

INT511[®] Air Flow Monitor

monitoring range 0.2 ... 8 m/s, with switching output



INT511

Application:

For monitoring air flow in medium temperature ranges from

-20 °C...+60 °C, with temperature compensation.

Functional description:

The KRIWAN INT511 air flow monitor controls air-flow velocities over a range of 0.2...8 m/s in accordance with the calorimetric principle. The switching point can be set within the adjustment range using a built-in potentiometer (left stop corresponds to the minimum sensitivity). The relay functions are displayed using LED (green = actual value > set value). To avoid a wipe contact on energizing, a second relay (yellow LED) in series pulls in

after 1 s, when the flow relay is already activated. During the start-up time, and if flow is > set value contact 11-14 is closed. If flow is < set value after this time expires, contact 11-12 is closed. INT511 devices with remanence relay do not have a yellow LED. The last relay condition, however, is kept when power fails or trips and can therefore be called off via a control master station for example.

Installation instruction:

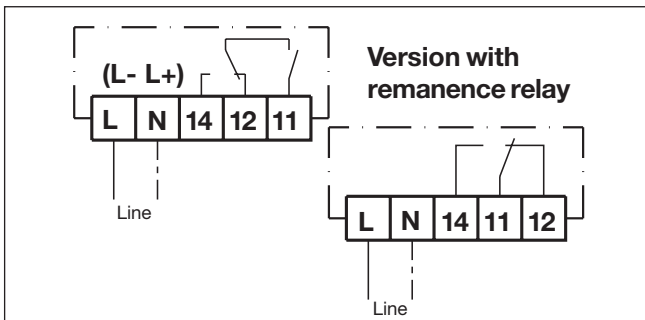
To avoid monitoring errors, the following points should be observed when selecting the monitoring site:

- Avoid dirt deposits, especially any moistening with water, by suitable steps (filter in the ventilator system and so on).

- Do only use in air medium!
- Do not touch the probe around the probe opening.
- Installation where there is low turbulence, if possible.
- Do not install directly behind the damper register.

Cleaning:

Dry cleaning is preferred. If necessary rinse with clear water with power disconnected. Restart only when the probe is dry.



Connection diagram

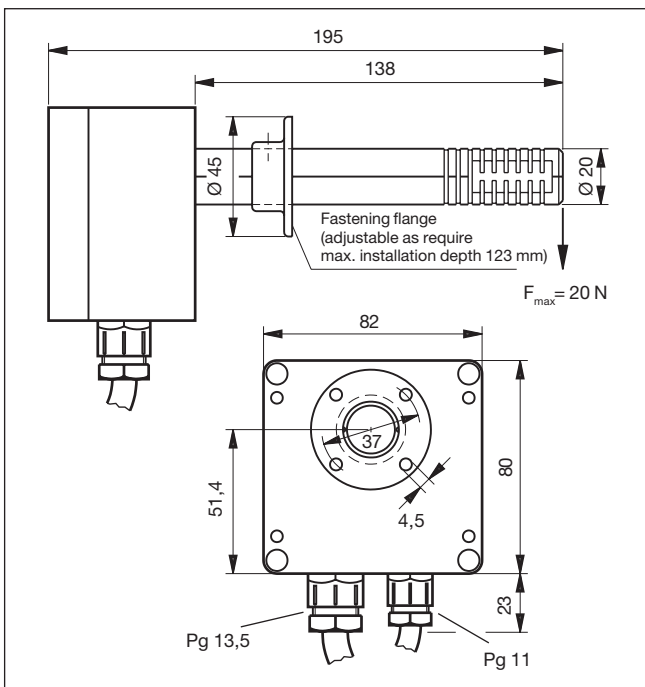
Technical data

DC 24 V	±20 %	part no. 13 N 142
AC 50/60 Hz 24 V	±10 %	part no. 31 N 142
AC 50/60 Hz 230 V	±10 %	part no. 52 N 142

Devices with remanence relay (the rise rate of supply voltage must be 10 V/s at least):

AC 50/60 Hz 24 V	±10 %	part no. 31 N 142 S22
------------------	-------	-----------------------

Amb. temperature range	-20 °C...+60 °C
Max. power consumption	3 VA
Monitoring range	0.2...8 m/s adjustable
Monitoring accuracy	± 5 % from measured value
Switching hysteresis	approx. 0.5 m/s
Start-up delay	approx. 120 s
Response time after start-up delay	between approx. 5 s at high airspeed setting and 40 s at low airspeed setting
Max. air humidity	≤ 85 %
Max. admis. flow rate	35 m/s
Duty cycle	100 % ED
Relay output	AC 250 V, max. 5 A, 300 VA ind. 1 c/o contact, potent.-free
Mounting	- probe 90° to flow direction - probe opening in flow direction
Material	- terminal box Polycarbonate - probe PA 6 GF 30
Protection class EN 60529	- terminal box IP65 - probe IP20 - probe IP54



Dimensions (mm)

The unit must be connected by trained electrical personnel. All valid standards and instructions for installing electrical

components must be observed. Maximum values for supply voltage of this unit may not be exceeded.

Application with protection class IP54 presuppose the following: long term moistening with water conditioned by the system is not admissible. Maintenance intervals must be fixed in the way that dust deposition on the monitoring element falsifying the measuring value cannot occur.

subject to technical modification without notice