

Convection units for floor installation

Type TCU



Convection units suitable for installation into false floors or floor slabs specially designed for heat treatment of perimeter zones by the natural convection principle

These units are available in four different widths and heights for standard lengths of 4,200 mm that configure a wide range of construction variants.



- Quiet operation compared to the refrigeration of noise produced by moving parts in other facilities
- High efficiency and energy saving that brings solutions with water as fluid
- Easy installation of components
- High cycle of life and low maintenance costs
- Modern design and integration into all kind of spaces due to its range of grids, unifying esthetics and functionality

Installation example

Unit installed in a false floor



Constructions

Product examples

TCU with grille type ARR



TCU with grille type AFN



Description

Construction:

- These convectors are made up of stainless steel housing, black 9005, with the battery housed inside made up of copper tubes and aluminium fins, and a grid (walkable) anodized aluminium, and other accessories. Available in four widths and four heights, and standard lengths up to 4200 mm, with its combinations offer a wide range for installation in false or ceiling slabs.

Performance:

- These units have a dual function. One the one hand to provide heat as the main element independently or support other heating system, and on the other hand, to prevent condensation on all window areas in contact with the outside subject low temperatures.
- Available in a wide range of construction variants with a heating capacity up to 4000 W.

Features:

- Quiet operation compared to the refrigeration of noise produced by moving parts in other facilities
- High efficiency and energy saving that brings solutions with water as fluid
- Easy installation of components
- High cycle of life and low maintenance costs
- Modern design and integration into all kind of spaces due to its range of grids, unifying esthetics and functionality

Application:

- Its main application is for the treatment of offices, shops, apartments and similar, and in particular for heating spaces with large window facades.

Installation:

- These units are suitable for installation near perimeter zones since they take the advantage of cool vertical airflows to promote a natural convection.

Grille

- Linear grilles made of anodized aluminum with longitudinal blades (AGN type) or roll down grilles with transversal blades (ARR type), walkable both. Under request, powder coated to any RAL color (Classic RAL)

Accessories

- Leveling foos for regulation on height and flush with the ground, also with anchoring elements.
 - Control valve 1/2"
 - Closing valve 1/2"
 - Thermoelectric actuator
 - Temperature controller

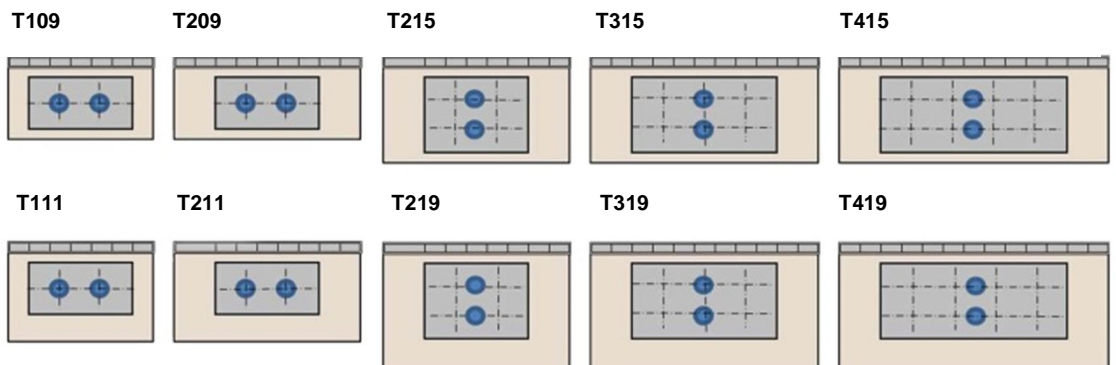
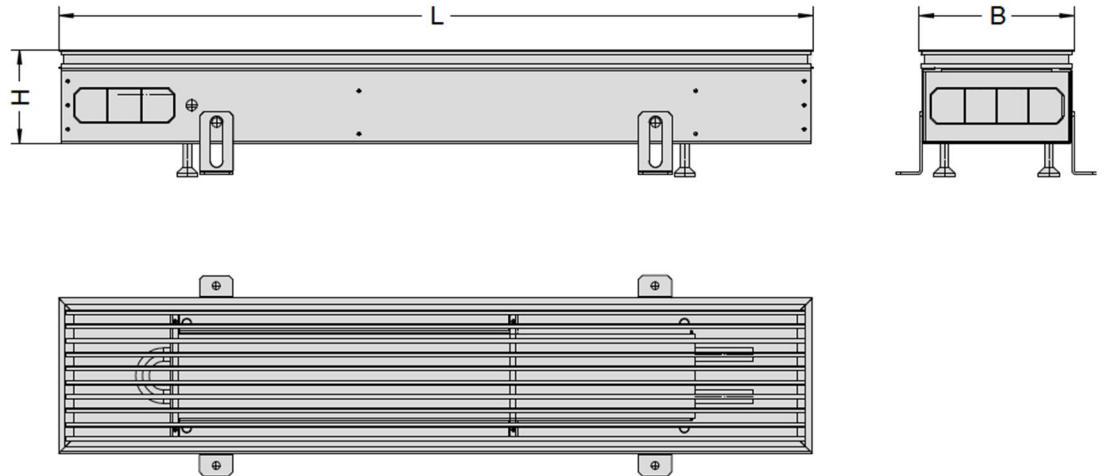
- Wide water capacity up to 90 °C and performance pressures up to 7 bar depending on the inlet/outlet water temperatures, outdoor temperature of the heating coil/unit and also, depending on the grille features.
- Water connection by an external and fixed thread 1/2" and closing/control valves and actuators.
- Accessible for maintenance works on sided-holes and on longitudinal faces.

Heating coil

- Heating coil formed by copper pipes and aluminum fins specially developed for an optimal exchange between the water and the air addressed through the unit for archiving a quick heat transfer to the room.
- Exposed surface optionally supplied in RAL 9005 black for a discrete integration inside the grille.

Schematic view

TCU



Dimensions

Performance calculation
 $Q_C = (l-300) / 1.000 \times Q_{C_ml}$

Size	B	H	L
109	185	92	900 – 4.200
209	265	92	
111	185	112	
211	265	112	
215	265	150	
219	265	195	
315	340	150	
319	340	195	
415	415	150	
419	415	195	

Technical data

Q_c in W
 Heating capacity of the unit

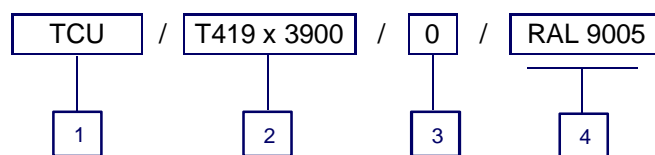
Q_{c_ml} in W/m
 Heating capacity per linear meter of heating coil
 75/65/20 in °C

Inlet/outlet water temperatures at room 90/70/20 in °C

Room temperature of 20 °C (estimated)

Size	Q _{c_ml} W/m	
	75/65/20 °C	90/70/20 °C
109	224	298
209	256	335
111	345	446
211	407	529
215	457	597
219	480	628
315	527	675
319	605	799
415	792	1.029
419	823	1.075

Order code



1 Type
 TCU..... TROX convection unit

2 Size
 T109, T111, T209, T209, T215
 T219, T315, T319, T415, T419

3 Length in mm
 900, 1.200, 1.500, 1.800, 2.100, 2.400
 2.700, 3.000, 3.300, 3.600, 3.900, 4.200

4 Surface
 0..... Painted to black color RAL 9005,
 gloss level 70%