

RVRK Heated snow louvre

The RVRK heated snow louvre is designed to protect air intake openings from snow and reduces the ingress of precipitation into the ventilation system.

Standard solution

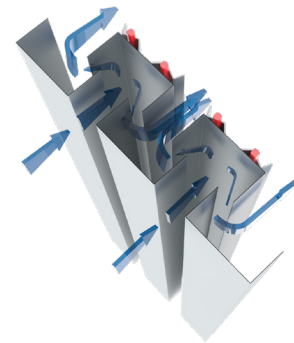
- Material: hot-dip galvanized steel Z275 and aluminium
- Powder coating RAL 7000
- Removable internal louvre
- Minimum size 400x400 mm
- Louvre size increment 100 mm
- Maximum single-section louvre 1500x1500 mm
- 3/8" drain nipple for connection to the sewer system



Louvres larger than 1500x1500 mm are manufactured from several internal modules and, for larger sizes, also as frame modules.

Options:

- Materials: ZM, Al
- Other colours: RAL Classic K7 and RR
- Also available without heating cable (RVRU)
- Special-shaped louvres



Use and construction

The RVRK heated snow louvre is intended to protect air intake openings, preventing snow and water from entering the ventilation system. The snow louvre is installed flush with the wall surface.

The snow louvre frame is made of 1.0 mm thick hot-dip galvanized steel (Z275) and the internal blade structure of 1.0 mm thick aluminium.

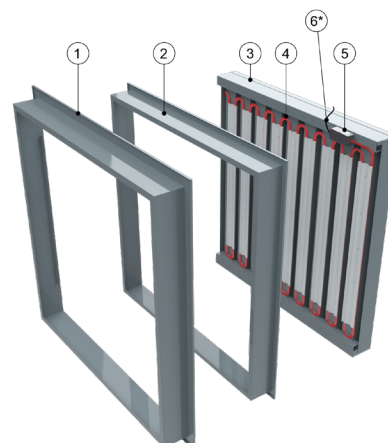
Zinc-magnesium coated steel (ZM310) or aluminium can also be used to manufacture the louvre frames. The internal blade structure is always made of aluminium.

The labyrinth-type internal blades of the snow louvre separate precipitation from the airflow and direct the water into the collecting gutter located in the lower part of the louvre. The gutter is connected to the building's sewer system via a 3/8" drain nipple.

In winter conditions, the self-regulating heating cable protects the external louvre from freezing.

The RVRK heated snow louvre consists of:

1. Outer frame (Zn)
2. Inner frame (Zn)
3. Louvre blades (Al)
4. Heating cable
5. Electrical junction box
6. * Supply cable (not included in the delivery)



The heating cable is fastened to the internal blades with mounting clips. The louvre is equipped with a self-regulating heating cable that adjusts its output according to the ambient temperature and helps prevent the accumulation of snow and ice. The output of the cable used is 30 W/m (ELSR-N-30-2-AO, Eltherm). In larger louvres, each module is equipped with a separate electrical junction box.

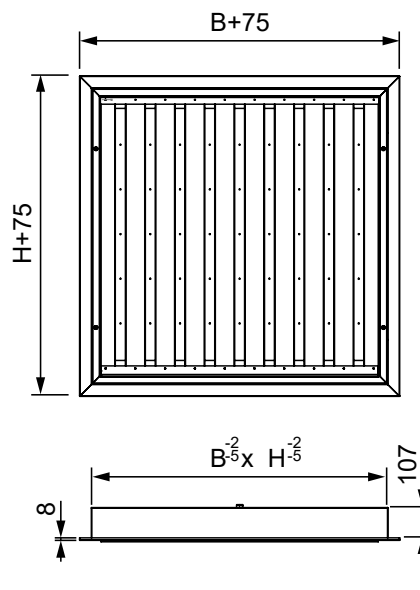
Dimensions

Dimensions B and H indicate the nominal dimensions of the snow louvre. The tolerance of the nominal dimensions is -2/-5 mm.

The standard louvre is rectangular; the minimum size is 400×400 mm and the size increment is 100 mm.

The maximum single-section snow louvre size is 1500×1500 mm. Larger louvres are manufactured from several internal modules (see p. 21).

The maximum size of an external louvre with one frame module is 2800×2000 or 2000×2800 mm. Larger louvres are manufactured from several frame modules.



H \ B (mm)	400...1500	1600...2000	2100...2800	>2800
400...1500	One internal module	Several internal modules	Several internal modules	Several internal and frame modules
1600...2000	Several internal modules	Several internal modules	Several internal modules	Several internal and frame modules
2100...2800	Several internal modules	Several internal modules	Several internal and frame modules	Several internal and frame modules
>2800	Several internal and frame modules	Several internal and frame modules	Several internal and frame modules	Several internal and frame modules

Technical information

The recommended face velocity of the RVRK snow louvre is $v \leq 0.8$ m/s.

Face velocity:

$v = Q / A_0$ (m/s), where

Q – required airflow (m³/s)

A₀ – face area (m²)

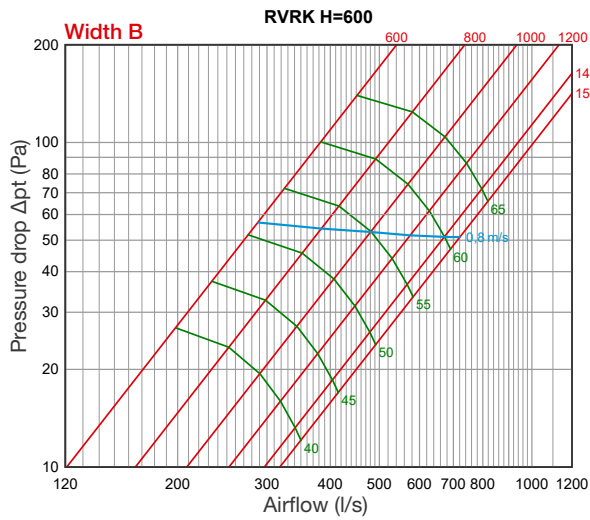
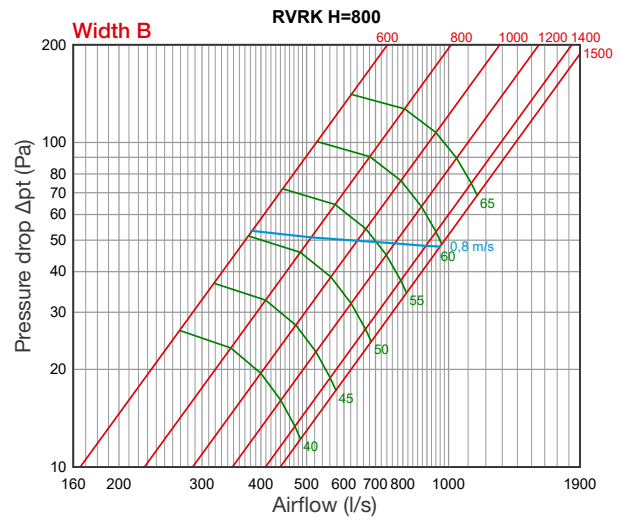
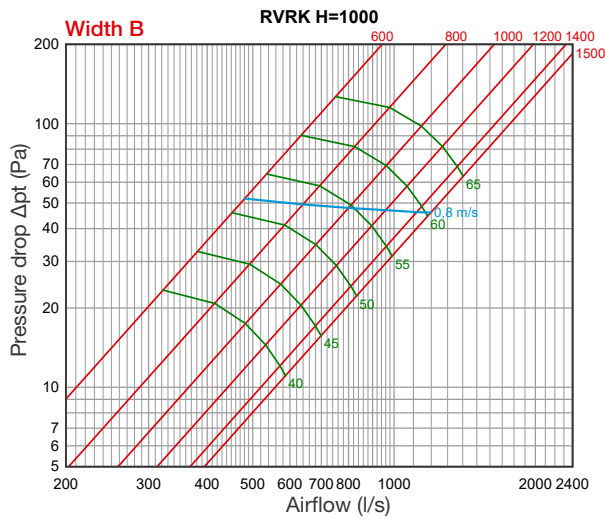
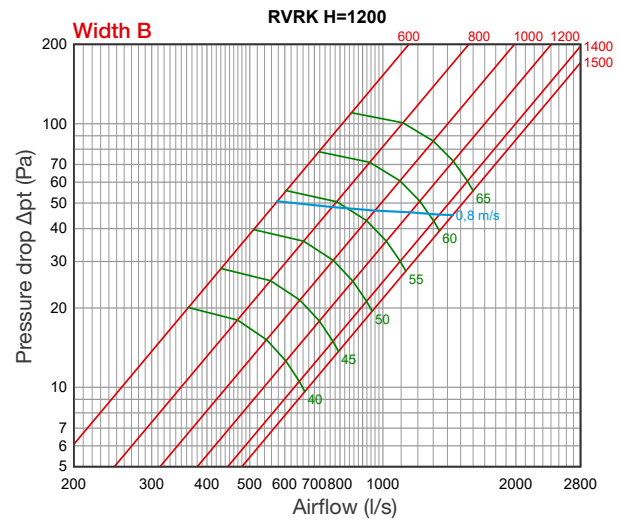
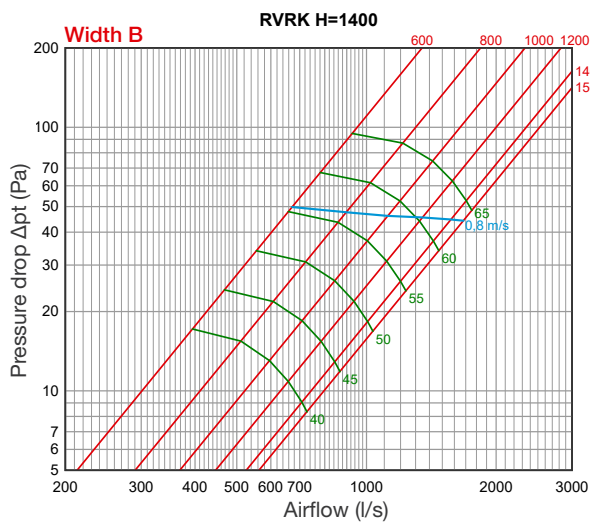
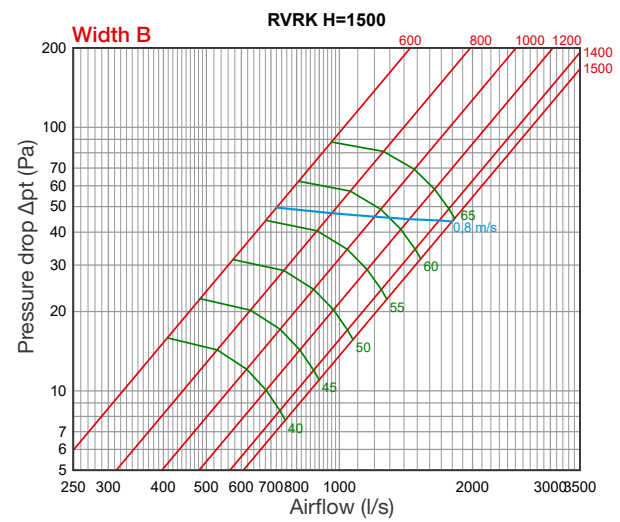
The face area of the RVRK snow louvre is calculated according to the nominal dimensions:

$A_0 = B \times H$ (m²), where

B – nominal width of the snow louvre (m)

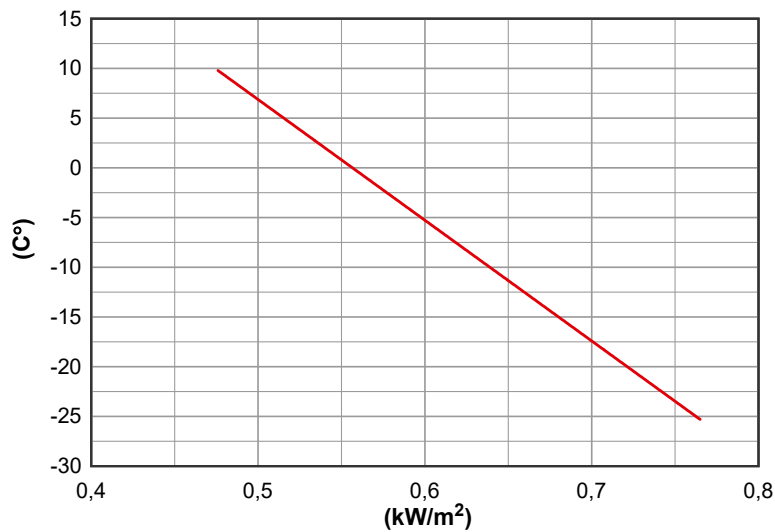
H – nominal height of the snow louvre (m)

Airflow, pressure drop, noise level

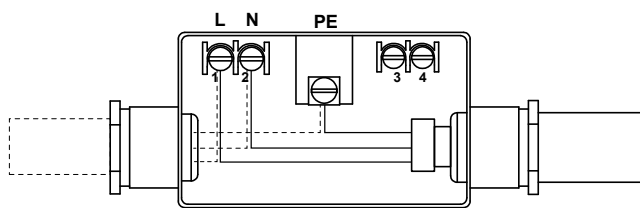


Heating and electrical data

The louvre is equipped with an Eltherm ELSR-N-30-2-AO self-regulating heating cable, whose maximum heat output at an outdoor air temperature of 0 °C is 561 W/m².



Connection diagram



Designation	Description
L	Phase
N	Neutral
PE	Protective earth
1-2	Heating cable connection
3-4	Not used

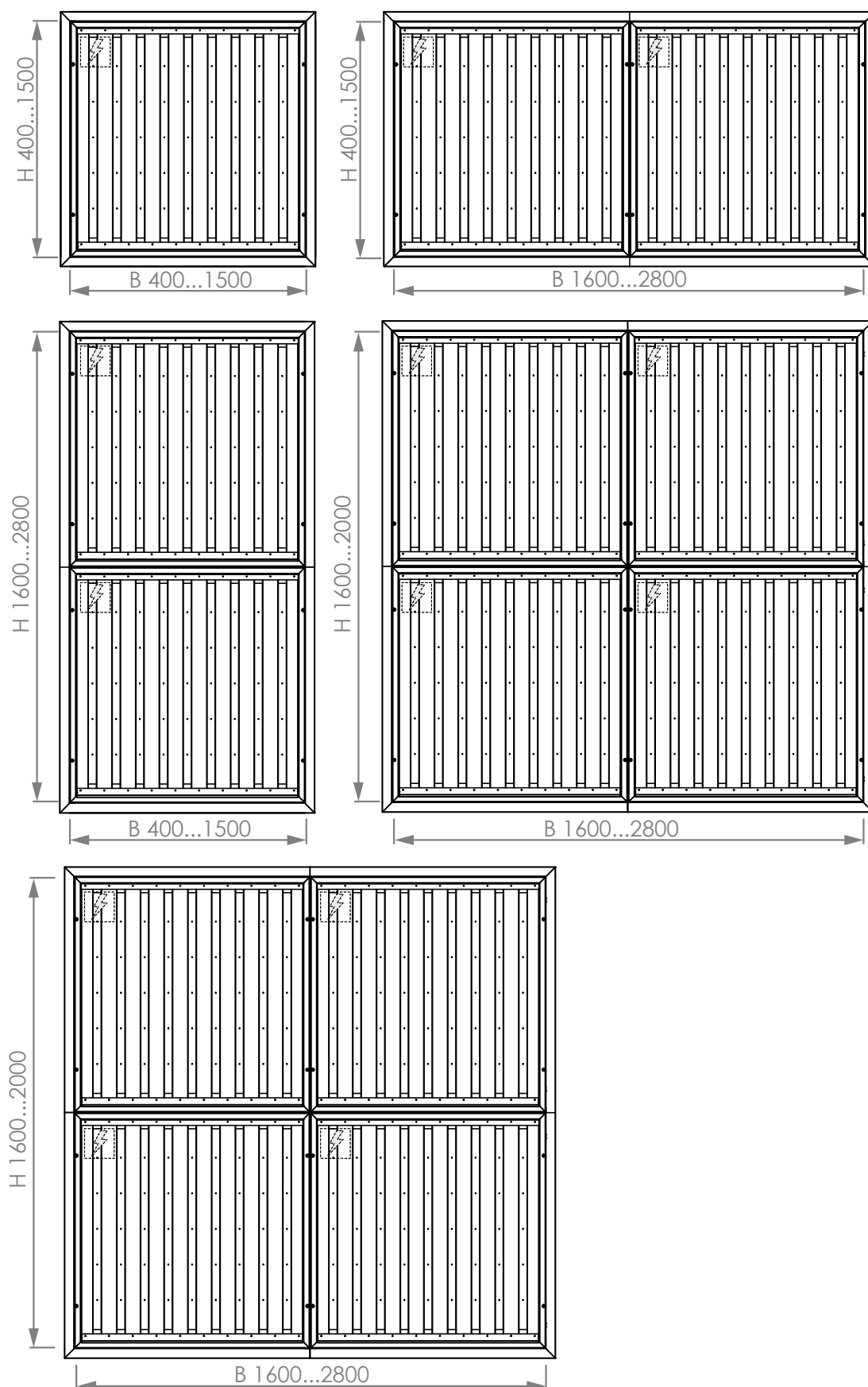
Power supply: 230 VAC, 50 Hz. The supply cable is not included in the delivery.

The heating cable is connected to the power supply cable inside an IP67-rated electrical junction box.

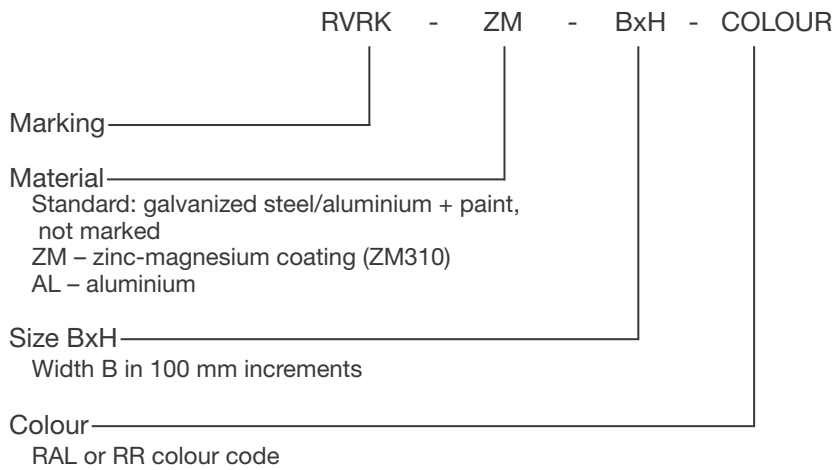
For louvres consisting of several modules, each module has its own electrical junction box. The power supply must be provided via a 16 A circuit breaker with C characteristic.

Division of internal parts of the RVRK external louvre with one frame module

The maximum size of an external louvre with one frame module is 2800x2000 or 2000x2800 mm. As standard, the dimensions of the internal parts are divided equally.



Marking



Example: RVRK 1200x1000