OKNM

Ventilate, cool and heat
For use in modular ceilings
Low built-in height, removable faceplate

Available types
O K N M - - - -

O chilled beam
K closed version
N ventilate and cool
M modular ceiling

- **Type**
  600

- Model
  600/1200

- **Nozzle**
  model 600
  B2/C2/D2
  model 1200
  A1/A2/B1/B2/B3/C1/C2

- **Coil**
  K cooling only
  V heating and cooling (double circuit)

SA-Select
Check SA-Select to create extended order codes and selection details online. **NB!** At this moment, SA-Select is only available in Dutch. But it is possible to create extended order codes and selection details online.

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

Use
The chilled beam type OKNM has a high capacity and is suitable for ventilation, cooling or heating rooms with a height of up to approximately 3 metres.

The unit has been designed as an insert module for T-bar modular ceilings, with a module size of 600 mm. The unit can also be used surface mounted.

The closed version provides 4-sided supply air and can be used universally in offices because of their highly efficient supply effect. The choice of three nozzle types enables an optimum combination of ventilation air and cooling capacity in every situation.

For cleaning purposes of the coil and the nozzles, the front can be removed easily and without tools.

Finish
Housing

Material:	steel
Treatment:	electrogalvanised
Finish:	visible parts; epoxy varnish
Colour:	white (RAL 9010)

Coil

Tubes:	copper
Fins:	aluminium
Post-treatment:	none
Test/operating pressure:	15/10 bar

Optional
Blanking panels: 3, 2 or 1-sided
Remember: the side of the water connection cannot be blanked.

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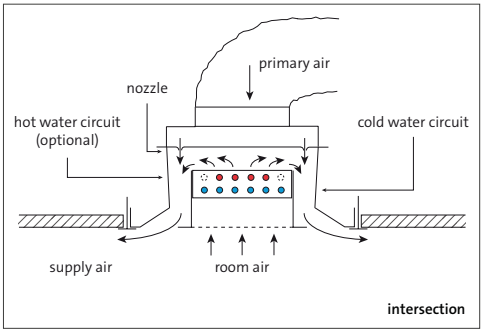
General
We recommend a straight flow length of 3 x D in the connection size of the chilled beam. We recommend studying our document "Solid Air recommendations for waterquality". For condensation-free operation, we recommend supplying the primary air with a dehumidifying capacity of 1 to 2 g/kg dry air. For specific information, please check the Mollier diagram.

Note
- The listed dimensions are in mm.
- The weight is given in kg.

Operating principle
The primary air is brought to high speeds via the venturi plates. This produces a powerful pump effect and secondary air is drawn in via the coil. The total of room air and primary air is brought into the room through the outflow openings integrated into the unit. When the air passes the coil, it is cooled or heated (optional) in function of the need in the room.



intersection

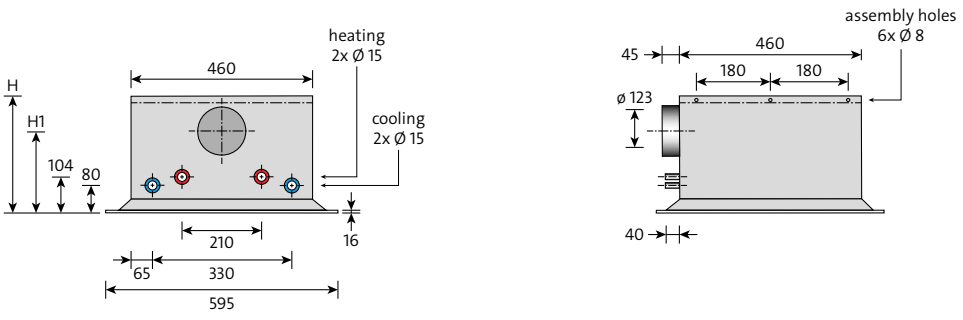
Tangible
Chilled beams only produce 'tangible' capacity, the units do not have a drip tray. In systems with chilled beams, the required 'latent' capacity is supplied by the dehumidifying capacity of the air-handling unit.

Selection process
Many factors play a role when you select a chilled beam. The unit has to be selected properly on the air and the water side. For the air side, we consider pressure and noise. On the water side, we consider the required volume of water, water-side resistance, "temperature difference (delta-T) on the water" and supplied output.

For a detailed selection procedure, we refer to the Appendix "Selection process Solid Air chilled beam".

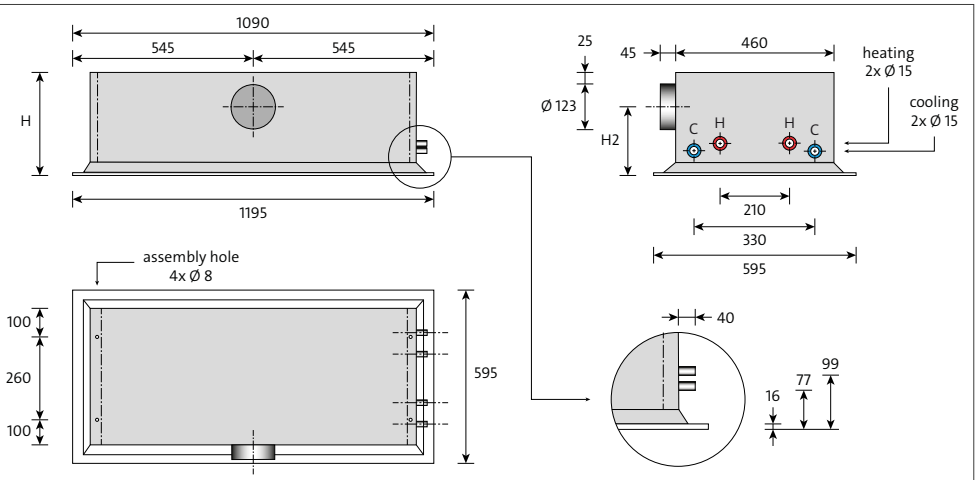
Dimensions

Model 600



OKNM 600 / 600
Cooling and heating

Model 1200



OKNM 600 / 1200
Cooling and heating

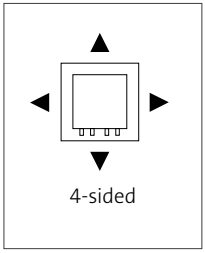
Available dimensions

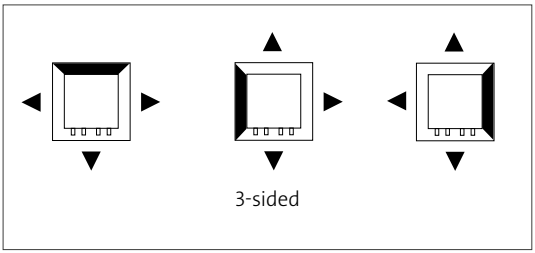
type	model	air connection	H	H1*	H2**	weight
600	600 or 1200	125	308	215	225	12 of 24
		oval 125	274	197	205	12 of 24
		top	196	n/a.	n/a.	12 of 24

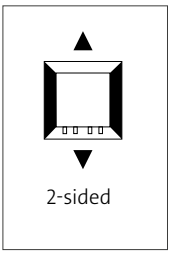
*Only applies to model 600.
**Only applies to model 1200.

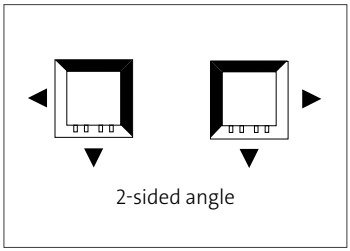
Outflow pattern

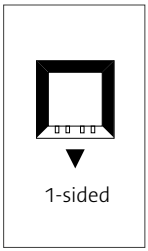
Blanking panels can be fitted and fixed with clips.
The side of the water connections cannot be blanked.
Using blanking panels reduces the water-side capacity.



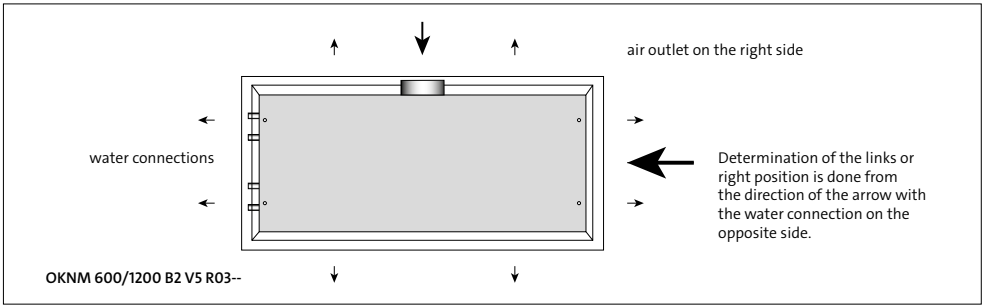








Position of air and water connection



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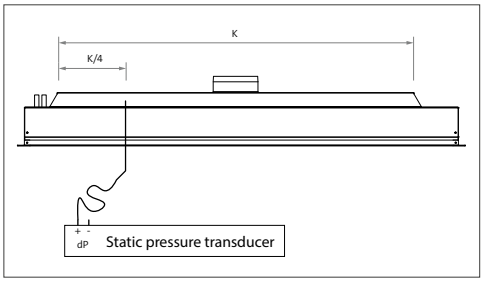
Water quality
To keep your water-fed system in optimum condition, it is essential to flush the system regularly (once every two days) and to check the water quality regularly. For more information, we refer to our document "Solid Air recommendations for water quality.".

Operating principle
After installation of the chilled beams, they must be adjusted air-sided and water-sided. This work is usually carried out by a specialized balancing company.

For the airside adjustment, the static pressure in the plenum should be measured at a quarter of the length of the plenum.



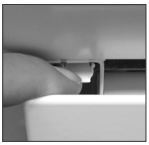
This requires a thin tube to insert through the nozzle into the plenum. Please note that extravent units use an open nozzle to perform the measurement. Inserting the measuring tube into a closed hole can damage the seal of the extravent strip and cause noise problems.

Maintenance
In view of cleaning the coil and the supply nozzles, it is possible to remove the middle segment of the unit in a simple fashion.

This works as follows:
1. Every corner has a clip.
2. Push the clip aside in all four corners.
3. The panel comes away and hangs from the safety cable.

Fit in reverse order.


1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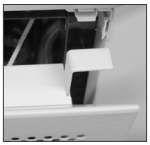
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Order and options codes

OKNM 600/600		B2 V 5		R O 3 U		O 1 O		595 x 595		9010 55

Type
600

Model
600 - 1200

Nozzle plate
B2 - C2 - D2 (model 600)
A1 - A2 - B1 - B2 - B3 - C1 - C2 (model 1200)

Coil
K cooling
V cooling and heating

Outflow configuration
5 4-sided outflow, blanking strips are available on request

Air connection
T top
V front
L left
A back
R right

Water connection
O standard

Air-connection diameter
3 125 mm
V oval on basis of 125 mm

Plenum version
U uninsulated

Diffuser
O not applicable

Side-edge configuration
1 suitable for T-bar

FPC (outflow direction element)
O not applicable

Actual width
595 mm

Actual length
595 mm
1195 mm

Colour
RAL 9010 (standard)

Gloss level
55 % (standard)

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