

CDH_b/CLH_b

Installation – Commissioning – Maintenance

20161212

Installation

The diffuser is equipped with four steel brackets for suspending the unit from the ceiling, see figure 1. It is very important that the diffuser is installed exactly horizontally ($\pm 1,0$ mm) to ensure the function of the seal. The rectangular duct connection is of a flange design. The circular duct connection is of spigot design, see measurement figures and tables. For fixed suspended ceilings the joint between the register's flange and the suspended ceiling needs to be sealed with sealing compound to prevent air leakage above the suspended ceiling.

For suspended ceiling systems with loose ceiling tiles, the duct system and its connections to CDH/CLH must be completely sealed.

Filter

Recommended final pressure drop depends on the filter type and the the current circumstances in the building. Normal recommended final pressure drop is 600 Pa or double the initial pressure drop. Pressure drop over the filter is measured by connecting a manometer to the spigot placed behind the front face, measuring against atmospheric pressure, see figure 1. To access the spigot, the front plate must be dismantled. Please contact Swegon if more information regarding filters is required.

Changing the filter

Start by removing the front plate by carefully pulling it down. This unclips the spring clips on the diffuser section. The attachments on the filter are removed and the filter can be lowered from the main diffuser.

Change of filter in CDH, rubber sealed filter, is done by loosening the two rails that tightens the filter to the backbox, see figure 2. Installing a new filter is done in the reversed order. The bolts are tightened with a torque of 4 Nm by using a torque wrench.

Change of filter in CLH, gel sealed filter, is done by pressing the spring clips holding the filter in place, see figure 3. Installing a new filter is done by carefully pressing the filter in place until the spring clips gets grip of the filter.

NOTE:

- CLH, use only with gel sealed filter. Max. temperature is 65 °C for filters with gel sealing.
- CDH, use only with rubber sealed filter. Max. temperature is 90 °C for filters with rubber sealing.

DOP-testing

For DOP-testing, use the spigot hidden behind the diffusers front face.

Maintenance

The diffuser should be cleaned when necessary or routinely using either lukewarm water with detergent added or alcohol.

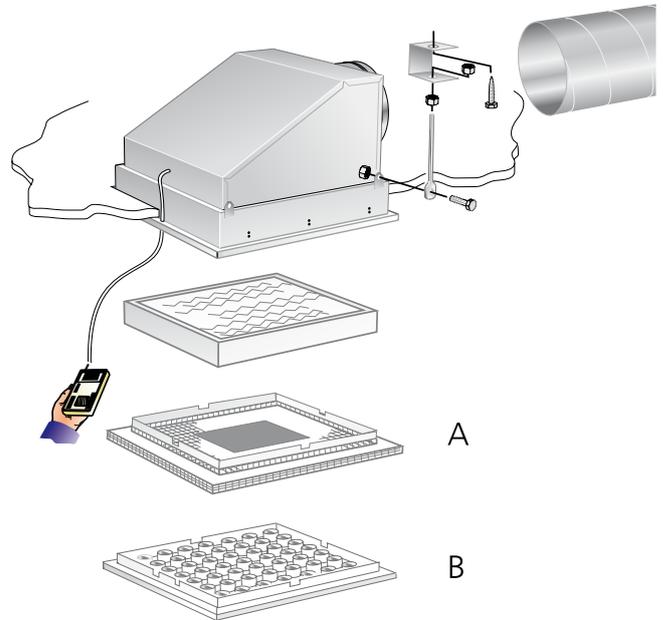


Figure 1. Mounting.
A = Perforated diffuser plate.
B = Diffuser plate with discs.

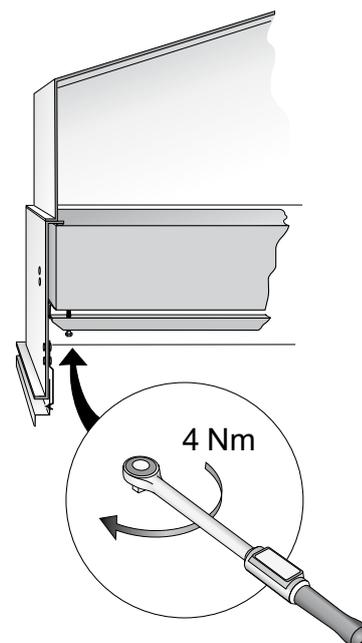


Figure 2. CDH, with rubber-sealed filter.

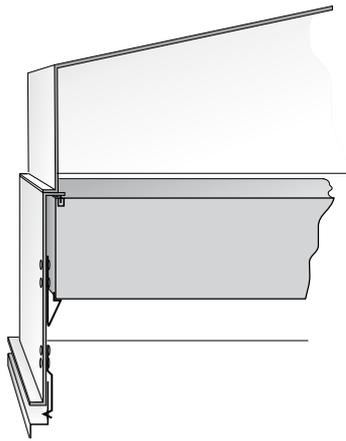


Figure 3. CLH, with gel-sealed filter.

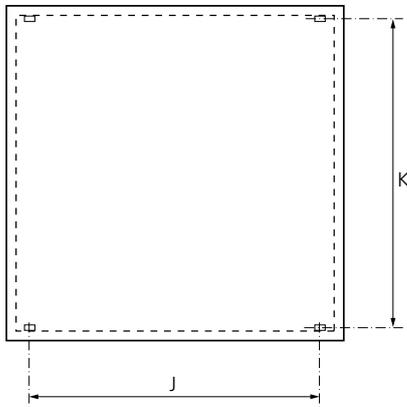


Figure 4. CDH/CLH, suspension.

Dimensions and weights

Circular connection

Size	Dimensions (mm)					Weight ^{*)} (kg)
	A	B	ØD	L	N	
33-160	390	339	159	130	320	8,1
66-315	693	642	314	130	475	18,0

^{*)} Incl. filter

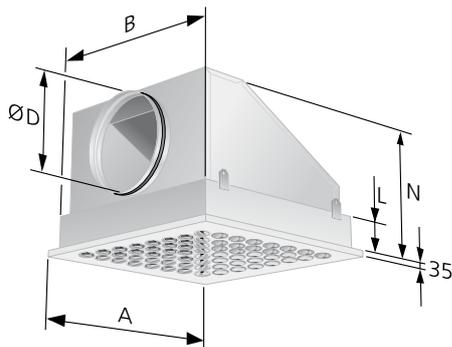


Figure 5. CDH/CLH, circular connection.

Rectangular connection

Size	Dimensions (mm)						wt. ^{*)} (kg)
	A	C x D	E x F	G	H	B1	
33-300x100	390	360x160	300x100	130	339	290	9,0
66-600x100	693	660x160	600x100	130	642	290	19,5

^{*)} Incl. filter

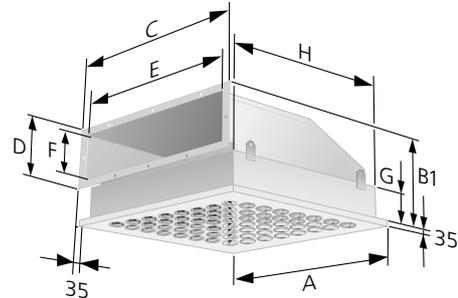


Figure 6. CDH/CLH, rectangular connection.

Filter and suspension dimensions

Size		Length x Width x Height (mm)		Dim. (mm)
Circular	Rectangular	CDH	CLH	J x K
33-160	33-300x100	305x305x69	305x305x80	285x340
66-315	66-600x100	610x610x69	610x610x80	585x640

Number of discs for diffuser faces with discs

Size		Number of discs
Circular	Rectangular	
33-160	33-300x100	25
66-315	66-600x100	64

Example disc settings

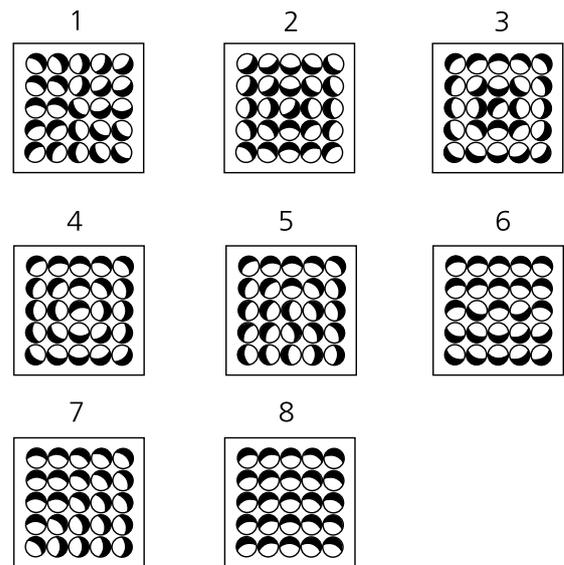


Figure 7. Standard disc setting. Diffuser with discs.

1. Rotation
2. V1 Vertical conc.
3. V2 Vertical diff.
4. 4-way (Standard)
5. 3-way
6. 2M-way
7. 2C-way
8. 1-way