











# **VHRU-HP**

Heat Pump Heat Recovery Unit



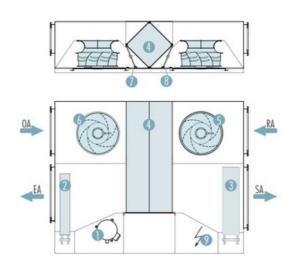
MOTOR INSULATION CLASS	F CLASS				
MOTOR PROTECTION CLASS	IP 44				
MOTOR EFFICIENCY CLASS	-				
MOTOR ENCLOSURE TYPE	EXTERNAL ROTOR MOTOR				
MOTOR BRAND	VOLTVENT				
BODY MATERIAL	GALVANIZED SHEET METAL				
BODY COATING	NONE				
IMPELLER MATERIAL	ALUMINIUM				
DUTY CYCLE	IEC Duty Cycle-S1				
WORKING TEMPERATURE	-20 - +50 °C				
STANDARDS	IEC-60335-2-80, ISO 1940-1				

VHRU-HP - Heat Pump Heat Recovery Devices are preferred to supply fresh air load in the environments. The device cools or heats the air exhausted from the environment and the fresh air entering the environment through a cross-flow heat exchanger device. However, sometimes the amount of heat is not sufficient in some places due to climatic reasons. In these cases, the heat pump comes into play and closes the temperature difference and the environment reaches the desired comfort.

VHRU-HP - Heat Pump Heat Recovery Devices operate quietly and with high efficiency thanks to the fans with AC or EC motors inside. The air flow level can be adjusted using the speed switch that comes standard with the product.

Model	Frequency & Voltage V - (Hz)	Power (kW)	Airflow (m³/h)	Max Pressure (Pa)	Compressor kW	Cooling Features kW	Heating Features kW	Electrical Heater (Optional)
VHRU-HP 750	230 - 50	0,42	750	183	1.20	4,10	5,53	1,50 kw
VHRU-HP 1000	230 - 50	0,45	1000	200	1,37	5,40	6,05	2,00 kw
VHRU-HP 1500	230 - 50	1,03	1500	160	1,70	8,50	10,75	4,00 kw
VHRU-HP 2000	230 - 50	0,94	2000	205	2,30	11,70	15,73	10,00 kw
VHRU-HP 3000	230 - 50	1,36	3000	195	2,80	14,90	19,42	10,00 kw
VHRU-HP 4000	230 - 50	2,6	4000	200	3,50	18,20	25,83	10,00 kw

### **Equipments**



# **Equipment List**

- 1- Compressor
- 2- Condenser
- 3- Evaporator
- 4- Heat Exchanger
- 5 Exhaust Fan
- 6- Fresh Air Fan
- 7- Fresh Air Filter
- 8- Exhaust Filter
- 9- Automation



#### **FANS**

The fans are high efficiency radial fans with backward curved blades, directly coupled to the motor



### **COMPRESSOR**

It operates in heating in winter and cooling in summer according to seasonal conditions. All safeguards, including low/high pressure protection, have been taken for the heat pump system and the device life is maximized.



#### **ELECTRIC BOARDS**

The electrical panel is designed in an internal enclosure inside the device so that it is not exposed to air flow. In addition, the device is plug and play thanks to automation.



## **EVAPORATOR & CONDENSER**

Evaporator and condenser are designed with copper tubes and aluminum fins, low air side pressure losses and high thermal efficiency. Accumulated water is collected and discharged in condensation pans made of stainless steel.



## **HEAT EXCHANGER**

The plate heat recovery heat exchanger does not allow air leakage thanks to its special design. It is sized in such a way that the pressure loss and efficiency relationship is optimal according to the device capacity. All heat exchangers are EUROVENT certified. There are condensation pans made of AISI 304 quality stainless steel in both air outlet sections of the recuperator (Aspirator and Ventilator).





