

OKNM

Ventilate, cool and heat

For use in modular ceilings

Low built-in height, removable faceplate

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.

Available types

OKNM----

- 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)

For detailed order information, see [page 31](#).

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.

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.



General

We recommend a straight flow length of 3 x D in the connection size of the chilled beam.

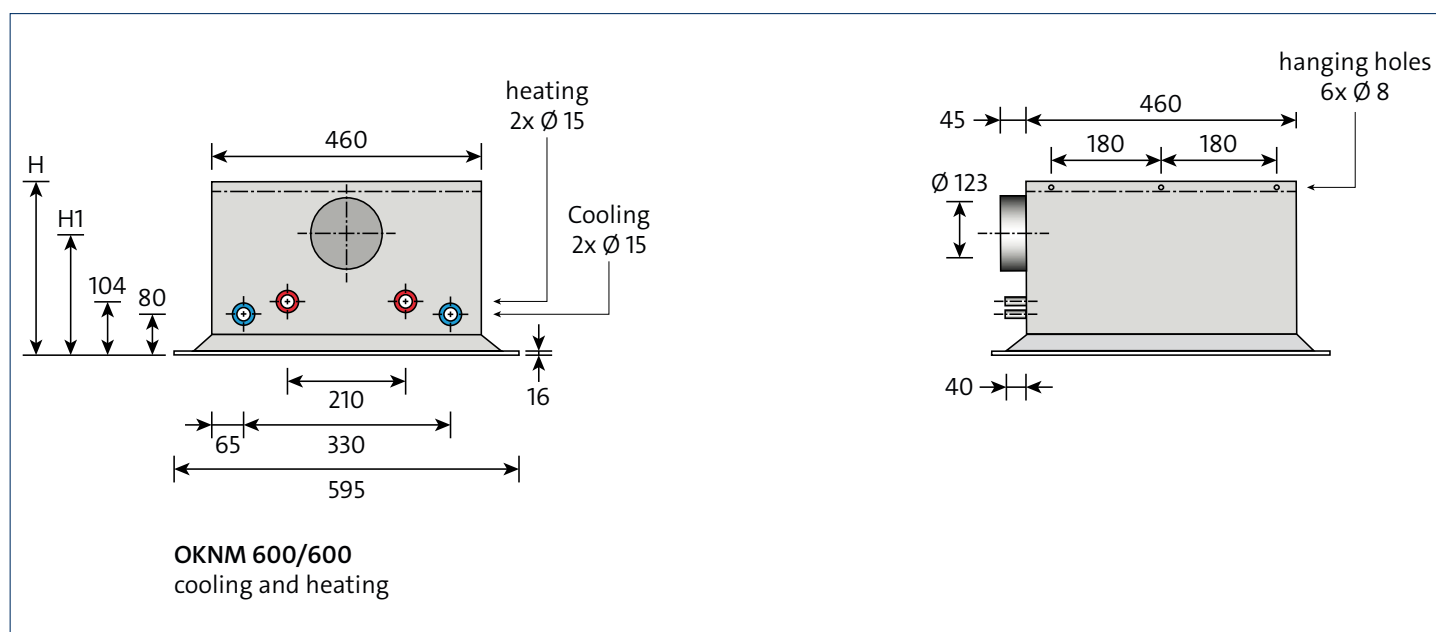
For condensation-free operation, we recommend supplying the primary air with a dehumidifying capacity of 1 to 2 g/kg dry air. For specific information, please check the Mollier diagram.

Comment

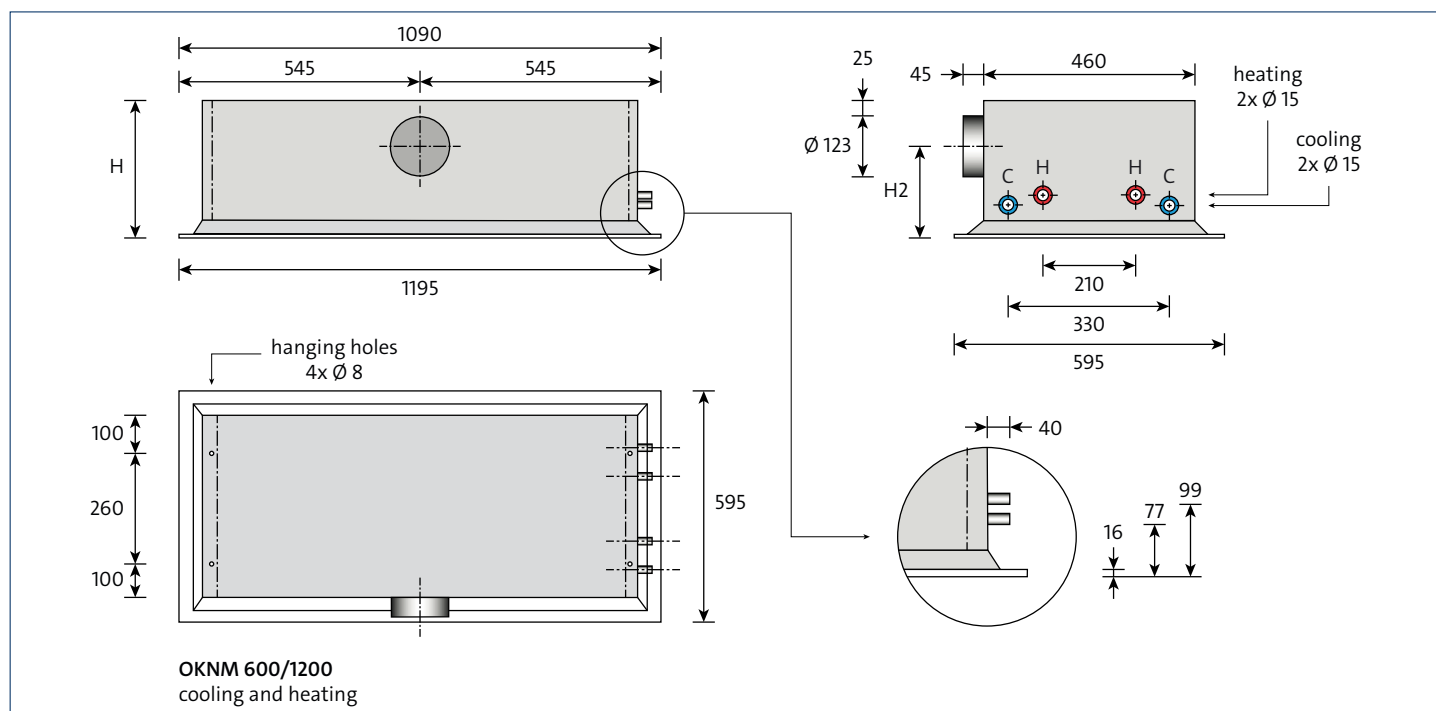
- The listed dimensions are in mm.
- The weight is given in kg.

Dimensions

Model 600



Model 1200



Available dimensions

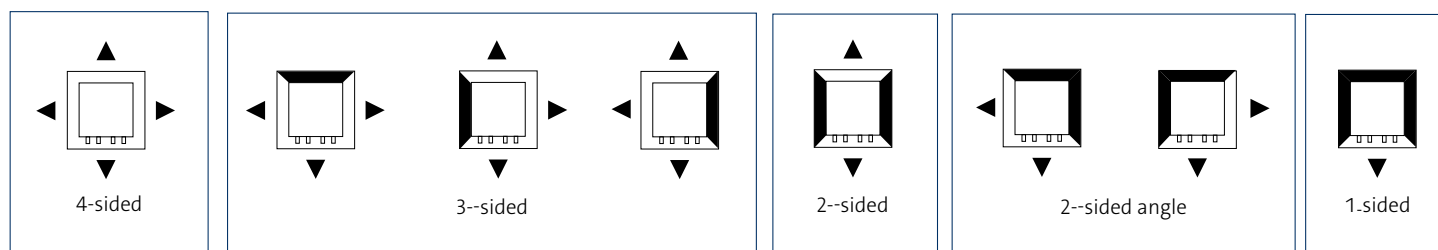
type	model	Air connection	H	H ₁ *	H ₂ **	weight
600	600 or 1200	125	308	215	225	12 or 24
		oval 125	274	197	205	12 or 24
		top	196	N/A	N/A	12 or 24

*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.



Standard water parameters

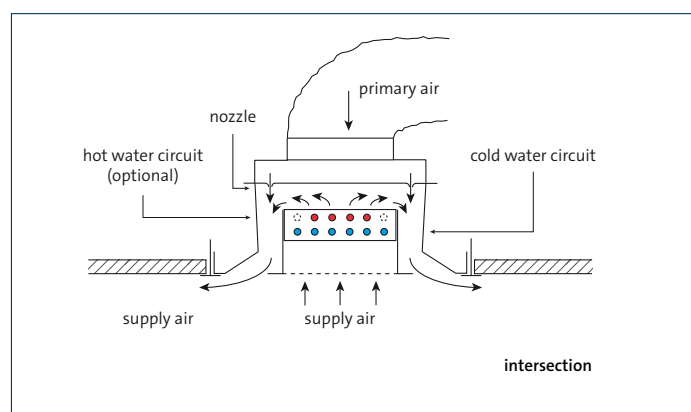
- Water-side pressure loss: 0 - 10 kPa.
- Water speed: 0.2 - 0.8 m/s.
The local flow speed in the tubes may never exceed 1.5 m/s.
- The water must circulate at least once every 3 days.
- Water inlet temperature (in cooling mode): approx. 15 - 18 °C.
The temperature of the water must always be above freezing. If this cannot be guaranteed, anti-freeze fluid must be added.
- Water inlet temperature (in heating mode): approx. 35 - 60 °C.
Maximum water temperature may not exceed 90 °C.
- Test pressure: 15 bar
All Solid Air water circuits are 100 % tested at this testing pressure.
- Operating pressure: 10 bar

Water quality

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

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. When the air passes the coil, it is cooled or heated (optional) in function of the need in the room.



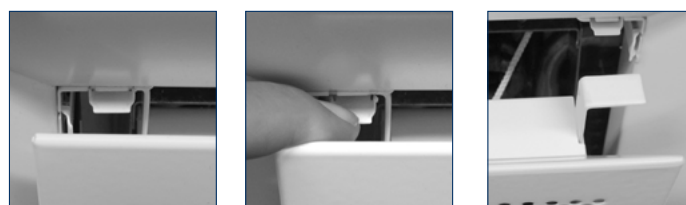
Removing the middle segment

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

2

3

Order and options codes

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

Position of air and water connection

