

# VENTMATIKA

RECTANGULAR DUCT WATER HEATERS

RW series



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## Description

The duct water heaters RWH/RWC with rectangular duct connections are designed for heating/cooling the ventilation air in a ventilation system. The RWH/RWC can also be used for heating or cooling individual rooms or zones. For controlling the room or supply air temperature, the duct heaters can be supplemented with regulators, sensors, actuators, valves and anti-freeze protection.

- 10 standard sizes;
- Water coils with 2, 3 and 4 tube rows;
- Casing of Aluzinc coated sheet steel, AZ 185;
- Openable cover for inspection and cleaning (RWC);
- Air tightness class C according to EN 15727;
- Coils are used with water (0/+110°C).

## Model marking

**RWC 600x300-3**

1                      2                      3

### 1- Type

RWH – Rectangular water heater

RWC – Rectangular water cooler

### 2 – Flange connection size (mm)

250x150

600x350

400x200

700x400

500x250

800x500

500x300

1000x500

600x300

1200x600

### 3 – Number of tube rows

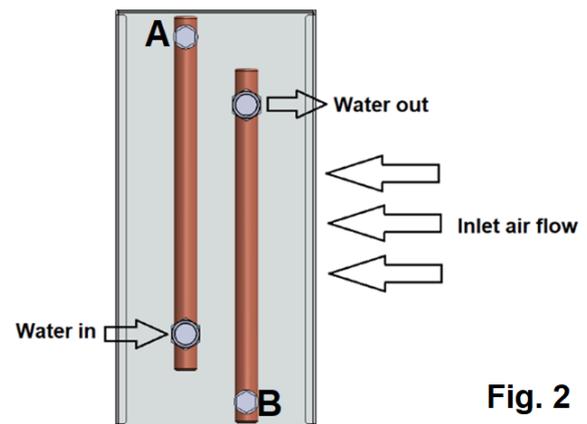
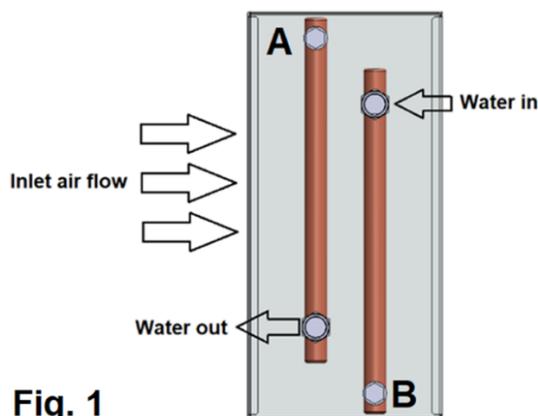
**2** – 2 rows    **3** – 3 rows    **4** – 4 rows

## Operating data: water coil

- Operating temperature range: 0/+110°C (water);
- Max. operating pressure: 2,2 MPa (22 bar) – heaters, 1,6 MPa (16 bar) - coolers ;
- The coils are tested for leakage (Bubble test described in the EN 1779).

## Installation

- Installation works shall be performed only by trained and qualified personnel only.
- An efficient filter is recommended in the system in order to reduce fouling and thus also cut down the need for maintenance.
- The heater/cooler should not be fitted too close to a fan outlet or a bend in the ducting because then there is a risk that the air flow through the heat exchanger is uneven which might result in lower efficiency.
- The duct heater RWH can be installed in a horizontal or vertical duct, with the air flow in either direction.
- The duct water cooler RWC can be installed in a horizontal duct only, with the air flow in either direction.
- A drain pipe is required to drain off any condensed water with drain connection of G $\frac{1}{2}$  (RWC).
- The duct cooler RWC must be insulated on the outside, so that no condensate will form. The ducts that carry the chilled air must normally also be insulated.
- The heater/cooler is controlled by external regulators, sensors, valves and actuators, which must be ordered separately.
- The water inlet should be connected according to the inlet airflow direction (Fig.1 and Fig.2).
- A – marked pipe with an air purging connection (Fig.1 and Fig.2).
- B – marked pipe with a drain connection (Fig.1 and Fig.2).



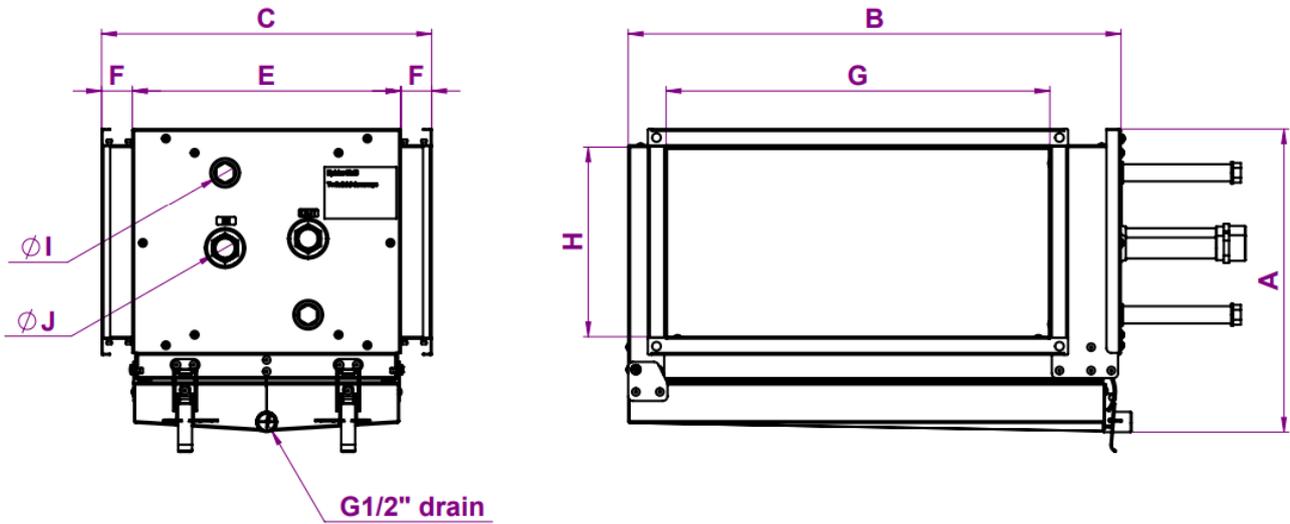
## Cleaning

The heat exchanger must be cleaned regularly in order to retain the best performance from the heater/cooler. The cleaning interval depends on the air cleanliness and on the correct maintenance of the whole system.

The heat exchanger is easily accessible for cleaning from air inlet or outlet sides. Whole heater/cooler can be cleaned by compressed air, water or steam.

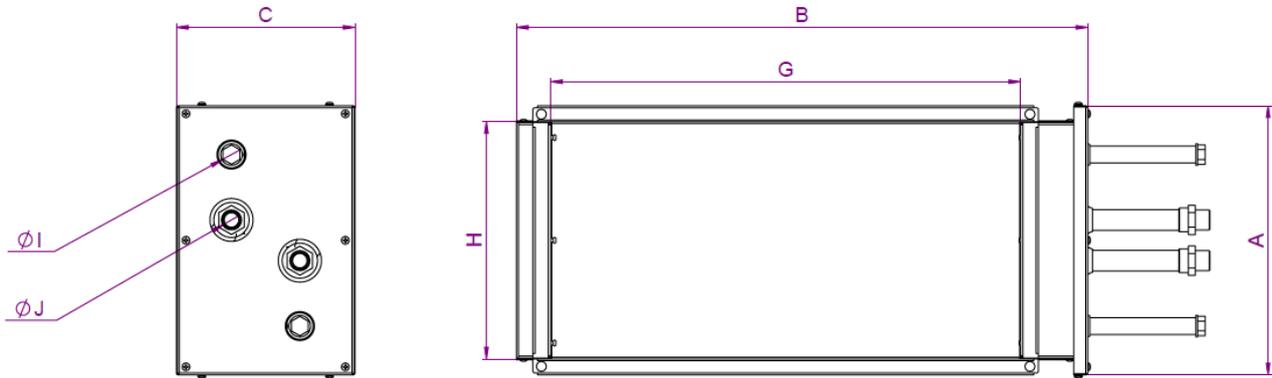
In order to clean the drip tray, pins must be pulled out and fasteners must be opened. Make sure that there is no one underneath the drip tray when it is being opened. Clean the bottom of the drip tray and check that condensate outlet is not clogged with the dirt. After cleaning, drip tray must be closed, fasteners and pins pushed tightly.

RWC dimensions



Heater type	A(mm)	B(mm)	C(mm)	E(mm)	F(mm)	G(mm)	H(mm)	Ø I	Ø J	Tube rows
RWC 250x150	265	364	344	274	35	250	150	1/4"	3/4"	4
RWC 400x200	315	514	344	274	35	400	200	1/4"	3/4"	4
RWC 500x250	370	607	344	274	35	500	250	1/4"	3/4"	4
RWC 500x300	420	607	344	274	35	500	300	1/4"	3/4"	4
RWC 600x300	420	710	344	274	35	600	300	1/4"	1"	4
RWC 600x350	475	710	344	274	35	600	350	1/4"	1"	4
RWC 700x400	525	807	344	274	35	700	400	1/4"	3/4"	3
RWC 800x500	625	922	344	274	35	800	500	1/4"	1"	3
RWC 1000x500	630	1122	344	274	35	1000	500	1/4"	1"	3
RWC 1200x600	735	1322	344	274	35	1200	600	1/4"	1"	3

*RWH dimensions*



Heater type	A(mm)	B(mm)	C(mm)	G(mm)	H(mm)	Ø I	Ø J - 2 row	Ø J - 4 row	Tube rows
RWH 250x150	153	328	190	250	137	1/4"	1/2"	1/2"	2;4;
RWH 400x200	220	479	190	400	202	1/4"	1/2"	3/4"	2;4;
RWH 500x250	270	578	190	500	252	1/4"	1/2"	3/4"	2;4;
RWH 500x300	320	602	190	500	302	1/4"	1/2"	3/4"	2;4;
RWH 600x300	320	672	190	600	302	1/4"	1/2"	1"	2;4;
RWH 600x350	370	702	190	600	352	1/4"	1/2"	1"	2;4;
RWH 700x400	420	809	190	700	402	1/4"	3/4"	1"	2;4;
RWH 800x500	520	917	190	800	502	1/4"	1"	1"	2;4;
RWH 1000x500	520	1117	190	1000	502	1/4"	1"	1"	2;4;
RWH 1200x600	620	1317	190	1200	602	1/4"	1"	1"	2;4;

## Product warranty

Fill in this warranty information form and keep this page for future reference or when warranty service may be required.

Model name		RWH/RWC .....-...
Warranty period		
Date of invoice		
Customer info	Name (company)	
	Address	
	Contact info	
Retailer info	Name (company)	
	Address	
	Contact info	
Fault description		

The product warranty covers product malfunctions, under normal operating conditions for 24 months from the date of manufacturer's invoice. Please note that the product warranty terms may vary depending on purchase or installation contracts.

During the product warranty period, warranty service (free of charge) is provided for product malfunctions caused under normal operating conditions. For warranty service, contact an official "Ventmatika UAB" dealer. Any manipulation of the appliance by personnel not appointed by "Ventmatika UAB" will cancel the guarantee. "Ventmatika UAB" reserves the right to modify the product without prior notice.



Manufacturer:

VENTMATIKA UAB

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