

CDD_b/CDR_c

Installation – Commissioning – Maintenance

20221212

Accessories

Commissioning box:

ALS. Made of galvanised sheet steel. The box contains a removable commissioning damper, fixed measurement tapping and sound absorbent insulation covered by a reinforced surface layer, rated to Fire resistance class B-s 1, d0 conforming to EN ISO 11925-2.

Installation

If the air diffuser is suspended, the diffuser inlet sleeve must be secured to the connecting duct using blind rivets. If the air diffuser is installed against the ceiling, the diffuser can be secured with screws through its backing box, if the building material has sufficient strength. The diffuser face can be removed by turning the springs that hold the diffuser face's "pins" one quarter of a turn (see Figure 1). 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 ± 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.

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 removing the diffuser face. Do so by turning the springs that hold the diffuser face's "pins" one quarter of a turn (see Figure 1). 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.

q = flow reading l/s
p = current pressure reading (Pa)
k = commissioning factor

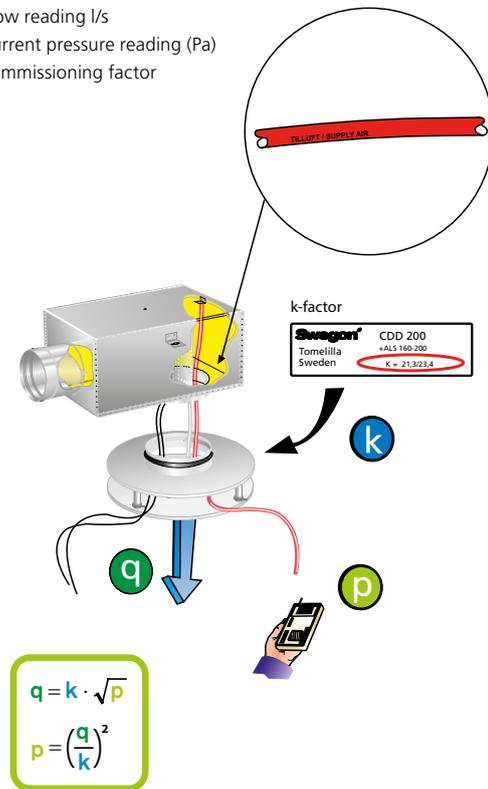


Figure 1. Commissioning.

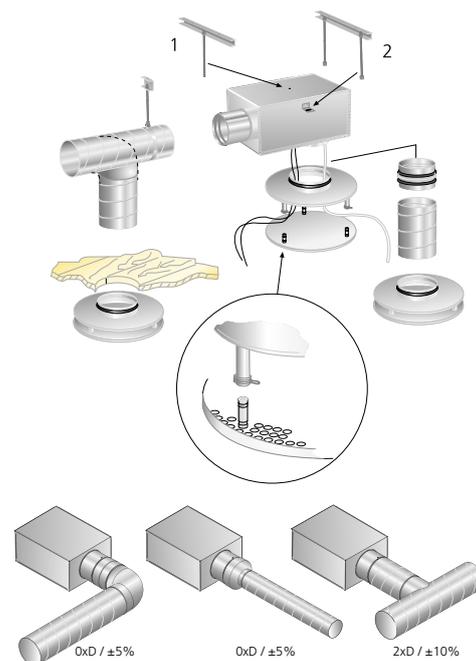


Figure 2. Installation

Dimensions and weights

CDD/CDR

Size	ØA	Ød	E	Gap	Weight, kg
100	192	99	36/46	20/30	0.6
125	228	124	36/46	20/30	0.8
160	304	159	46/56	30/40	1.3
200	380	199	46/56	30/40	1.8
250	456	249	50/60	30/40	2.5
315	568	314	50/60	30/40	3.7

Size of opening = Ød + 6 mm.

CDD/CDR + 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	160	90	200	50	1.8
125	180	100	270	80	2.7
160	204	112	315	80	3.5
200	239	130	375	100	4.5
250	279	150	465	115	6.3
315	340	175	575	140	9.3

CL = Center line

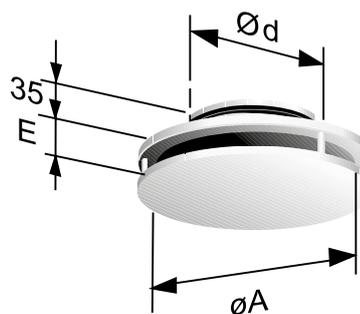


Figure 3. CDD/CDR.

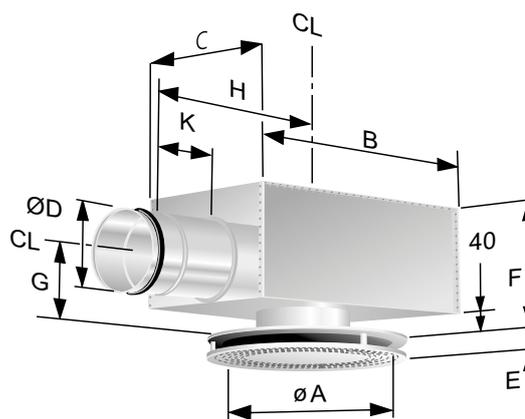


Figure 4. CDD/CDR + ALS.

K-factor (Rated COP)

CDD

ALSd Size	CDDb, supply air, 360°			
	Size	20 mm slot	30 mm slot	40 mm slot
80-100	100	5.8	6.1	-
100-125	125	8.2	8.9	-
125-160	160	-	14.4	15.0
160-200	200	-	21.3	23.4
200-250	250	-	24.4	31.1
250-315	315	-	34.6	43.3

Number of measuring tubes: 1
Colour of the tube: Red

ALSd Size	CDDb, extract air		
	Size	20 mm slot	30 mm slot
80-100	100	3,2	-
100-125	125	4,1	-
125-160	160	-	6,5
160-200	200	-	10,4
200-250	250	-	16
250-315	315	-	22,1

Number of measuring tubes: 1
Colour of the tube: Transparent

CDR

ALSd Size	CDRc, supply air, 360°			
	Size	20 mm slot	30 mm slot	40 mm slot
80-100	100	5.0	5.6	-
100-125	125	7.1	8.1	-
125-160	160	-	13.1	13.9
160-200	200	-	18.4	20.3
200-250	250	-	24.3	28.5
250-315	315	-	36.1	42.6

Number of measuring tubes: 1
Colour of the tube: Red

ALSd Size	CDRc, extract air		
	Size	20 mm slot	30 mm slot
80-100	100	3,1	-
100-125	125	3,8	-
125-160	160	-	6,9
160-200	200	-	10,8
200-250	250	-	14,9
250-315	315	-	22,8

Number of measuring tubes: 1
Colour of the tube: Transparent