

# CDK<sub>b</sub>/CKP<sub>d</sub>

Installation – Commissioning – Maintenance

20221212

## Accessories

### Commissioning box:

ALS. Made of galvanised sheet steel. Contains removable commissioning damper, fixed measurement tapping and sound absorbing insulation with reinforced surface layer. Fire resistance rated to B-s1,d0 in accordance with EN ISO 11925-2.

### Frame:

SAR C. For aesthetic installation of a lowered diffuser.

## Installation

The diffuser inlet sleeve should be secured to the connecting duct with blind rivets. The diffuser face can be removed by turning the springs that hold the diffuser face's "pins" one quarter of a turn (see Figure 2). If an ALS commissioning box is used, the sleeve coupling between the ALS and the air diffuser can be lengthened using an ordinary circular duct of up to 500 mm without having to lengthen the measuring tubes and damper adjustment cords. See Figure 2.

## Commissioning

Commissioning must be carried out with the diffuser face mounted. Pull the measuring tubes and damper adjustment cords out through the air diffuser slot. Then connect the manometer to the correct measuring tube. The red tube in the ALS commissioning box is used for supply air. The rated coefficient of performance of the air register can be used in a calculation to determine the required commissioning pressure. Conclude commissioning by adjusting the damper to the correct blade position, tie a commissioning knot in the damper cords to indicate the damper position. See Figure 1.

Measurement accuracy and requirement on straight duct before the commissioning box, see Figure 2. The requirements of straight duct depends on the type of disturbance before the commissioning box. Figure 2 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 rated coefficient of performance (K-factor) is specified on the identification label of the product and in the relevant commissioning instructions at [www.swegon.com](http://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 for cleaning by removing the diffuser face. Do so by turning the springs that hold the diffuser face's "pins" one quarter of a turn. If a type ALS commissioning box is used, swing the distribution plate to the side on so that you then can grip the handle of the tubular damper casing and rotate it out of its holder. See Figure 2.

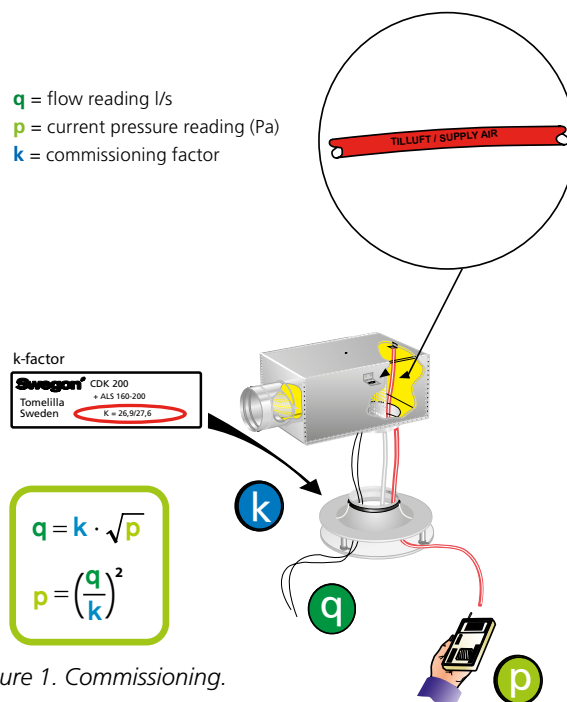


Figure 1. Commissioning.

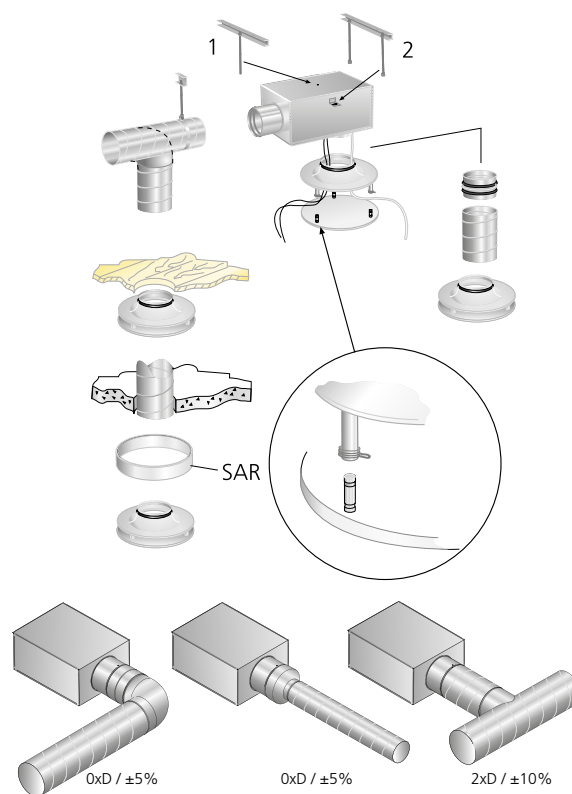


Figure 2. Installation

# Dimensions and weights

## CDK/CKP

Size	ØA	Ød	E	ØJ	L	Weight, kg
100	192	99	36/46	125	51	0.6
125	228	124	36/46	160	56	0.8
160	304	159	46/56	215	73	1.3
200	380	199	46/56	280	87	1.8
250	456	249	50/60	350	95	2.5
315	568	314	50/60	450	114	3.7

ØJ = Size of the opening

## CDK/CKP + ALS

Size	ØA	B	C	ØD	E
100	192	227	192	79	36/46
125	228	282	217	99	36/46
160	304	342	252	124	46/56
200	380	404	288	159	46/56
250	456	504	332	199	50/60
315	568	622	388	249	50/60

Size	F	G	H	K	Weight, kg
100	177	107	200	50	1.8
125	202	122	270	80	2.7
160	243	151	315	80	3.5
200	292	183	375	100	4.5
250	340	211	465	115	6.3
315	420	255	575	140	9.3

CL = Center line

## SAR C frame

Size	M	Ø L
100	40	187
125	40	223
160	65	299
200	65	375
250	100	451
315	100	563

# K-factor (Rated COP)

## CDK

ALSd	CDKb, supply air, 360°				
Size	Size	Slot 20 mm	Slot 30 mm	Slot 40 mm	Colour of the tube
80-100	100	6.8	6.9	–	Red
100-125	125	9.8	10.1	–	Red
125-160	160		16.3		Red
160-200	200	–	26.9	27.6	Red
200-250	250	–	38.5	42.1	Red
250-315	315	–	57.6	69.9	Red

Number of measuring tubes: 1

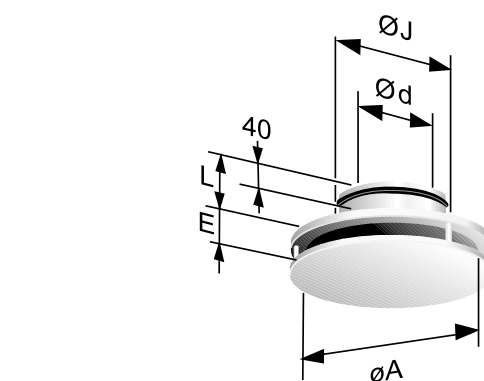


Figure 3. CDK/CKP.

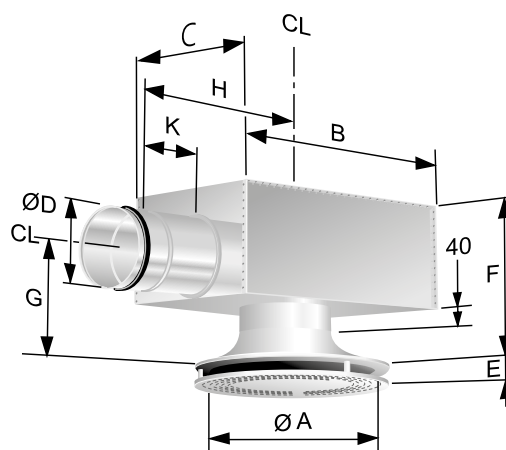


Figure 4. CDK/CKP + ALS. CL = Centerline.

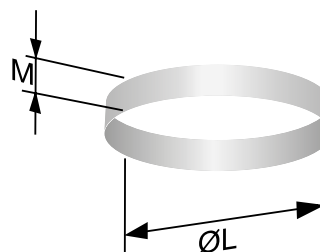


Figure 5. SAR C.

## CKP

ALSd	CKPa, supply air, 360°				
Size	Size	20 mm slot	30 mm slot	40 mm slot	Colour of the tube
80-100	100	3.8	6.8	–	Red
100-125	125	9.9	10.1	–	Red
125-160	160	–	16.2	16.5	Red
160-200	200	–	27.3	27.9	Red
200-250	250	–	39.8	42.2	Red
250-315	315	–	60.6	68.7	Red

Number of measuring tubes: 1