ROCa

Installation – Commissioning – Maintenance

20250605

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. 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.

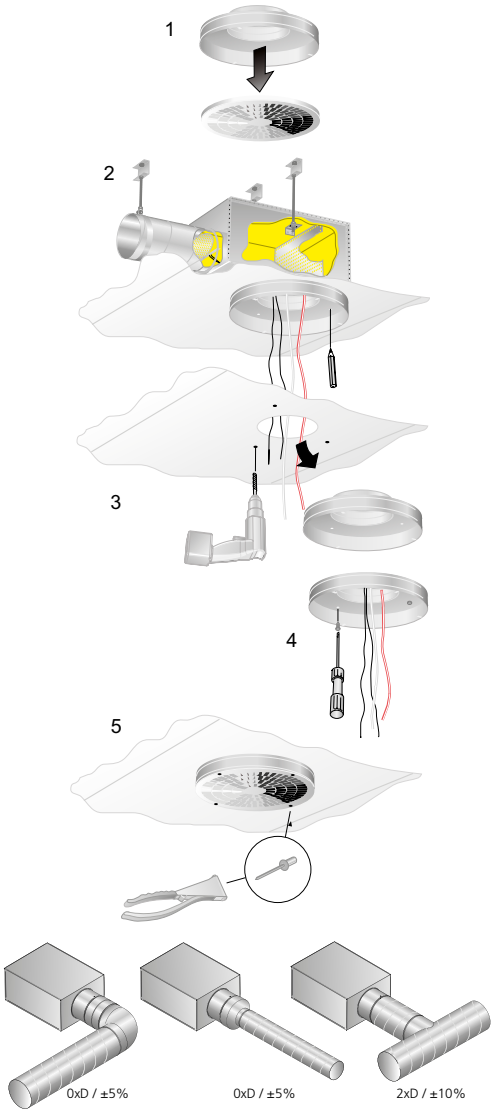

Figure 1. Installation.

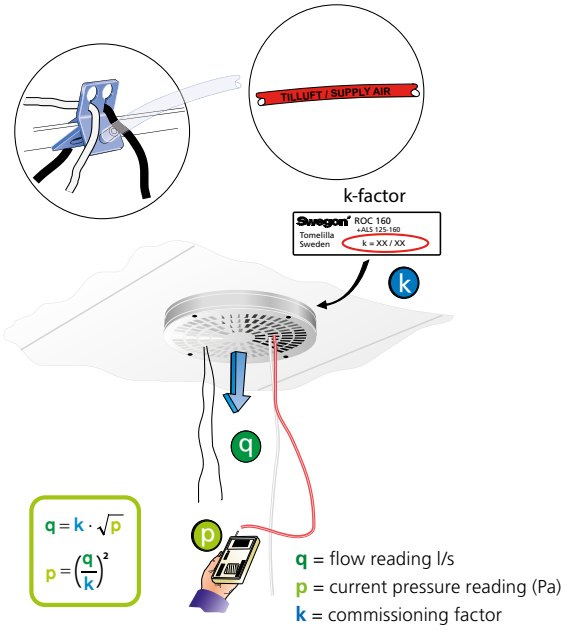

Figure 2. Commissioning.

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 commisioning box, see Figure 1. The requirements of straigh 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 ± 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 from 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	F	G	H	K	Weight, kg	Weight, kg
100	228	227	192	79	99	60	160	90	200	50	1.2	3.1
125	304	282	217	99	124	60	180	100	270	80	1.8	4.3
160	380	342	252	124	159	60	204	112	315	80	2.6	6.1
200	456	404	288	159	199	88	241	130	375	100	3.9	7.4
250	568	504	332	199	249	117	281	150	465	115	6.0	11.0
315	568	622	388	249	314	117	342	175	575	140	5.9	13.4
400	568	767	488	314	399	117	402	210	712	175	5.6	16.9

CL = Center line

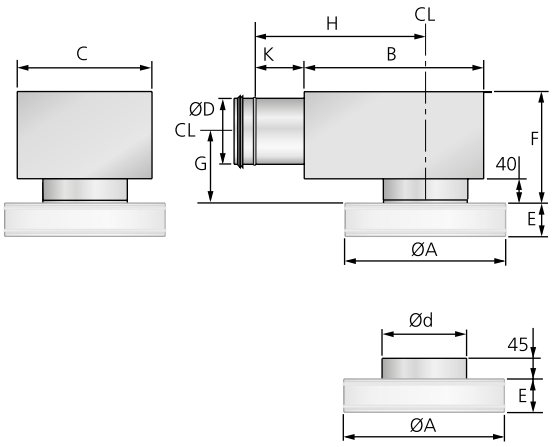

Figure 3. ROC + ALS.

K-factor (COP)

Supply air

Size ALSd	Size ROC	Supply air	
		K-factor	Tube colour
80-100	100	4.6	Red
100-125	125	7.5	Red
125-160	160	11.6	Red
160-200	200	19.7	Red
200-250	250	32.6	Red
250-315	315	43.4	Red
315-400	400	52.1	Red

Number of measuring tubes: 1

Extract air

Size ALSd	Size ROC	Extract air	
		K-factor	Tube colour
80-100	100	3.2	Transparent
100-125	125	4.5	Transparent
125-160	160	7.0	Transparent
160-200	200	12.0	Transparent
200-250	250	19.2	Transparent
250-315	315	28.6	Transparent
315-400	400	40.0	Transparent

Number of measuring tubes: 1