



Trench heaters

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To finish: The floor grilles

Custom made

What type of trench heater should you choose?

Verco offers you a range of convectors, each one with its own characteristics. You will always find a Verco trench heater to meet your expectations in compliance with the building and the requirements.

Type C: trench heater with natural convection

The trench heater with natural convection is ideal as a secondary heat source with floor heating. The broader models can serve as main heating. This system is an ideal and quick solution during the intermediate season when you want to increase the room temperature by just a few degrees for a short while. It can also be combined with trench heaters with fan.

Type CV: trench heater with radial fan

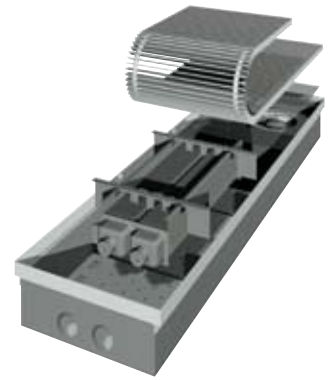
An increased output and quicker heating can be obtained with the trench heater with radial fan. This system has an air conduction channel with inductive outlets at the bottom to ensure a better mix with the ambient air.

Type CVQ for heating: trench heater with tangential fan

Trench heaters with tangential fan are ideal where a higher output and quicker heating up are required. The ambient or room air is sucked in by the fans and is equally distributed by the heating element. The tangential fan allows to draw more output from the convector. The low-noise fan is regulated by a 5-step transformer.

Type CVQK for heating and/or cooling: trench heater with tangential fan

In addition to the heating option this variant can also provide cooling. An effective cooling of the room is possible thanks to the tangential fan. The condensation is caught in the built-in insulated drain pan and can possibly be evacuated via a condensate return pump. The heat exchanger is available in both a 2 or 4-pipe system.



Type CL - trench heater with conditioned air

Fresh air helps towards a more alert mind and better air-conditioning. In the trench heater type CL the conditioned air is supplied from a central unit. In conjunction with the trench heater this air provides optimal shielding of the glass walls and ventilates the rooms. In summer mode it is possible to induce the cooled air at low speed over the floor without causing draughts. To increase the heating output of the convector it is possible to induce air under the convector by using an adjustable steel sheet for air flow regulation.

The output is dependent on the convector size and on the desired volume of supply air. Type CL is calculated and manufactured according to plan.

Discrete heating and / or cooling

Large and small building projects frequently entail high demands in respect of interior finish. Every project has its own concept and all the elements must be developed and integrated within this concept. Customization is often required and this also applies for cooling and heating systems. For us customization is not only related to dimensions but also to design, choice of material and finish made to measure.

The trench heaters offer a perfect solution. They comprise a built-in channel with a convector. Variants can be obtained in a forced version (with fan) or be intended for the supply of conditioned air.

As they are built into the finished floor they are perfectly integrated in the interior with a minimum of space loss. A grille finishes off the unit aesthetically and entirely in line with the interior.

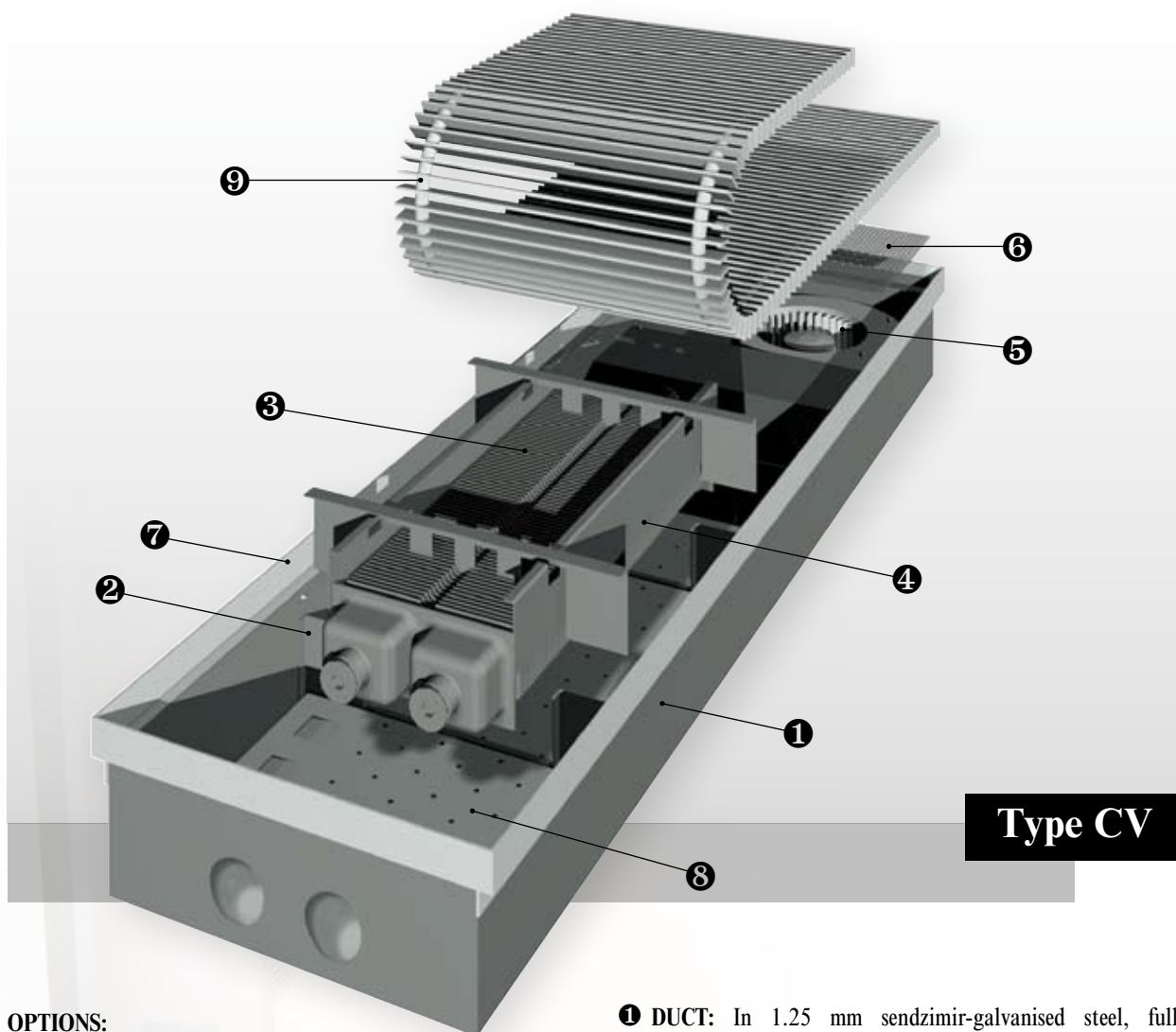
Flexibility and customization stand high on Verco's agenda. Finish using window modules, cut-outs around pillars, corners, etc. are perfectly elaborated according to plan.

This design freedom is much appreciated by architects, engineering groups and end-customers. Moreover, the installers also take advantage of the straightforward assembly thanks to the numerous accessories and adjustments

Operating principle of the trench heaters

PROBLEM	SOLUTION
Cold radiation → Windows are usually the largest cold sources. This causes cold radiation from the window into the room.	You will prevent these problems by placing convectors on the glass sections (and outside walls). In doing so it is important to make sure the heat (= the convector) extends over the full window length and the heating output of the convector exceeds the heat loss via the window.
Cold air flow → The room air is cooled down near the window section. This cooled air descends and flows into the room via the floor.	
Window condensation → The cold window surface reduces the room temperature. This can cause an increased humidity level. Part of it will cause condensation on the windows depending on the relative air humidity level and temperature of the window surface.	

1. Trench heater with radial fan



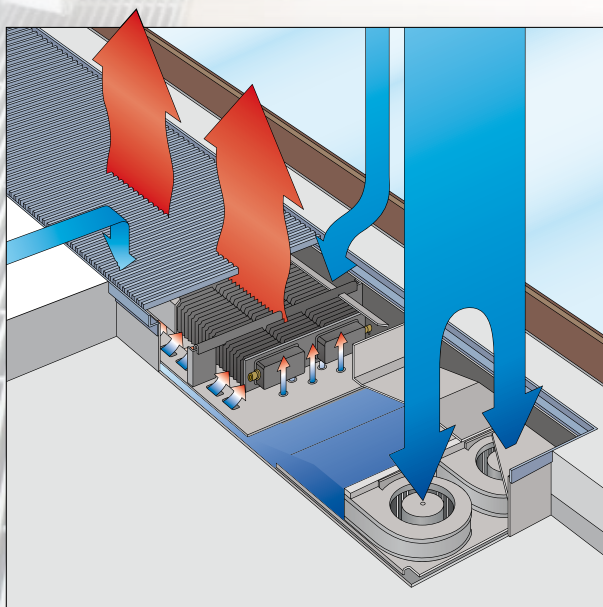
OPTIONS:

Insulation, fastening hooks.

5 widths: 184, 259, 289, 334 and 364 mm

Lengths: up to 5.000 mm available in one piece.

Height: 109 or 111 mm, depending on the frame height.



① DUCT: In 1.25 mm sendzimir-galvanised steel, fully lacquered in anthracit grey on the inside.

② CONSOLES: To support the convector, covered with a black plastic strip to prevent impact sounds.

③ CONVECTOR: Convector, consisting of steel tubes with solid steel fins.

④ BAFFLES: For an optimal heat conduction.

⑤ FAN: Soundless radial fan with external, single-phase rotor, adjustable transformer.

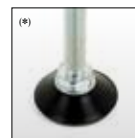
⑥ FAN PROTECTION GRILLE

⑦ FRAME: Frame in anodised aluminium, colour matching with the colour of the grille. Suited for grille heights of 18 or 20 mm. Standard execution with a frame for a grille height of 18 mm.

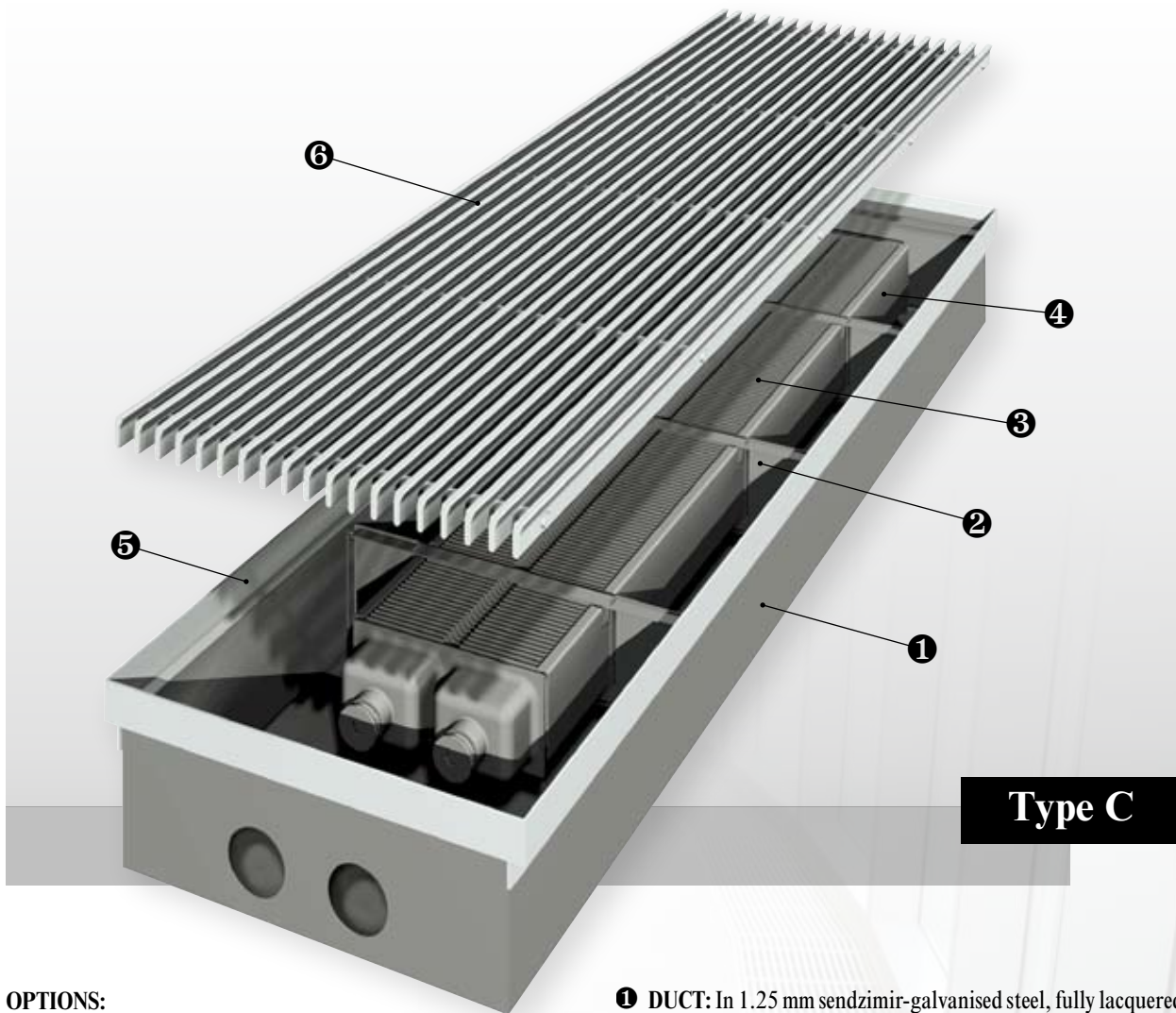
⑧ AIR CONDUCTION SHEET: with induction outlets, ensuring not only the conduction of fan air but also the induction of ambient air.

⑨ GRILLE: In various models and colours available.

LEVELLING FEET^(*)



2. Trench heater with natural convection



Type C

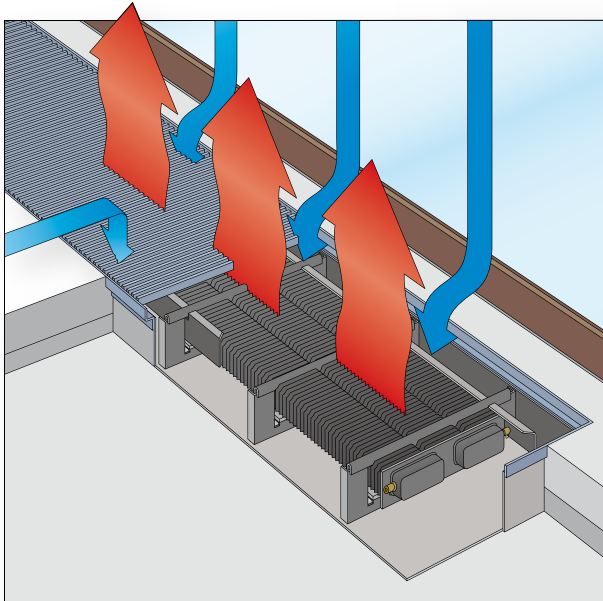
OPTIONS:

Insulation, fastening hooks.

5 widths: 184, 259, 289, 334 and 364 mm

Lengths: up to 5.000 mm available in one piece.

Height: 109 or 111 mm, depending on the frame height.



1 DUCT: In 1.25 mm sendzimir-galvanised steel, fully lacquered in anthracit grey on the inside.

2 SUPPORTS: To support the convector, covered with a black plastic strip to prevent impact sounds.

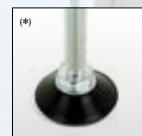
3 CONVECTOR: Convector, consisting of steel tubes with solid steel fins.

4 BAFFLES: For an optimal heat conduction.

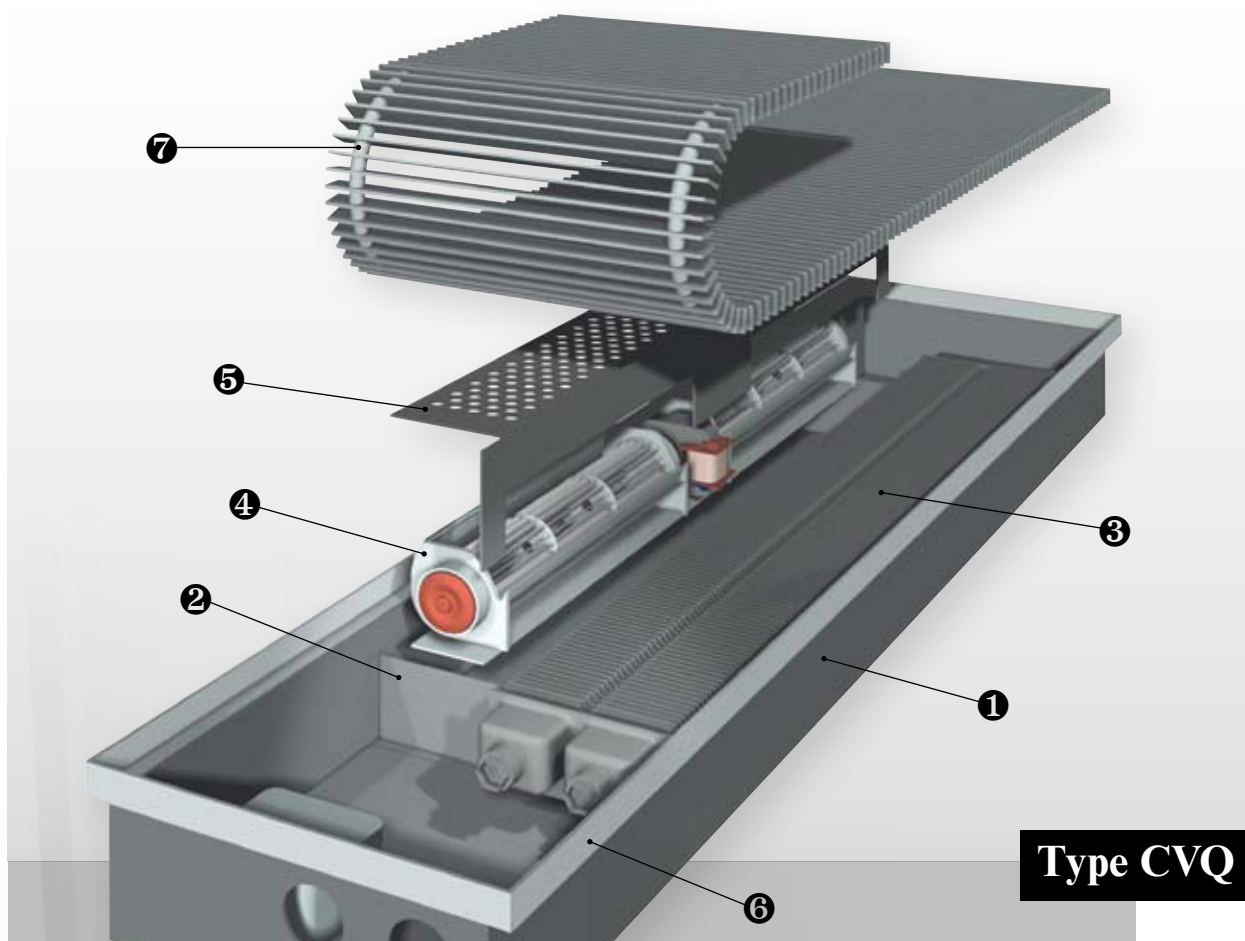
5 FRAME: Frame in anodised aluminium, colour matching with the colour of the grille. Suited for grille heights of 18 or 20 mm. Standard execution with a frame for a grille height of 18 mm.

6 GRILLE: In various models and colours available.

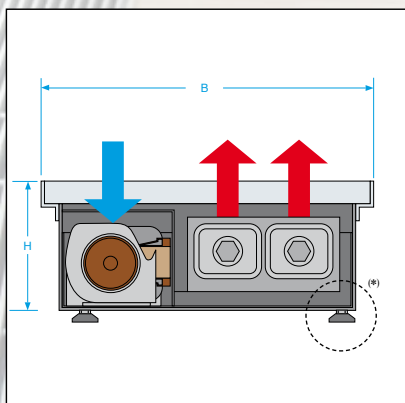
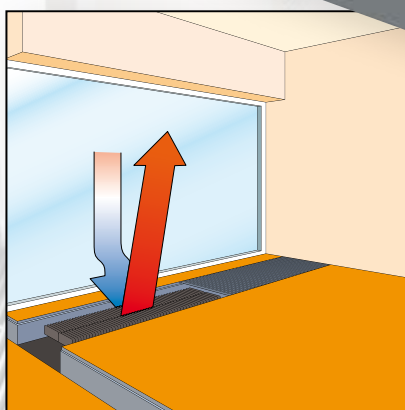
LEVELLING FEET(*)



3. For heating - trench heater with tangential fan



Type CVQ



① DUCT: In 1.25 mm sendzimir-galvanised steel, fully lacquered in anthracite grey on the inside.

② SUPPORTS: To support the convector, covered with a black plastic strip to prevent impact sounds.

③ CONVECTOR: Convectors, consisting of steel tubes with solid steel fins.

④ FAN: Soundless tangential fan with 3 speed motor. On request: 1 speed motor.

⑤ FAN PROTECTION GRILLE

⑥ FRAME: Frame in anodised aluminium, colour matching with the colour of the grille. Suited for grille heights of 18 or 20 mm. Standard execution with a frame for a grille height of 18 mm.

⑦ GRILLE: In various models and colours available.

The convector of the CVQ should be mounted at the roomside for cold air protection (standard manufactured).

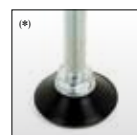
OPTIONS: Insulation, leveling feet^(*), fastening hooks, speed controls.

4 Widths: 259, 289, 334 and 364 mm

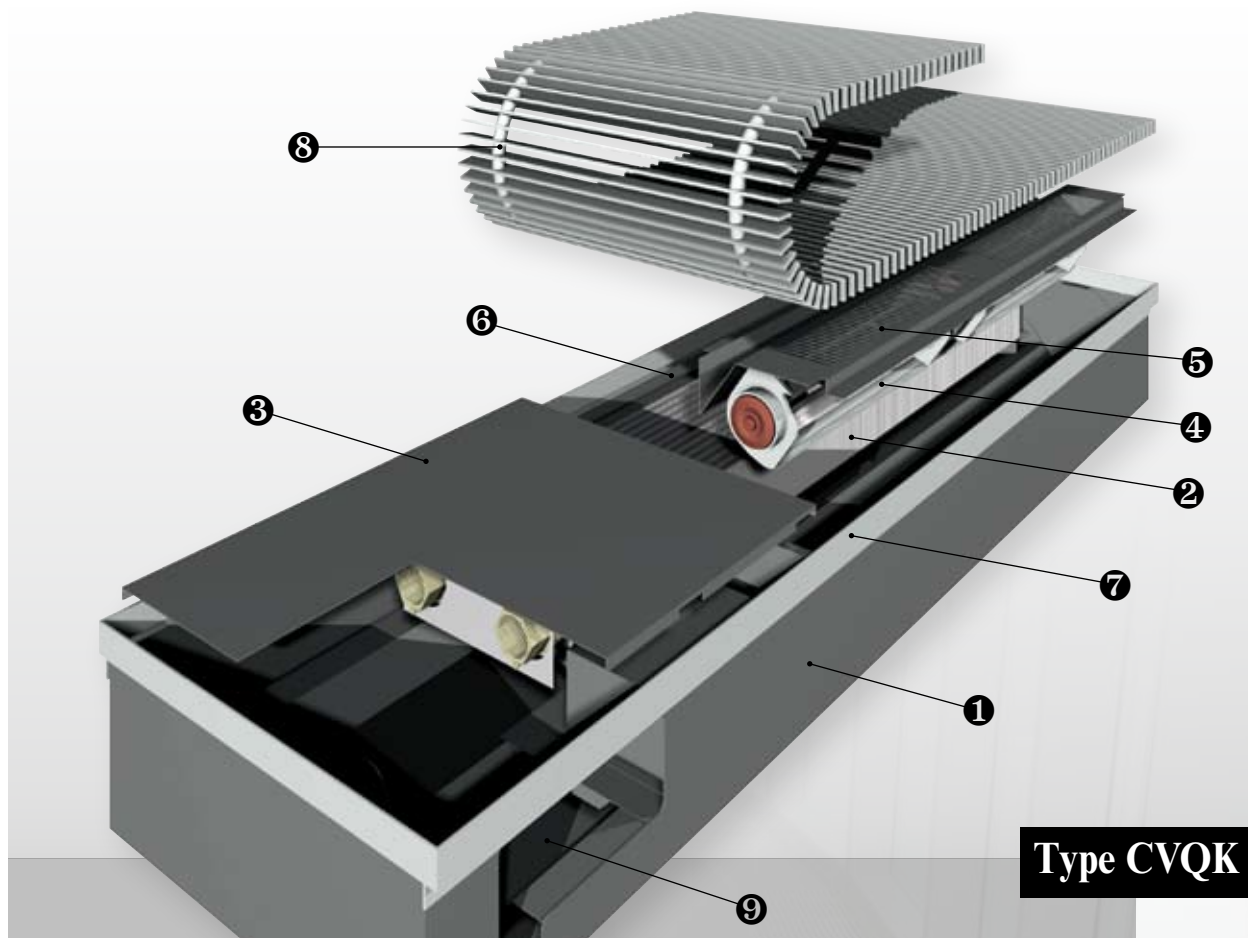
Lengths: Minimum length of 1.250 mm.

Up to 5.000 mm available in one piece.

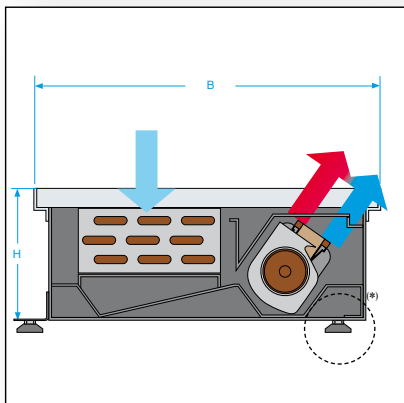
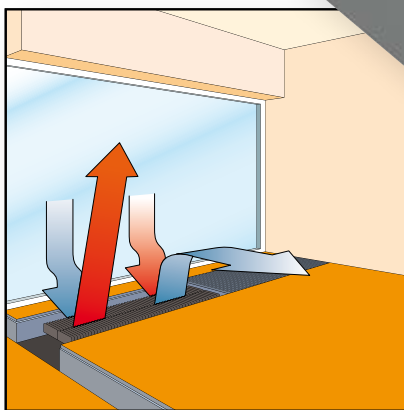
Height: 109 or 111 mm, depending on the frame height.



4. For heating and/or cooling – trench heater with tangential fan



Type CVQK



❶ DUCT: In 1.25 mm sendzimir-galvanised steel, fully lacquered in anthracite grey on the inside.

❷ CONVECTOR: Convector with copper tubes and aluminium fins, 3 rows, 2 or 4 tube system.

❸ PROTECTION STEEL SHEET: Covers the electrical and hydraulic connections.

❹ FAN: Soundless tangential fan with 3 speed motor. On request: 1 speed motor.

❺ FAN PROTECTION GRILLE

❻ AIR CONDUCTION SHEET: Leads the sucked air under the convector.

❼ FRAME: Frame in anodised aluminium, colour matching the colour of the grille. Suited for grille height of 18 or 20 mm. Standard execution with a frame for a grille height of 18 mm.

❽ GRILLE: In various models and colours available. Not available with a linear grille.

❾ DRAIN PAN: Treated with corrosion-proof paint, and insulated.

WITH SOUND-DEADENING INSULATION

OPTIONS: Fastening hooks, levelling feet^(*), insulation, speed controls, drain pump.

Width: 364 mm

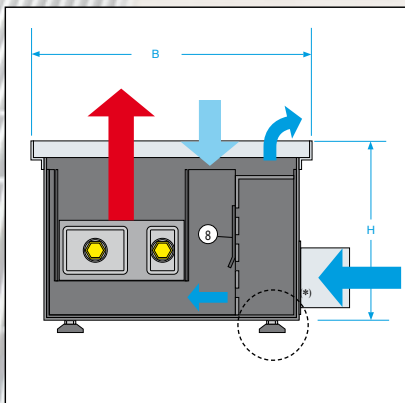
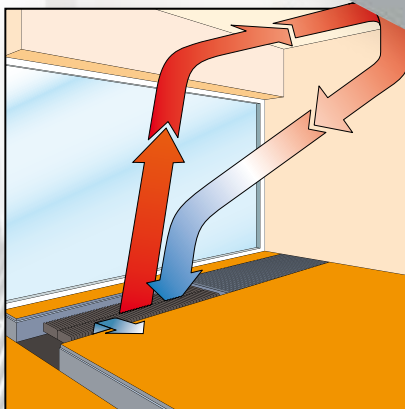
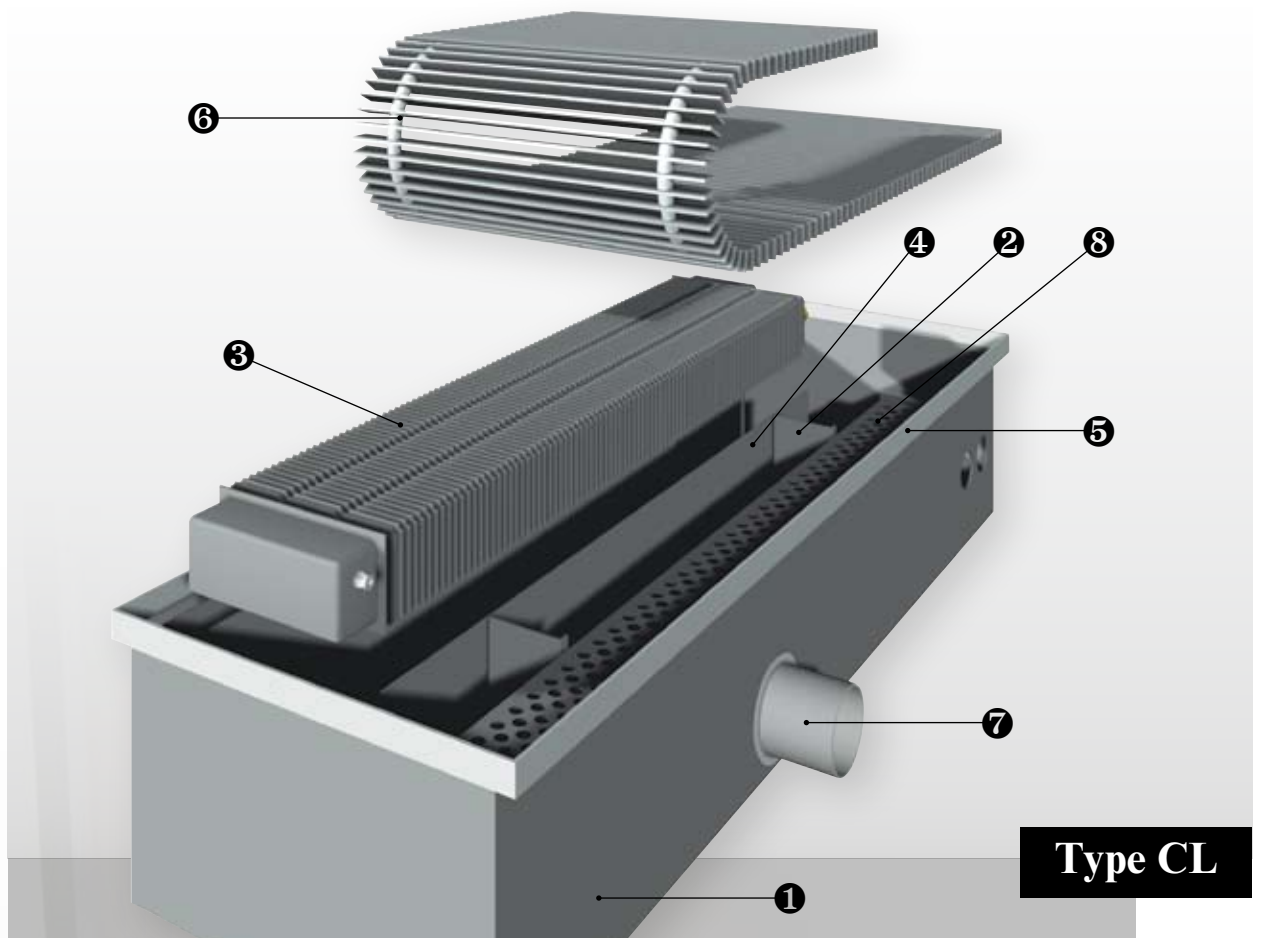
Height: 150 or 152 mm

3 Lengths: 1.250, 2.000 and 2.750 mm

Convector: Cu/al, 3 rows, 2 or 4 pipe system.



5. Trench heater with conditioned air



① DUCT: In 1.25 mm sendzimir-galvanised steel, fully lacquered in anthracite grey on the inside.

② SUPPORTS: To support the convector, covered with a black plastic strip to prevent impact sounds.

③ CONVECTOR: Convector, consisting of steel tubes with solid steel fins.

④ BAFFLES:
For an optimal heat conduction.

⑤ FRAME: Frame in anodised aluminium, colour matching the colour of the grille. Suited for grille height of 18 or 20 mm. Standard execution with a frame for a grille height of 18 mm.

⑥ GRILLE:
In various models and colours available.

⑦ AIR HOLE and FLANGE:
Fresh air passage into the trench.

⑧ PERFORATED STEEL SHEET WITH ADJUSTABLE STEEL SHEET FOR AIR FLOW REGULATION

The type CL is CUSTOM MADE.

OPTIONS: Levelling feet^(*), fastening hooks, insulation.

Widths: On request
Lengths: Up to 5.000 mm in one piece available.
Height: From 150 mm



To finish: The floor grilles



Natural



Polished stainless steel

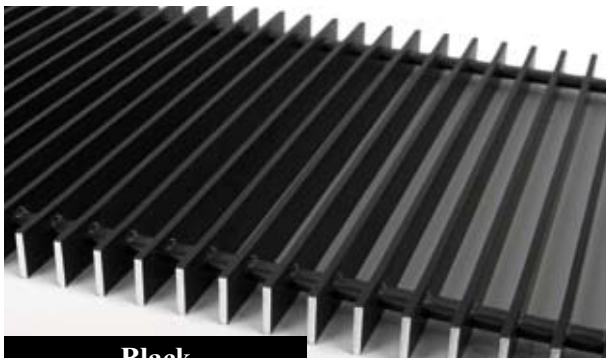
To finish off the trench heater Vercor offers a wide range of grilles. Linear, fixed and roll grilles in aluminium, stainless steel or wood slats leave nothing to be desired. You will find a complete overview of the grilles in our brochure.



Brass



Bronze



Black



Wood

at choice : oak, pine, beech



Stainless steel "mirror"-effect



Epoxy coated

RAL color at choice







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