

# ROC<sub>d</sub>

Installation – Commissioning – Maintenance

20150101

## Accessories

### Commissioning box:

ALS: Manufactured of galvanized sheet steel. Includes removable commissioning damper, fixed measurement unit and sound attenuating lining with reinforced surface layer, to Fire Resistance Class B-s1,d0 according to EN ISO 11925-2.

### Installation

The diffuser box is screwed tightly to the ceiling or the wall. The connecting duct is fixed to the spigot with pop rivets.

When the commissioning box ALS is used, this should be secured to the building structure with drop-rods or installation band. The distance between the commissioning box ALS and the diffuser can be extended by up to 500 mm without the need of extending the measurement hose and damper control. The diffuser face is pop riveted to the diffuser box using steel pop rivets. See Figure 1.

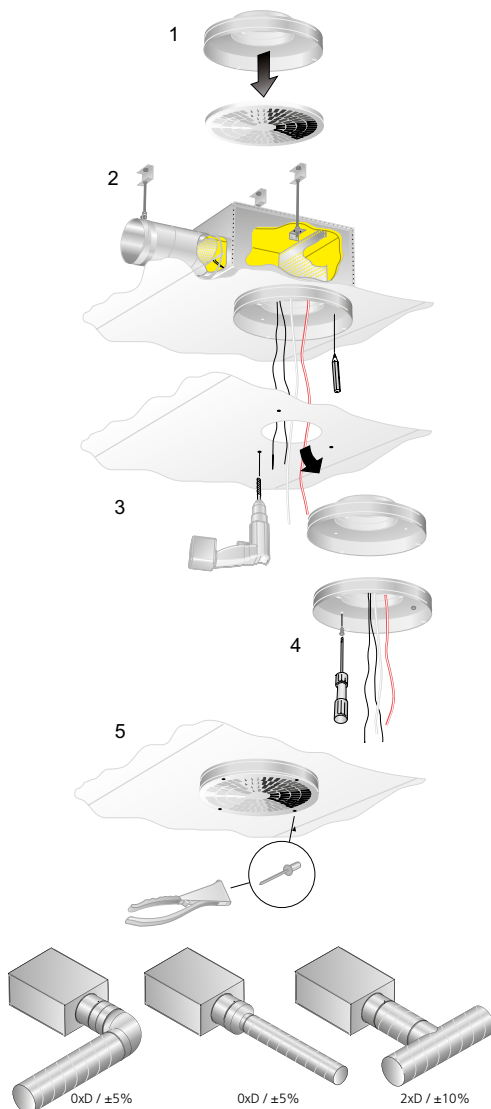


Figure 1. Installation.

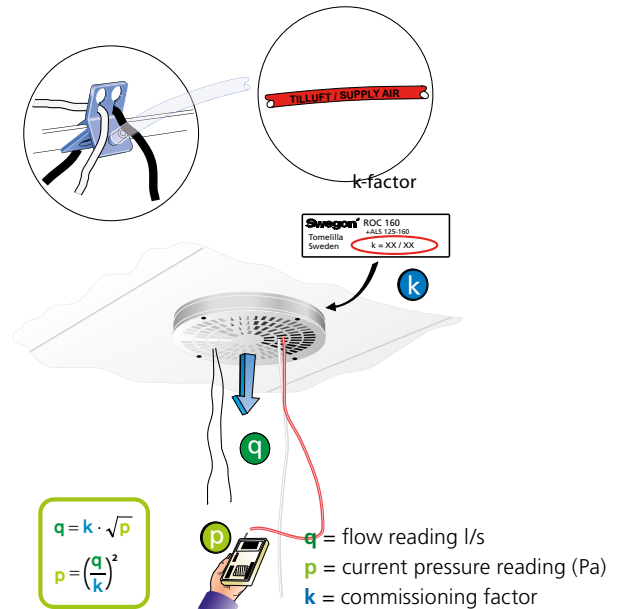


Figure 2. Commissioning.

### Commissioning with ALS

Commissioning should be done with the diffuser face assembled. The measurement hose and damper control is pulled out through the perforation of the diffuser face. A manometer is connected to the measurement hose. The desired commissioning pressure can be calculated with the help of the terminal's K-factor. The damper is set in the right position, an adjustment knot is tied on the damper chords to indicate the damper position. See figure 2. To lock the commissioned damper position, the damper cords are fixed with the cord screw in the top part of the diffuser box.

Measurement accuracy and requirement on straight duct before the commissioning box, see Figure 1. The requirements of straight duct depends on the type of disturbance before the commissioning box. Figure 1 shows a bend, a dimensional change and a T-piece. Other types of disturbances requires at least 2xD straight (D = connection dimension) for measurement accuracy of  $\pm 10\%$  of the flow.

The K-factor is stated on the product's label, as well as in the current commissioning instructions, which can be downloaded from [www.swegon.com](http://www.swegon.com).

### Maintenance

The diffuser is cleaned if necessary with tepid water and a detergent. Access to the duct system is possible by drilling out the steel pop rivets, the diffuser face is then released from its spring clips. When the commissioning box ALS is used, the distribution plate in the box is moved to the side, to gain access to the commissioning damper. The damper unit is then turned anticlockwise and pulled out of its holder. See figure 1.

## Dimensions and weight

| Size | A   | B   | C   | ØD  | Ød  | E  |
|------|-----|-----|-----|-----|-----|----|
| 125  | 304 | 282 | 217 | 99  | 124 | 60 |
| 160  | 380 | 342 | 252 | 124 | 159 | 60 |

| Size | F   | G   | H   | K  | Weight, kg |
|------|-----|-----|-----|----|------------|
| 125  | 180 | 100 | 270 | 80 | 1,6        |
| 160  | 204 | 112 | 315 | 80 | 2,1        |

CL = Center line

## K-factor (COP)

| ALSd Size | ROC Size | Supply Air |             |
|-----------|----------|------------|-------------|
|           |          | K-factor   | Tube colour |
| 100-125   | 125      | 7,1        | Red         |
| 125-160   | 160      | 11,2       | Red         |

Number of measuring tubes: 1

| ALSd Size | ROC Size | Extract Air |             |
|-----------|----------|-------------|-------------|
|           |          | K-factor    | Tube colour |
| 100-125   | 125      | 4,6         | Transparent |
| 125-160   | 160      | 7,0         | Transparent |

Number of measuring tubes: 1

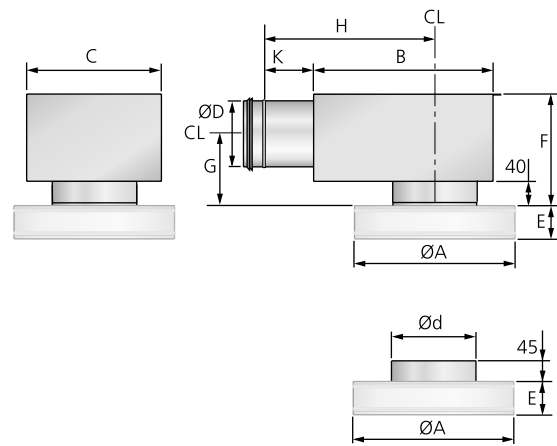


Figure 3. ROC + ALS.