

PELICAN™ CS/CE a

Installation - Commissioning - Maintenance

20110131

Accessories

Commissioning box: ALS The ALS box is made of galvanized sheet steel and contains a removable adjustment damper, fixed measurement tappings and sound absorbing material*) with reinforced surface layer.

The ALS commissioning box is available with one or two differences in dimension between the inlet and the outlet and also a version for low installation where a low overall height is required. The ALS box is then supplied without outlet branch.

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

Frame: SAR K, for aesthetic installation of a lowered diffuser section.

Adapter: ADAPTER, for adaptation to various variants and makes of systemized false ceilings: Ecophon, Gyproc, Dampac etc. Also used for adaptation to optional sizes of lay-in ceilings, for instance 625 x 625 or 675 x 675.

Installation

To unfasten the diffuser face, press in the spring retainers on one side of the diffuser and let the diffuser face hang on its safety cords. See Figure 2.

The inlet spigot of the diffuser backing box can be secured to the connecting duct by means of self-tapping screws or a blind rivets. For flush-mounting in fixed ceiling constructions, secure the terminal by means of screws into place in the framework through either the sides or top of the diffuser backing box. The air diffuser and commissioning box in the version for low installation height must be centred and jointed together using the locking strip supplied. Secure the air diffuser in the correct position with self-tapping screws or pop rivets in the under side 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 down in the T-bar framework, and then secure them to the duct system or to the commissioning box.

If an 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 by as much as 500 mm with an ordinary circular duct without having to lengthen the measuring tubes and damper commissioning cords. See Figures 3 and 4.

Commissioning

Commissioning should be carried out with the face plate mounted. Pull the measuring tube and damper adjusting cord out through the face plate. Connect a manometer to the right measuring tube. The red + red or red + blue tube is used for supply air depending on whether a one or two-step ALS commissioning box is used. For extract air, use the

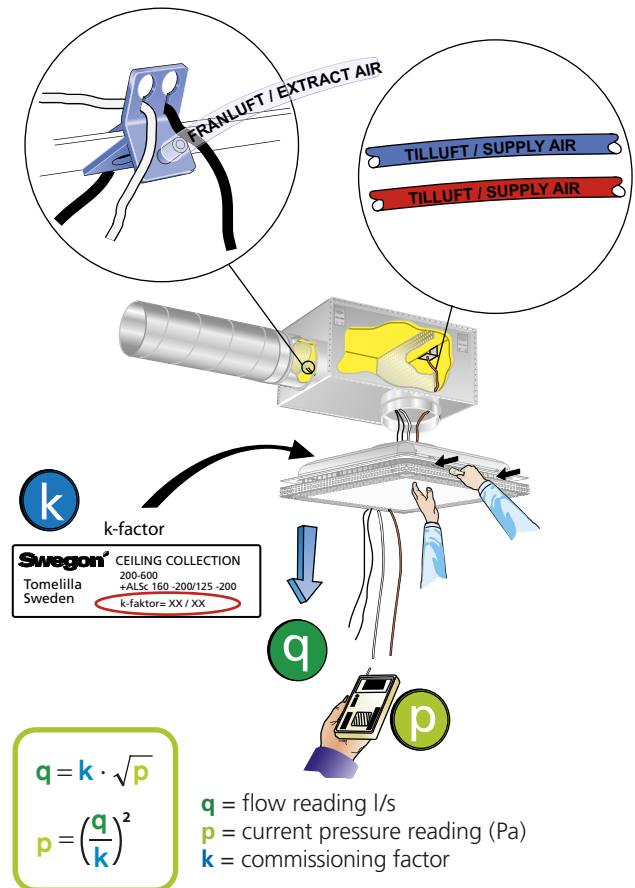


Figure 1. Commissioning.

transparent tube only. The required commissioning pressure can be calculated by means of the K-factor of the air diffuser/register. Adjust the damper to the correct position and tie a commissioning knot on the damper cords to indicate the damper setting. See Figure 1.

The K-factor is specified on the product identification plate and also in the relevant commissioning instructions available 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 reached for cleaning after opening the diffuser face. If a type ALS commissioning box is used, swing the diffuser face to the side on its hinges so that you then can grip the handle of the tubular damper casing and rotate it out of its holder. See Figure 6.

Installation

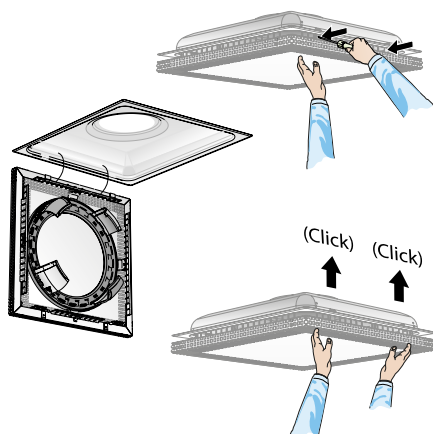


Figure 2. Quick Access.

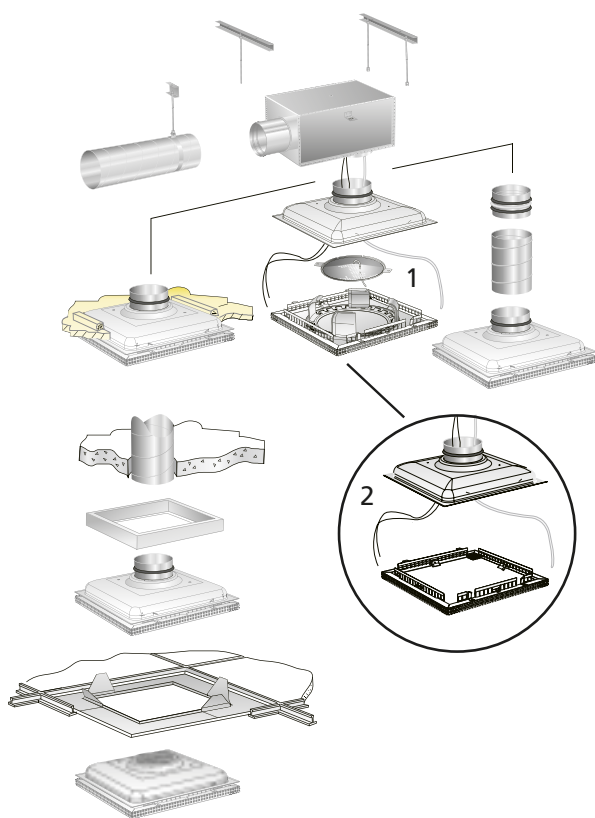


Figure 3. To install the PELICAN
1. Supply air
2. Extract air

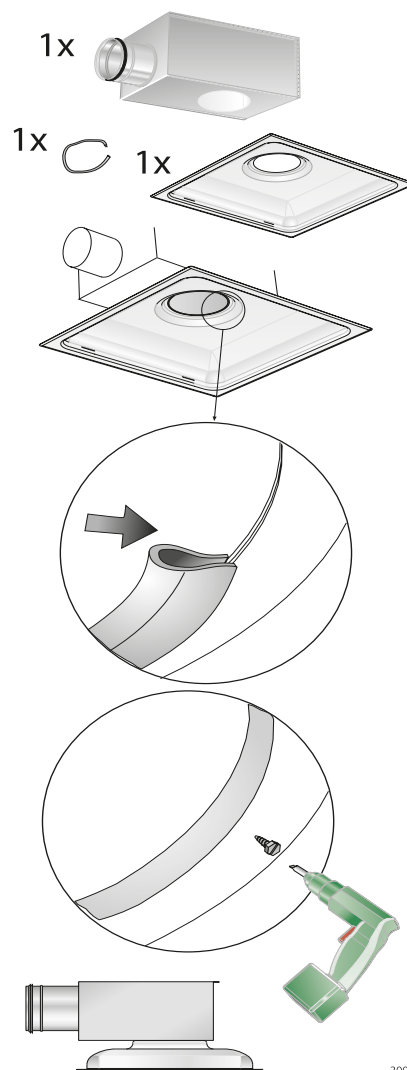


Figure 4. Installation of air diffusers and commissioning box with low installation height.

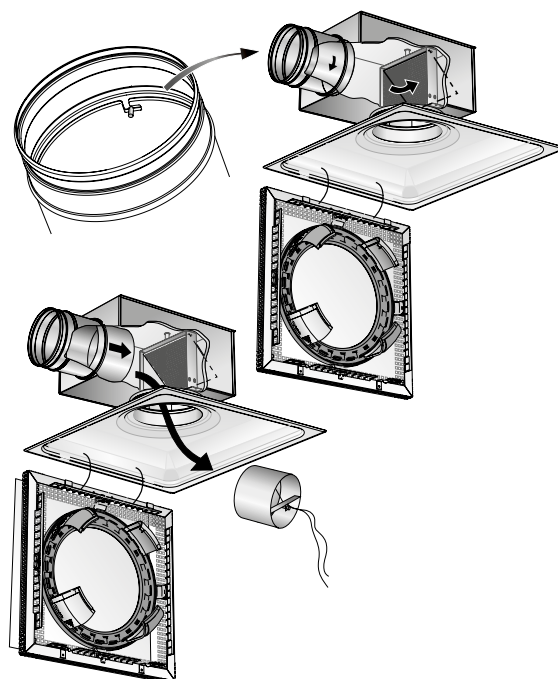


Figure 5. To dismantle the damper.

Dimensions and weights

PELICAN Ceiling

Size	A	Ød	l	M	kg
125-400	395	124	375	70	2.1
160-400	395	159	375	70	2.1
200-600	595	199	575	70	4.3
250-600	595	244	575	70	4.3
315-600	595	314	575	50	4.3
400-600	595	399	575	50	4.3

Dimensions of opening, l x l

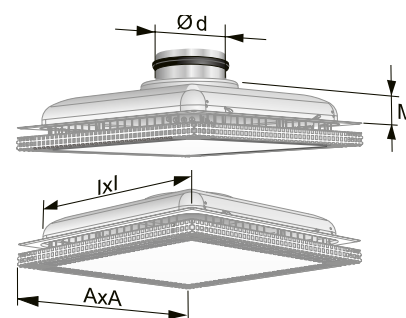


Figure 6. PELICAN Ceiling

PELICAN Ceiling with ALS, 1-step

Size	A	B	C	ØD	Ød	E1	E2	F1	F2	G1	G2	H	K	Weight, kg
125-400	395	282	217	99	125	255	212	113	70	175	132	270	80	3.5
160-400	395	342	252	124	160	279	236	113	70	188	145	315	80	4.2
200-600	595	404	288	159	200	314	271	113	70	205	162	375	100	7.0
250-600	595	504	332	199	250	354	311	113	70	225	182	465	115	8.7
315-600	595	622	388	249	315	395	352	93	50	230	187	575	140	11.8
400-600	595	767	488	314	400	455	–	93	–	262	–	712	175	15.0

CL = Centreline of branch

PELICAN Ceiling with ALS, 2 steps

Size	A	B	C	ØD	Ød	E1	E2	F1	F2	G1	G2	H	K	kg
160-400	395	342	252	99	160	255	212	113	70	175	132	315	80	4.1
200-600	595	404	288	124	200	279	236	113	70	188	145	355	80	5.0
250-600	595	504	332	159	250	314	271	113	70	205	162	450	100	7.8
315-600	595	622	388	199	315	334	291	93	50	205	162	550	115	9.5

CL = Centreline of branch

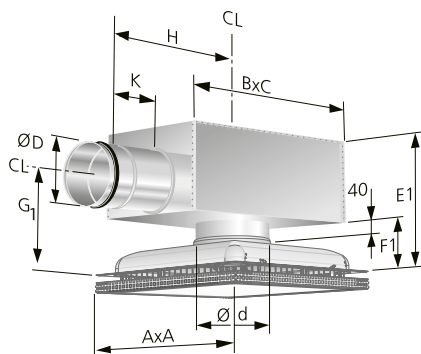


Figure 7. PELICAN C with ALS.

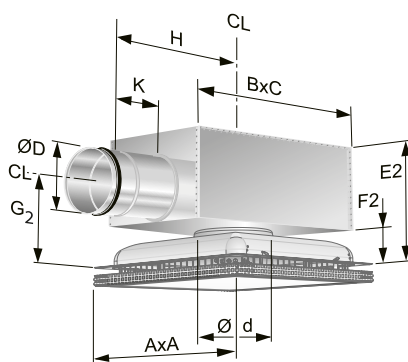


Figure 8. PELICAN C with ALS. Low installation

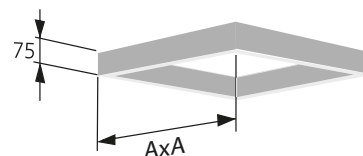
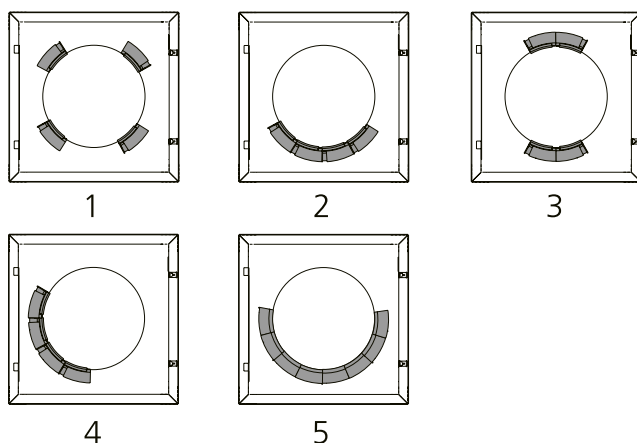


Figure 9. SAR K frame.

Setting and blanking off



1. 4-way
2. 3-way
3. 2-way, centre
4. 2-way, corner
5. 1-way

Coefficient of performance, PELICAN CS/CE

PELICAN CS, supply air

ALSc Size	PELICAN CSa supply air			
Size	Size	Standard	Low version	Tube colour
100-125	125-400	7.1	7.7	Red + Red
100-160	160-400	10.6	10.1	Blue + Red
125-160	160-400	11.4	11.8	Red + Red
125-200	200-600	16.0	16.5	Blue + Red
160-200	200-600	18.1	19.0	Red + Red
160-250	250-600	25.7	27.1	Blue + Red
200-250	250-600	29.0	28.4	Red + Red
200-315	315-600	37.6	36.1	Blue + Red
250-315	315-600	44.0	38.1	Red + Red
315-400	400-600	68.2	-	Red

Number of measuring tubes: 2

PELICAN CE, extract air

ALSc Size	PELICAN CEa extract air			
Size	Size	Standard	Low version	Tube colour
100-125	125-400	4.9	4.6	Transparent
125-160	160-400	7.6	7.2	Transparent
160-200	200-600	14.2	12.6	Transparent
200-250	250-600	21.2	20.2	Transparent
250-315	315-600	27.9	27.7	Transparent
315-400	400-600	41.6		Transparent

Number of measuring tubes: 1