

Smoke Switch Status Indicator RZA 142

Installation

The Smoke Switch Status Indicator RZA 142 can be installed vertically or horizontally (e.g. in a control panel).

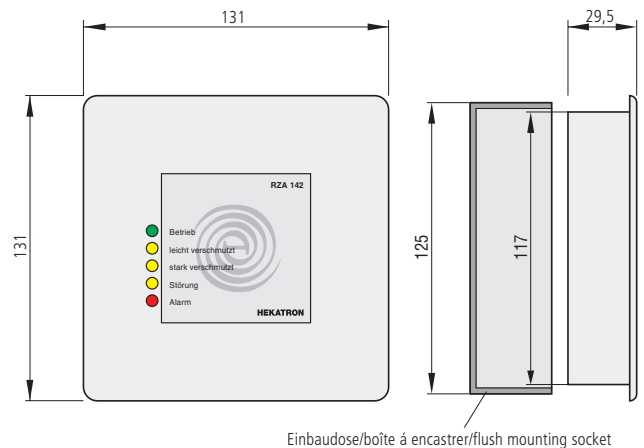
Flush-mounting version

- Install the flush-mounting box so that its edge is flush with the surface and plaster in.
- Secure the RZA 142 in the flush-mounting box with the screws provided.

Surface-mounting version

- Secure the unit with four screws in the required position.
- Connect the cable.

After connection and functional testing (see "Electrical connection"), fit the cover, screw it in place, and secure the plate with the plastic rivets provided.



Einbaudose/boîte à encastrer/flush mounting socket

Figure 3: RZA 142 UP for flush-mounting, dimensions without flush mounting box

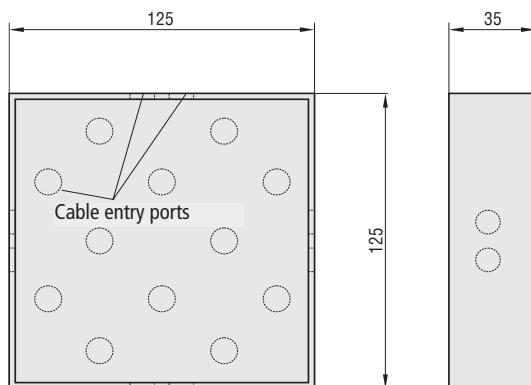


Figure 1: Installation drawing of flush-mounting box for RZA 142 UP

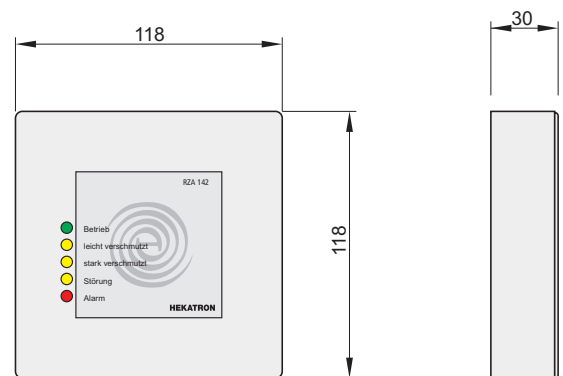


Figure 4: RZA 142 AP for surface mounting

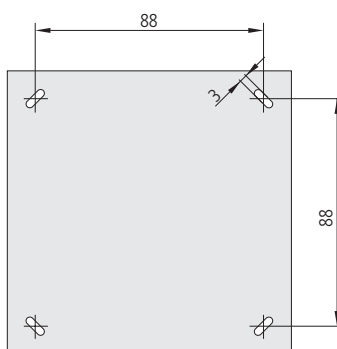


Figure 2: Installation dimensions of RZA 142 AP

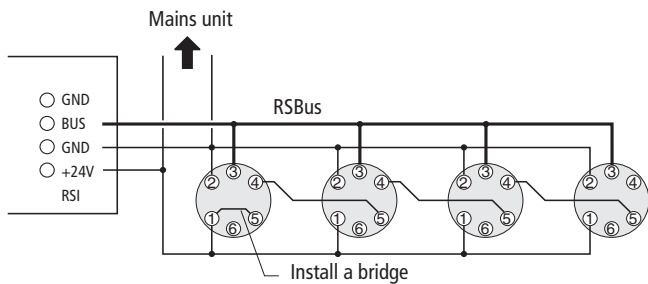
Technical data

Operating voltage	18 to 28	V DC
Residual ripple	max. 120	mV _{SS}
Current draw	max. 120	mA
Power consumption	max. 3.4	W
Relays	1 change-over each, potential-free	
Switched voltage	max. 30	V DC
Switched current	max. 1	A
Switched power	max. 30	W
Ambient operating temperature	-20 to +70	°C
Total BUS length	max. 100	m
Weight RZA 142 AP	185	g
Weight RZA 142 UP	206	g

Electrical connection

The smoke switch and Smoke Switch Status Indicator RZA 142 are connected together via the RS bus (system bus). The wiring may be star or series connected. The RZA 142 and connected smoke switches must be supplied from a single 24 V DC supply.

Up to 20 smoke switches can connect to the RZA 142. In case of complete disassembling the inquiry time takes max. 7 sec. Inquiry times are reduced if less smoke switches are connected (e.g. 10 pcs. to 5 sec.). We recommend that safety circuits are operated through the alarm contacts of the smoke switches or the alarm contacts of a Hekatron mains and triggering unit.



When it is in operation, the RZA 142 calls up the status of the smoke switch cyclically:

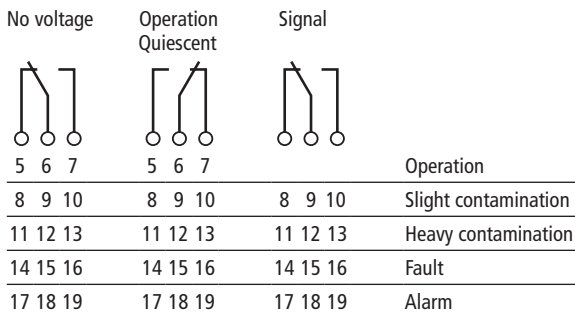
- Slight contamination
- Heavy contamination
- Fault
- Alarm

There are dedicated LEDs for each of the following conditions:

- Operation (supply voltage "ON", green),
- Slight contamination (yellow blinking),
- Heavy contamination (yellow blinking),
- Fault (yellow continuously on for a smoke switch fault, yellow blinking for a communication fault)
- Alarm (red continuously on).

In parallel, relays (change-over) for each condition with potential-free contacts (terminals 5 to 19) are addressed.

Under normal, fault-free conditions, only the green "Operation" LED is illuminated. All relays are activated. When a signal arrives from one of the smoke switches, the relay assigned to that signal opens.



Commissioning

When commissioning an RZA 142 the connected smoke switches must be initialised. The "INIT" jumper must be fitted to the RZA 142 (condition as supplied). During initialising, the yellow LEDs blink in succession and repeatedly.

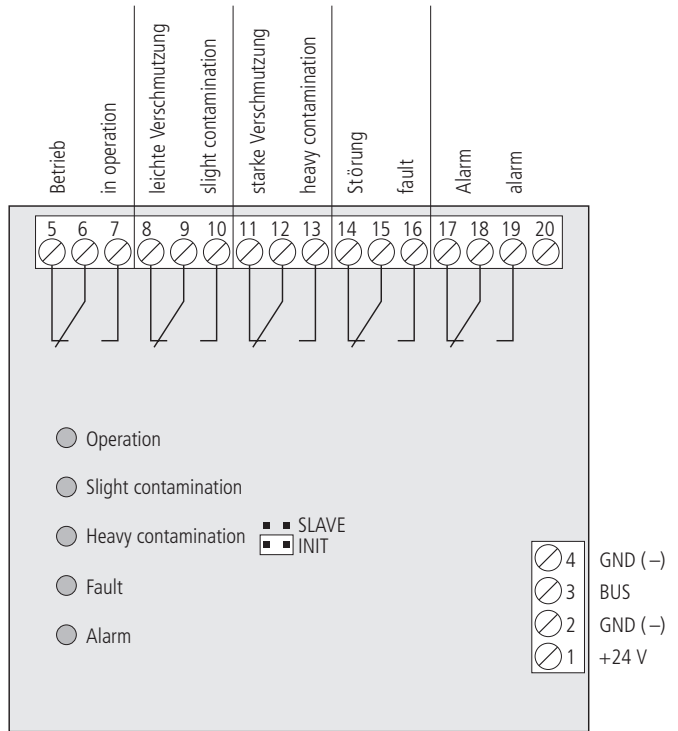


Figure 7: Jumper „INIT“ in the RZA 142; relay in power-off condition

For initialising, the smoke switch must be put into the alarm condition, e.g. by briefly spraying with test gas. The smoke switch indicator lamps illuminate, at first red (alarm), then they blink green for 5s to 10s (initialisation successful). Initialising assigns an address to each smoke switch. After all smoke switches have been initialised, the "INIT" jumper must be removed and parked on a spare pin.

If a smoke switch has not been initialised, the RZA indicates a communication fault. This condition does not adversely affect communication with correctly initialised sensors.

If a smoke switch is subsequently replaced or removed, the installation must be re-initialised.

Ordering data

Description	Order No.
RZA 142 AP	5 500 034
RZA 142 UP ¹⁾	5 500 035

¹⁾ The scope of supply includes a box for flush-mounting