COLIBRI Ceiling VF a

Installation – Commissioning – Maintenance *20/01/2023*

Accessories

Commissioning boxes

REACT ALS/ALS

The commissioning box is made of galvanised sheet steel and contains a removable commissioning damper, fixed measurement tapping and sound absorbing material*) with reinforced surface layer.

The commissioning box ALS is available with 1 or 2 changes in dimension between the inlet and outlet.

*)Fire resistance rated to B-s1,d0 in accordance with EN ISO 11925-2.

Frame

SAR K

For aesthetic installation of a lowered diffuser face.

Adapter

ADAPTER

For adaptation to various variants and makes of systemised false ceilings: Ecophon, Gyproc, Dampa, etc. Also used for adaptation to optional sizes of lay-in ceilings, for instance 625 x 625 or 675 x 675. Specification can be found in product sheet for ADAPTER.

Installation

- To dismantle the diffuser face, insert a thin object, for example a Quick Access card or similar, between the diffuser face and the backing box in order to release the springs. Slide the card from the centre out towards the corner, see Figure 2.
- The inlet spigot on the backing box can be secured to the connecting duct by means of screws or blind rivets.
- For flush mounting in fixed suspended ceilings, the air diffuser is secured to the building structure by means of screws through either the sides or top of the backing box.
- Secure the air diffuser in the correct position with screws or blind rivets in the underside of the commissioning box.
- For mounting in modular suspended ceilings, it is advisable to select air diffusers with outer dimensions of 595 x 595 mm. Position these directly in the T-bar framework, and then secure to the duct system or to the commissioning box.
- When a REACT ALS or ALS commissioning box is used, it must be secured to the building structure by means of hangers or mounting brackets.
- The distance between the commissioning box and the air diffuser can be increased up to 500 mm with a circular duct, without having to lengthen the measuring tubes and damper adjustment cords. See figure 3.

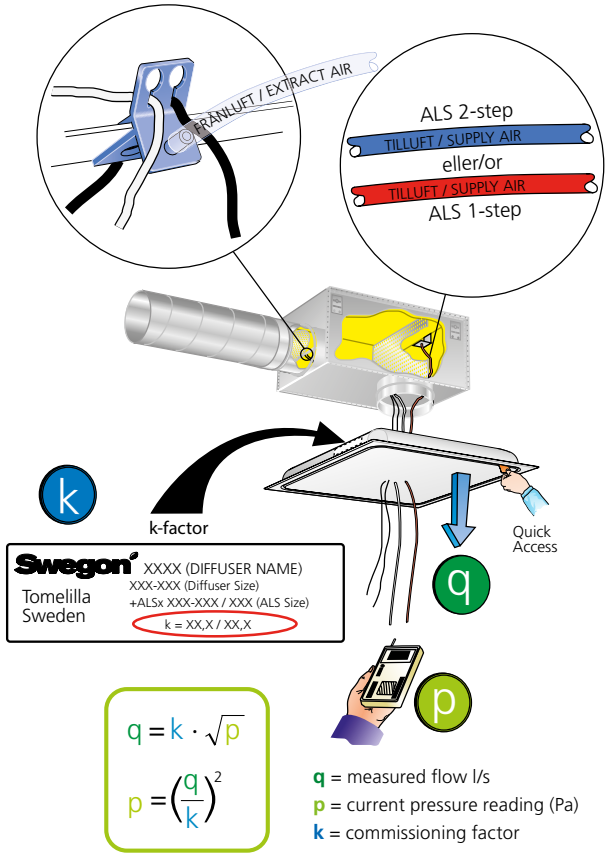


Figure 1. Commissioning.

Commissioning with ALS

- Commissioning should be carried out with the diffuser face mounted.
- The measuring tubes and damper adjustment cords are pulled out through the diffuser face.
- Connect a pressure gauge to the measuring tube/tubes.
- The red and the blue tubes respectively from the ALS commissioning box of the one or two-step version are used for supply air.
- The rated coefficient of performance of the air diffuser can be used in a calculation to determine the required commissioning pressure.
- The adjusted damper position is saved by tying together the damper cord in an adjustment knot.
- Measurement accuracy and straight section requirement before commissioning box. See Figure 3.
- Length of straight section of duct depends on type of obstruction upstream of the commissioning box.
- Figure 3 shows a bend, a change in dimension and T-piece.
- Other types of disturbances require at least 2xD straight section (D = connection dimension) to obtain a measurement accuracy of ±10% on the flow.
- The K-factor is specified on the product's identification label, as well as in the relevant commissioning instructions at www.swegon.com.

Maintenance

- The air diffuser can be cleaned, if necessary, using lukewarm water with dishwashing detergent.
- Alternatively a vacuum cleaner and brush nozzle is used.
- The duct system can be reached for cleaning by opening the diffuser face. If a REACT ALS or ALS commissioning box is used, pull the distributor plate aside and then grip and twist the damper unit from of its mounting. See Figure 4.

Installation

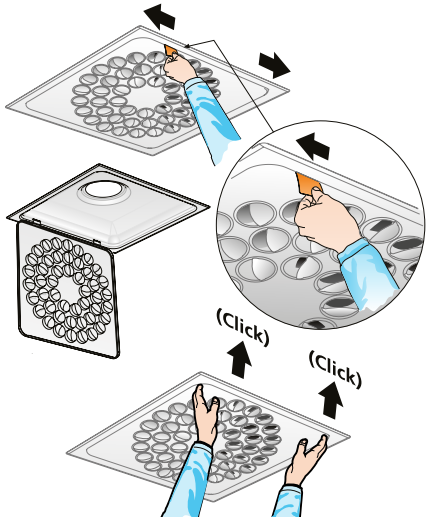


Figure 2. Quick Access, dismantling the diffuser face.

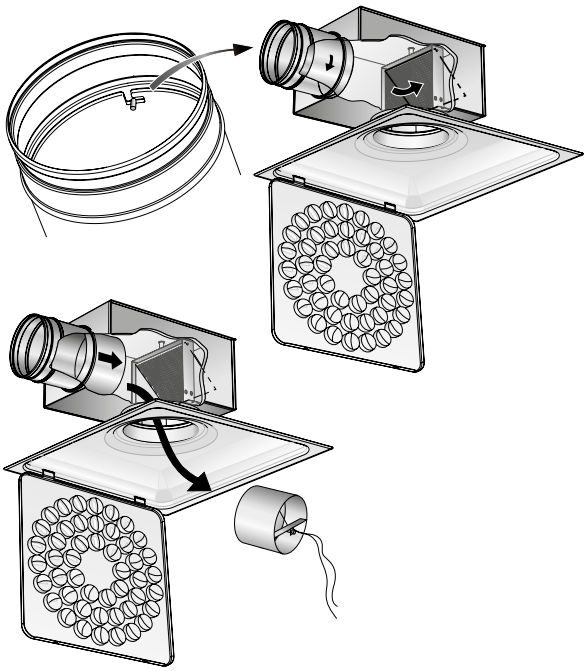


Figure 4. Dismantling the damper when using REACT ALS and ALS commissioning box.

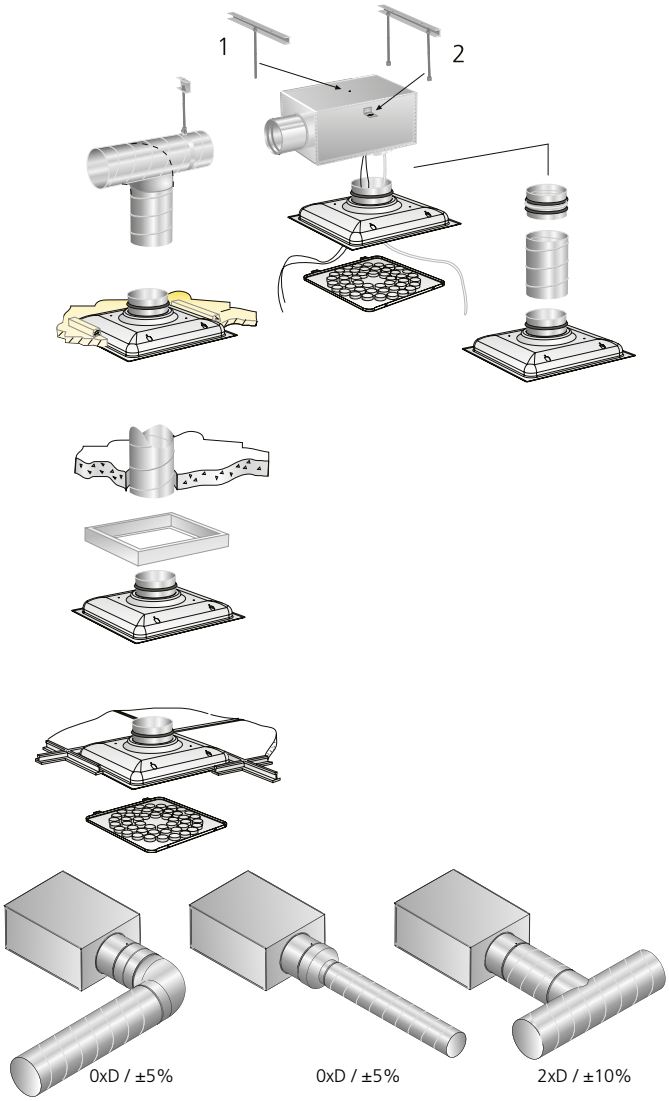


Figure 3. Installation options for the ALS commissioning box. See the REACT ALS product sheet for installation options with active commissioning box.

Dimensions and weights

COLIBRI Ceiling VF

Size	Dimensions (mm)				Weight (kg)	Number of nozzles
	A	Ød1	I	M		
250-600	595	249	575	70	3.5	90
315-600	595	314	575	50	3.5	130

Dimensions of opening in ceiling I x I

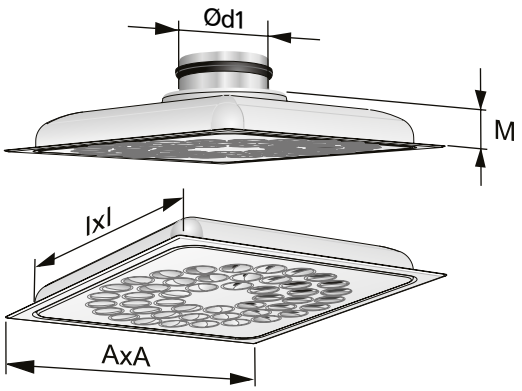


Figure 5. COLIBRI Ceiling VF.

COLIBRI Ceiling VF with REACT ALS active commissioning box

Size	Dimensions (mm)											Weight (kg)
	A	B	C	ØD	Ød	E1	F1	G1	H	K	Q	
250-600	595	504	332	159	250	314	113	214	450	100	40	8.4
315-600	595	622	388	249	315	395	95	247	575	140	40	11.3

COLIBRI Ceiling VF with ALS commissioning box – One step

Size	Dimensions (mm)											Weight (kg)
	A	B	C	ØD	Ød	E1	F1	G1	H	K	Q	
250-600	595	504	332	199	250	354	113	225	465	115	40	8.7
315-600	595	622	388	249	315	395	93	230	575	140	40	11.8

COLIBRI Ceiling VF with ALS commissioning box – Two steps

Size	Dimensions (mm)											Weight (kg)
	A	B	C	ØD	Ød	E1	F1	G1	H	K	Q	
250-600	595	504	332	159	250	314	113	205	450	100	40	7.0
315-600	595	622	388	200	315	334	93	205	550	100	40	8.7

SAR K frame

Size	L	Weight (kg)
600	595	1.0

When installing size 315-600 diffusers, position the ALS box so that its branch extends 20 mm below the ceiling surface

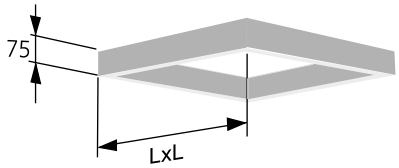


Figure 6. Frame, SAR K.

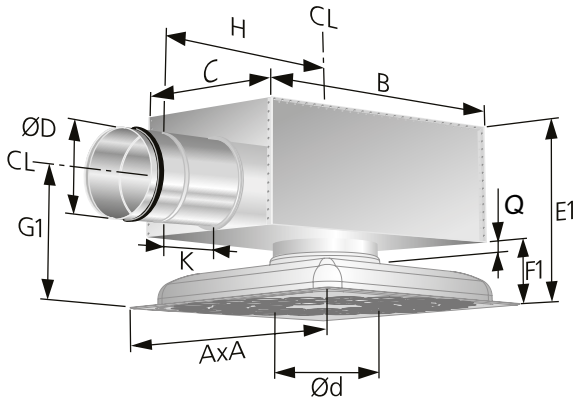


Figure 7. COLIBRI Ceiling VF with REACT ALS or ALS commissioning box. CL = Centreline.

K-factor

COLIBRI Ceiling VF with ALS commissioning box

ALSd Size	COLIBRI Ceiling VF, supply air		
	Size	Standard	Tube colour
160-250	250-600	20.6	Blue
200-250	250-600	21.7	Red
200-315	315-600	28.6	Blue
250-315	315-600	29.5	Red

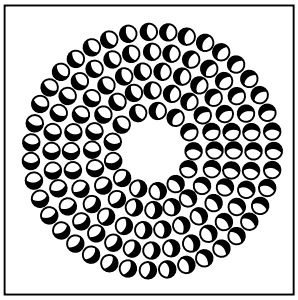
Number of measuring tubes: 1

Nozzle pattern and nozzle settings

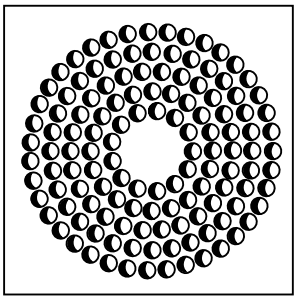
Standard and optional nozzle settings for various air distribution patterns. Note the air flow direction in the figures.

Example, nozzle pattern:

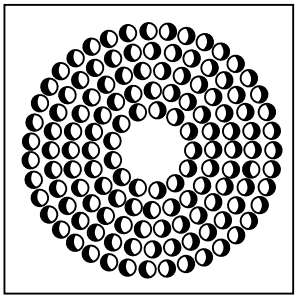
Clock-wise swirl (standard)



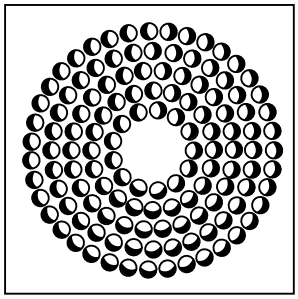
1-way



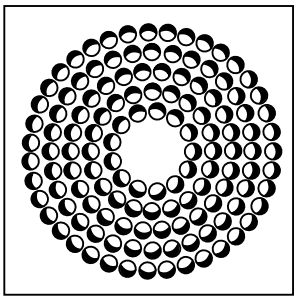
2-way



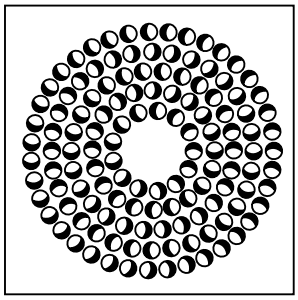
3-way



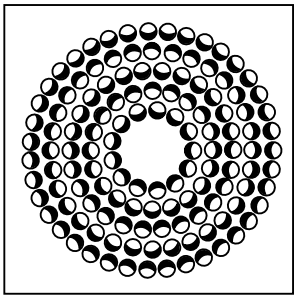
4-way



Counter-flow distribution pattern



VD Vertical, diffused



VK Vertical, concentrated