycling.