

Operating Instructions

SÜDWIND - Negative Air Pressure Monitor



CE

Introduction:

The negative air pressure monitor is a device that enables simultaneous operation of a ventilation system in conjunction with a fireplace that is dependent on the ambient air. Without this negative air pressure, a vacuum can occur in the room when a fireplace and a ventilation system are operated at the same time, which sucks the exhaust gases from the fireplace back into the room. This would allow life-threatening carbon monoxide (CO) to enter the room air. The negative air pressure unit monitors the ambient pressure in the apartment and outside and switches off the ventilation system at a pressure difference of 4 Pa (Pascal).

To measure the external pressure, a hose (included in the scope of delivery) is laid to the outside. The negative air pressure monitor is preferably installed in the room to be measured. If this is not possible, in addition to the outer hose, an inner hose must also be laid, which projects into the room to be measured.

The negative air pressure monitor switches off at 4 Pa vacuum in the room with a delay time of 150 seconds.

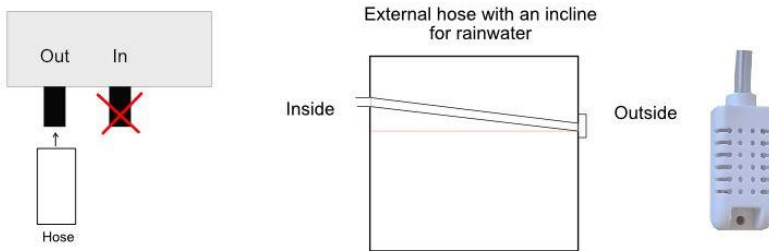
When the pressure is back to normal, the negative air pressure monitor switches the ventilation system back on. (Then starts in AUTO mode). If the system is switched off 3 times within an hour, the ventilation system remains off. The unit must be switched on again manually.

Assembly:

Connection of the hose:

The hose is plugged into the “Out” nozzle as shown on the left. From there, the hose is laid to the outside through an outer wall. Note that the hose should be laid at an angle to the outside so that rainwater can drain off.

Note: The outer hose must **not be connected to the “In” nozzle. Otherwise, the unit measures the wrong pressure.**

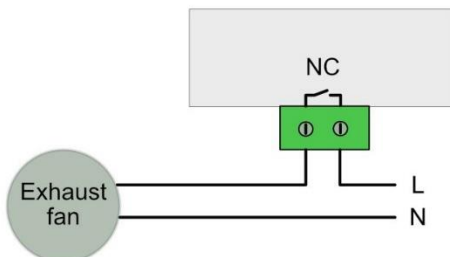


The cover of the outer hose should be mounted downward as shown in the picture on the right.

Connection of the ventilation system:

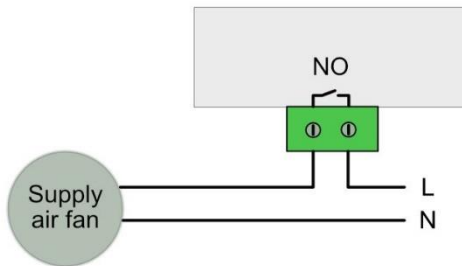
There is a potential-free contact on the “NC” (“normally closed”) terminal, to which you can connect the ventilation devices. When the negative air pressure monitor is started, this contact is closed so that the fan runs.

If dangerous negative pressure of 4 Pa is reached, the contact is opened and the fan is switched off.



Optional: Connection of a fresh-air fan:

There is a potential-free contact on the “NO” (“normally open”) terminal, to which you can also connect a fresh-air fan. This is switched on when the dangerous negative pressure of 4 Pa is reached and should restore the normal pressure.



Switching on the system:

Check that the outer hose is plugged in “Out” and that it is not kinked on the way outside. Then switch the unit on. The pressure difference between outside and inside now appears on the display. If the pressure on the display is less than 0 (e.g., -2 Pa), there is a negative pressure inside. If the display is greater than 0 (e.g., 2 Pa), then there is an overpressure inside.

Technical specifications:

Mains voltage: 230 V (operation via 5V/1A plug-in power supply)

Connected load: 500 W

Power consumption: < 2 W

Pressure measurement range: -50 to +50 Pa

Accuracy: 3% of measured value