

EVAP AIR COOLER

EXTRA COMFORT IN SUMMER WITH HRV VENTILATION AND EVAPORATIVE COOLING

It is well known that heat recovery ventilation (HRV) has many benefits when the outdoor temperature is low, including energy savings and a high thermal comfort level. However, HRV ventilation also offers benefits in the summer. If the outdoor temperature is higher than the indoor temperature, the outdoor air is cooled by the slightly cooler indoor air. Unfortunately, this does not prevent the home from gradually heating up if the daytime temperature is high for longer periods. Once the home has warmed up, the heat does not easily leave the home. The Evap Air Cooler is the ideal solution to this problem.

EVAP AIR COOLER AS ADDITION TO THE HRV SYSTEM

The Evap Air Cooler is a system module that cools air. It can be added to a heat recovery ventilation system, such as the Flair. The Evap Air Cooler works based on the principle of water evaporation, otherwise known as adiabatic cooling. Evaporative cooling with water is not new. For example, outdoor terraces in countries with hot climates are often cooled with water. When atomised, the water evaporates almost immediately. Because evaporation consumes heat, the temperature on the terrace falls by several degrees. The Evap Air Cooler is installed in the extract air duct, which means the evaporated humid air exits to the atmosphere and does not enter the home.



After installing the Evap Air Cooler in the extract duct of the ventilation unit, it becomes part of the ventilation system.

ENERGY-EFFICIENT COOLING

Because it consumes only water, this cooling method is very energy efficient. In countries with hot summer climates, where air conditioning is essential, the Evap Air Cooler can help to reduce the energy consumption of the air conditioning system.

NOT JUST CLEAN AIR BUT ALSO
COOLER AIR WITH THIS **SMART**
ADDITION TO YOUR HRV SYSTEM

THE BENEFITS

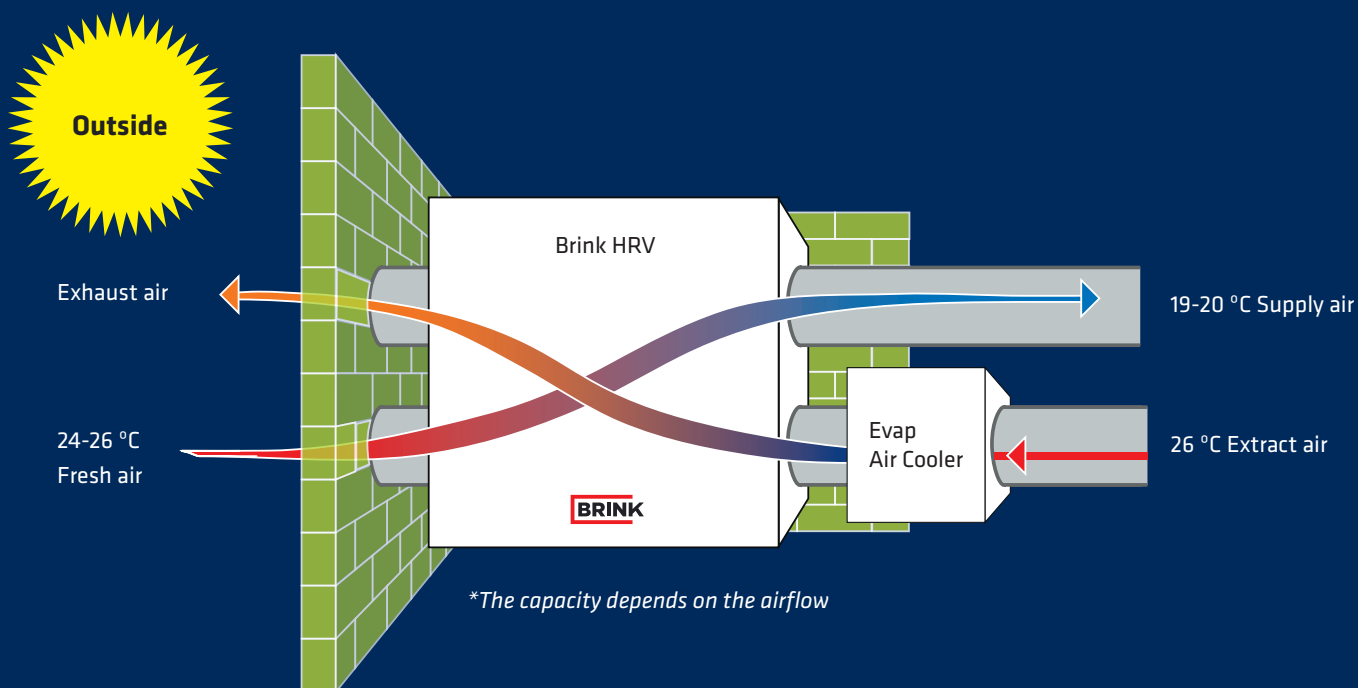
- Environmentally friendly cooling with water
- Fits any central HRV ventilation system
- Very low energy consumption: cooling system with extra fan unnecessary
- Operates fully automatically
- Increases living comfort
- No risk of excessive cooling
- Can be combined with the Evap Pro humidifier for the right moisture balance in winter



HOW DOES THE EVAP AIR COOLER WORK?

The Evap Air Cooler works fully automatically and turns on if the outdoor temperature exceeds 22 °C. The warm extract air from the home passes through a moistened glass fibre cassette inside the Evap Air Cooler. The moisture evaporates and cools the extract air. This cooler extract air passes through the heat exchanger, which cools the supplied outdoor air. With this cooling type, the indoor air can be cooled to around 6 °C below the outdoor temperature. This avoids a situation in which excessive cooling results in an

extreme transition between the indoor and outdoor temperature. The limited capacity of adiabatic cooling is compensated by the fact that it can operate continuously above 22 °C, which means the cooling capacity remains available for longer and does not consume additional electricity. You can check its operation using the optional controller. The Evap Air Cooler also excels in combination with the Evap Pro humidifier, which prevents excessively dry indoor air in winter.



INSTALLATION AND MAINTENANCE

The Evap Air Cooler is very simple to install. It is connected directly to the extract duct of the ventilation unit. It can be fitted to any central ventilation system. The only required maintenance is periodically exchanging the Evap replacement cassette. After each service, the Evap Air Cooler is as good as new.

Evap Air Cooler technical specifications

Dimensions (H x W x D)	335 x 335 x 258
Weight empty/full	3,0 / 3,8 kg
Water consumption	0-5 l/h 0.55 l/h at 24 °C/60%RH and 200 m³/h
Maximum rated power	20 W
Nominal rated power	5 W
Cooling capacity	Max 1 kW at 400 m³/h 372 W at 24 °C/60% RH and 200 m³/h