COLIBRI Wall c

Installation – Commissioning – Maintenance

27/05/2024

Accessories

Commissioning box

ALV

The box is made of galvanised sheet steel and contains a removable commissioning damper, fixed measurement tapping and air distribution baffle. The commissioning box is available with two connection options: rear and side connection.

Cover plate

ALVT 1

For a fitted and aesthetic installation of the ALV commissioning box.

Installation

Installation and dismantling can be seen from figure 1.

- 1. Prepare an opening in the wall according to the dimensions specified in the dimension table.
- 2. Place the commissioning box containing the damper insert, air distribution plate and air distribution baffle in the opening.
- 3. Apply sealing compound between the commissioning box and the mounting frame to prevent air leakage. Insert the mounting frame into the commissioning box and secure it with screws in the short sides to the commissioning box and to the wall structure.
- 4. Press the diffuser face into the mounting frame.

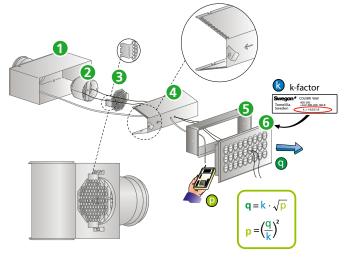
Commissioning

Commissioning should be carried out with the diffuser face mounted. The measuring tube and the damper adjustment cords are pulled out of the air diffuser through a nozzle. A pressure gauge is connected to the measuring tube. The desired commissioning pressure can be calculated using the rated coefficient of performance (K-factor) of the air diffuser. The damper is set to the correct blade position, a commissioning knot is tied in the damper cords to indicate the damper position. Then the cords are locked against the locking screw in the air distribution baffle.

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 added, or by vacuum cleaning using a brush nozzle. The duct system can be accessed by dismantling the diffuser face, withdrawing the air distribution baffle, moving the air distribution plate to the side and turning the damper and withdrawing it from the inlet holder (see figure 1).



- **q** = measured flow I/s
- **p** = current pressure reading (Pa)
- k = commissioning factor

Figure 1. Installation, commissioning.

- 1. Commissioning box.
- 2. Damper insert, bayonet catch.
- 3. Octagonal air distribution plate, enlarged image shows the locking device.
- 4. Air distribution baffle, enlarged image shows the locking device.
- 5. Mounting frame.
- 6. Diffuser face.



Figure 2. Installation options, applicable to all connections (B, K).



Dimensions and weight

COLIBRI Wall and commissioning box ALV - rear connection

Size				Dimensions	Weight, diffuser	Weight, diffuser incl. ALV			
	А	В	ØD	F	G	Κ	IxJ	(kg)	(kg)
300-150	330	180	99	295-375	225-305	70	305 x 155	0.7	3.1
400-150	430	180	124	295-375	225-305	70	405 x 155	0.9	3.9
400-200	430	230	159	315-395	225-305	90	405 x 205	1.0	4.5
550-250	580	280	199	360-440	251-331	110	555 x 255	1.4	6.4
550-300	580	330	249	385-465	251-331	134	555 x 305	1.6	7.5

Size of opening = $I \times J$

CL = Centre line

COLIBRI Wall and commissioning box ALV - short side connection

Size	Dimensions (mm)								Weight, diffuser	Weight, diffuser incl. ALV
	Α	В	ØD	G2	K	L	М	IxJ	(kg)	(kg)
300-150	330	180	99	270-350	77	145-225	195-275	305 x 155	0.7	3.3
400-150	430	180	124	331-411	77	180-260	240-320	405 x 155	0.9	4.4
400-200	430	230	159	331-411	95	145-225	225-305	405 x 205	1.0	5.0
550-250	580	280	199	371-451	114	145-225	245-325	555 x 255	1.4	7.3
550-300	580	330	249	425-505	138	145-225	275-355	555 x 305	1.6	8.7

Size of opening = I x J CL = Centre line

ALVT 1

Size		Dimensions (mm)	
3126	А	В	N
300-150	330	180	230
400-150	430	180	230
400-200	430	230	230
550-250	580	280	255
550-300	580	330	255

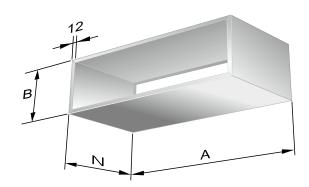
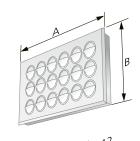
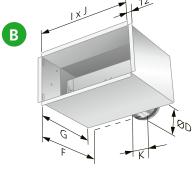


Figure 3. Cover plate ALVT 1.





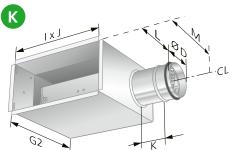


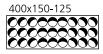
Figure 4. Dimensions, COLIBRI Wall and commissioning box ALV.

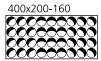
 $B = Rear\ connection$

K = Connection on short side

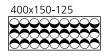
Nozzle settings



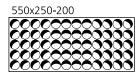


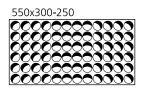


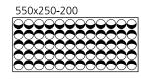












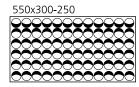


Figure 5. Standard nozzle settings, short throw length.

Figure 6. Nozzle settings, long throw length.

K-factor

Size	COLIBRI Wall – Supply air						
ALV	Size	Connection – rear	Connection – short side				
300-150-100	300-150	5.4	5.1				
400-150-125	400-150	7.8	7.6				
400-200-160	400-200	10.2	10.1				
550-250-200	550-250	16.9	16.5				
550-300-250	550-300	19.8	19.6				