

Device Description

ISL1E Wind Vane Relay

Application

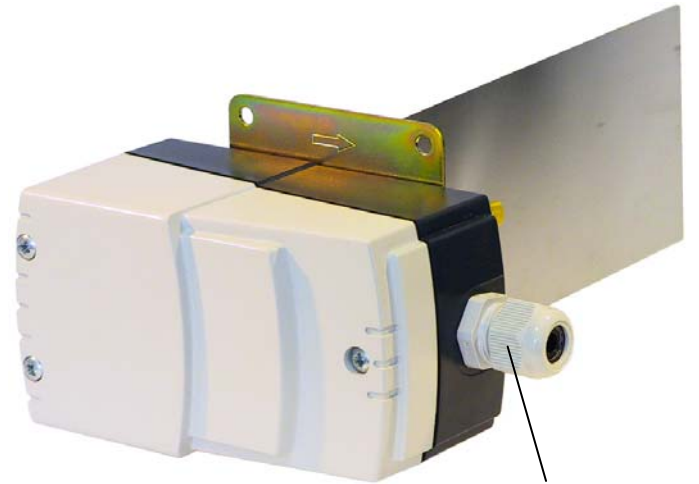
The ISL1E wind vane relay is used to monitor the air flow in the air ducts of ventilation and air conditioning systems.

Type

ISL1E Wind vane relay with switch contact (changeover switch) for air flow monitoring (2m/s to 9m/s)

Technical data

Output	1 changeover switch, floating, 24V to 250V AC, 15 (8) A At 24V AC min. 150mA
Switch	Switch-on value: 2m/s to 9m/s Switch-off value: 1m/s to 8m/s Switching difference: 1m/s
Connection	Screw terminals
Measuring system	Wind vane for air flow monitoring
Ambient temperature	-40°C – 85°C, non-condensing
Medium temperature	Max. 85°C
Vane spar	Brass
Wind vane	V2A 1.4301
Housing	Shock-resistant plastic, color RAL 7035 (gray)
Degree of protection	IP65 On connector head outside the air channel when attached and sealed cable gland
Weight	Approx. 390g
Scope of delivery	Wind vane relay Cable gland (M16 x 1.5), enclosed Seal (attached between relay and air channel)



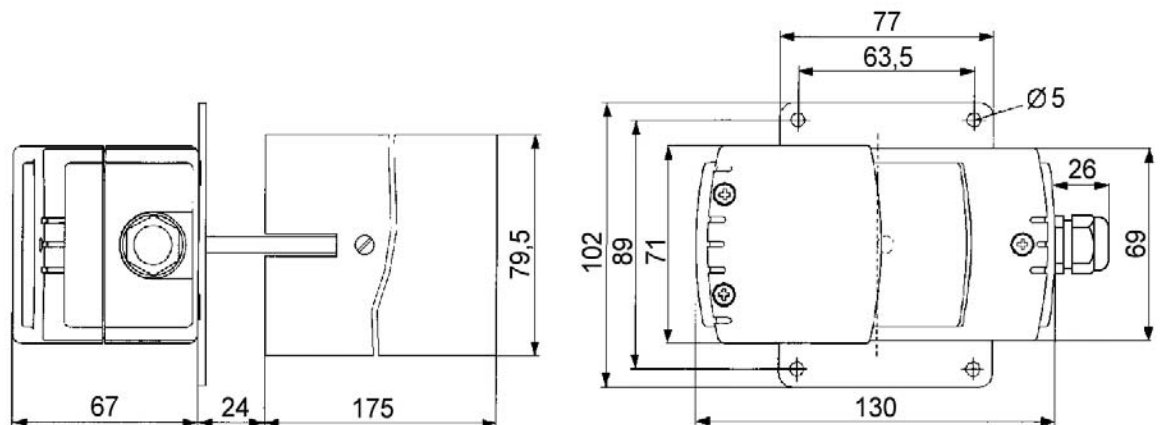
The enclosed cable gland (M16 x 1.5) must be attached when the wind vane relay is connected.

Subject to change

Mounting

- In order to guarantee the switching function, the wind vane relay must be mounted at a vibration-free position of the air channel in a laminar air flow. To avoid eddy formations in the valve, a smoothing section of 5 times the channel diameter should be provided in front of and behind the vane relay.
- Pay attention to the flow direction according to the direction of the arrow on the mounting plate.
- The wind vane relay is set for installation in a horizontal air channel as standard (wind vane movement downward to horizontal position). When the relay is installed in a vertical air channel, you must compensate for the vane weight with the set screw (caution: check the switch values and compensate for them with the set screw when necessary).
- The enclosed channel seal must be attached between the mounting plate of the wind vane relay and the air channel.

Dimensions



Issue: April 2, 2002

Installation



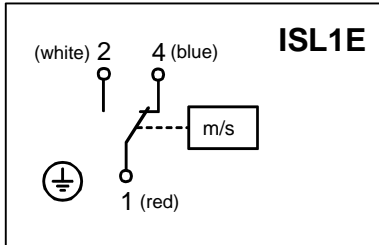
Danger

A mains voltage of 230V may be present. Electrical installation and unit connection may only be carried out by qualified technicians (e.g. electricians).

Ensure that this process complies with VDE guidelines and local wiring regulations.

The device must be connected in accordance with the applicable system wiring diagram.

Connection



Switch function

Contacts 1 – 2 close When air flow is higher than the switch-on value

Contacts 1 – 2 open When air flow is lower than the switch-off value

(see “Setting” section)

Connections 1 and 2 must be wired for air flow monitoring (marked red and white).

They open when the air flow is below the set value.

Contacts 1 – 4 close simultaneously and can be used as signal contacts (marked red and blue).

Setting

The wind vane relay is set as standard to a minimum air speed of 2m/s for installation in a horizontal air channel (switch-on value = 2m/s / switch-off value = 1m/s)

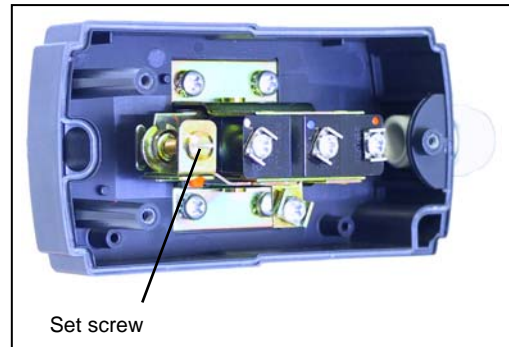
A higher switch-on value can be set by turning the set screw to the right (see diagram).

Settable air speeds

Min. switch-on value: 2.0m/s (switch-off value: 1.0m/s)

Max. switch-on value: 9.2m/s (switch-off value: 8.0m/s)

When the relay is installed in a vertical air channel, you must compensate for the vane weight with the set screw (caution: check the switch values and compensate for them with the set screw when necessary).



Note

At air speeds of > 5m/s, the vane must be cut off laterally at both side markings due to danger of breakage (see label on the vane).

In this case, the minimum switch-off value is increased from 1m/s to 2.5m/s.