

## Description

Vanvex R is a domestic hot water heat pump, with an integrated 285 liter hot water tank, extract air fan, heat pump and electrical connection.

With its modern design and practical pipe connections the Vanvex R is easy to install, for instance in the basement, in the installations room or in the utility room. With its 285 liter boiler Vanvex R is able to meet the demand of a family for hot water. The water is heated by the integrated heat pump in a cost efficient way.

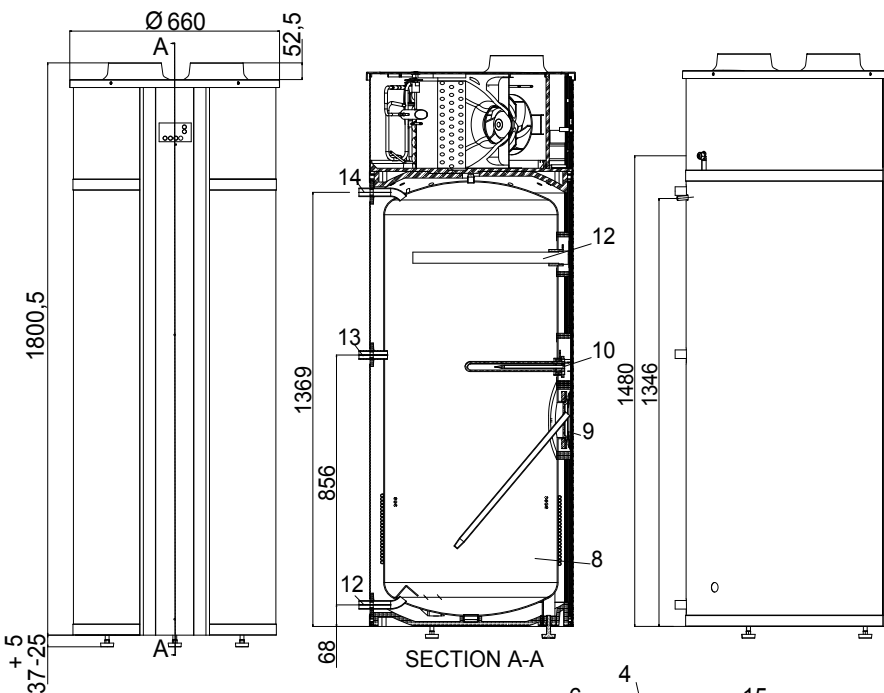
## Suitability

The Vanvex R is a very energy saving domestic hot water heat pump, which uses the energy of the fresh or indoor air to heat up the domestic hot water. The hot water operates very efficiently with an actual efficiency (COP) of 3.54 at an ambient air temperature of 15°C and heat the water from 15-45°C and a circulated air volume of 250 m<sup>3</sup>/h.

Hot water temp. max. with heat pump of: 55°C.  
Hot water temp. max. with heat pump + electric heating element of: 65°C.

## Dimensions

Dimensions in mm

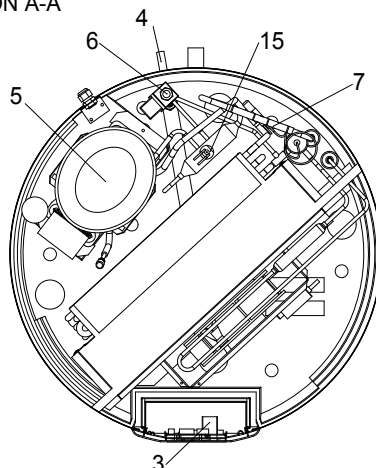
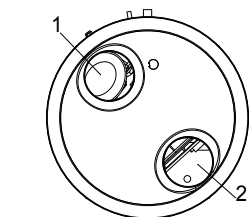


## Capacity

The heat pump can produce approx. 1000 l of hot water within 24 hours at a temperature of 45°C. The capacity is dependent on the outside temperature, the supply temperature of the cold water and the drawing pattern. It is possible to connect a 1.5 kW electric heating element at peak loads to provide hot water again quickly. When the desired temperature has been reached, the electric heating element can be switched off.

The energy consumption of an Vanvex R is 27 % of the consumption using an electric water heater.

1. Supply air
2. Exhaust air
3. Circuit board
4. Condensation drain
5. Compressor
6. Magnetic valve
7. Non return valve
8. 285 liter boiler
9. Service connecting
10. 1,5 kW electric heating element
11. Anode
12. Cold water connecting 3/4" AG11
13. Hot water circulation 3/4" AG12
14. Hot water connecting contact 3/4" AG13
15. High pressure switch





## Technical data

### Electrical connection:

1 x 230V+ N + PE, 10 A, 50 Hz

### Fan:

R2E 190

### Condenser:

2.0 µF

### Motor:

AC

### Isolation class:

B

### Protection class:

IP44

### Motor data:

2500 Rpm

### Collection max.:

58 W

### Power consumption:

0.26 A

### Compressor:

BSD122DT-P6AG

### Effect collection:

0.43 kW at an air temperature of 15°C (Water 15°C-45°C)

### Heat performance:

1.52 kW at an air temperature of 15°C (Water 15°C-45°C)

### COP:

3.54 (EW255-3)

### Cooling medier:

R134A

### Filling:

1000 g

### Electric heating element:

1.5 kW

### Cylinder capacity:

285 Liter

### Standby loss:

2.3 W/K

### Max. operating pressure:

10 Bar

## Construction

### Main dimensions:

Ø660 x 1837 mm incl. connecting pieces

### Cabinet construction:

Enamelled steel casing with 45 mm Isolation

### Top plate:

Cast en bloc with louvre and duct connection 2 x Ø160

### Protection of the tank:

Enamelled inside and magnesium anode.

### Condenser:

D-pipe condenser coiled at the outside of the cylinder. This structure prevents calcification.

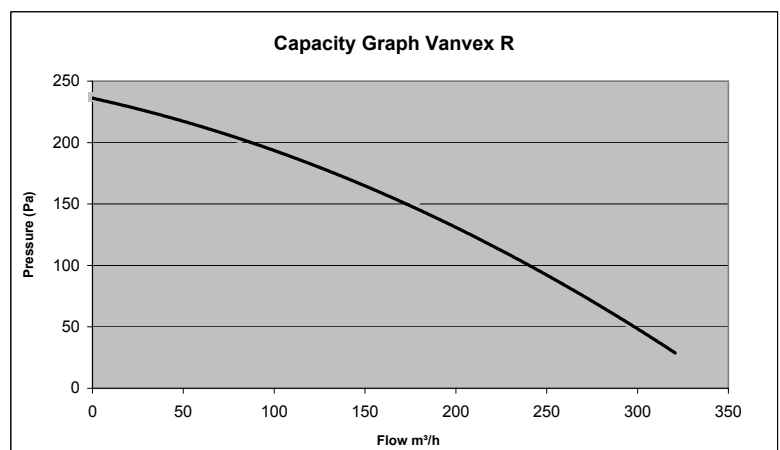
### Condensation drain:

Ø12.5 mm (1/2") connection

### Weight without /with Water:

105/390 kg

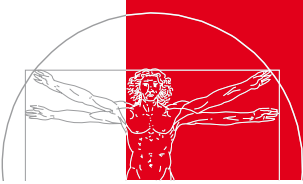
## Capacity



It is recommend keeping the extern lost of pressure less than 100 Pa

## Sound data

Measuring point	1 m in front of unit	Extraction duct	Supply air duct
Airflow	100%	100%	100%
	Lo dB	Lwu dB	Lwu dB
63 HZ	58	98	86
125 Hz	53	95	88
250 Hz	54	89	83
500 Hz	47	84	77
1000 Hz	44	78	71
2000 Hz	46	78	68
4000 Hz	35	69	62
8000 Hz	30	61	51
Average	Lo dB(A)	Lwu dB(A)	Lwu dB(A)
	52	86	79

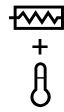


## Automatic

The Vanvex R is equipped with a complete control - Optima 155 - and a display. The operating status can be read in the display and the operating conditions of the unit can easily be changed.



### The electric element and the operating thermostat keys are pressed simultaneously



The domestic water temperature may be adjusted between 0-65°C. The electric heating element solely heats the top half of the container, while the heat pump still heats the lower half of the container. Factory setting: 50°C

If you do not press any button for 15 seconds the standard setting will appear again. The value of each menu will be displayed and it can be changed pressing the button/ buttons below:



#### P1: Level

##### The level key is pressed

With this key, it is possible to switch between: stand-by, automatic operation, constant operation and timer controlled constant operation. (Level 0, level 1, level 2, level 3).

Level 0: The heat pump is now turned off and the control is active.

Level 1: The fan only runs when domestic water is heated. (1. priority)

Level 2: The fan only runs after the compressor has stopped, providing extract to the home. (E18)

Level 3: The fan runs in a chosen period of time - before it switches back to normal operation.

Factory setting: 1



#### P2: Electric element ON

##### The electric element key is pressed

The heat pumps are supplied with an extra heating element for heating the domestic water. With this signal key, it is possible to switch on the electric element for heating the domestic water. By adjusting the set point to 1, the electric element will turn on whenever needed. By adjusting the set point to 0, the electric element will not turn on if needed. At outdoor temperatures below 0°C it is an advantage to use the electric element.

Factory setting: 0



#### P3: The operating thermostat is pressed

The required domestic water temperature may be set between 0-55°C, which is heated by the heat pump.

Factory setting: 50,0°C



#### P4: Stop defrosting

##### The level and operating thermostat buttons are pressed simultaneously

As a standard setting, the defrosting period ends when the temperature has reached 10°C. During extraordinary operating conditions, it may be necessary to change this temperature. The temperature may be adjusted between 0-25°C.

Factory setting: 10,0°C



#### P5: The electric element