

# ABAV-S3 CONTROL UNIT

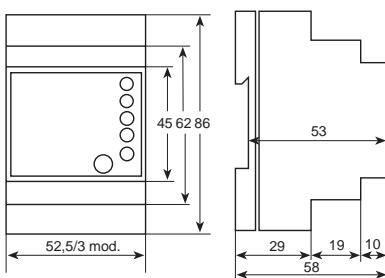
for smoke detectors with service alarm



## TECHNICAL DATA

- Operating voltage:** 230V AC  $\pm 10\%$  50-60 Hz  
24V AC  $\pm 10\%$  50-60 Hz  
alternatively 24-30V DC.  
When ordering, state voltage.
- Energy consumption:** 1,8 VA
- Alarm relay:** One changing contact 250V 8A  
One breaking contact 250V 8A
- Service alarm relay:** One closing contact 250V 5A
- Failure alarm relay:** One changing contact 250V 5A
- Terminating resistor:** 2,2 kOhm
- Indications:**
- |   |            |
|---|------------|
| <b>Normal operation:</b>                  | green LED  |
| <b>Service alarm:</b>                     | yellow LED |
| <b>Short circuit in detector circuit:</b> | yellow LED |
| <b>Interruption in detector circuit:</b>  | yellow LED |
| <b>Alarm:</b>                             | red LED    |
- Number of detectors that can be connected:** 30 smoke detectors
- Mounting:** DIN-Rail
- Option:** ETUK-1, Housing IP-54 for wall mounting
- Surrounding temp.:** 0 to 50°C
- The following values applies for the detector circuit:**
- |   |            |
|---|------------|
| <b>Normal operation:</b>                      | 4 to 21 mA |
| <b>Broken Line:</b>                           | < 4 mA     |
| <b>Short circuit:</b>                         | > 100 mA   |
| <b>Service alarm (contaminated detector):</b> | > 21 mA    |
| <b>Alarm (smoke):</b>                         | > 38 mA    |
- Weight:** 230V = 280g, 24V = 150g
- Protection:** IP20

## DIMENSIONS (mm)



## FUNCTION

The unit is designed for DIN-Rail mounting with LED/indications on the front panel. When a smoke detector, connected to the ABAV-S3, indicates alarm for smoke, the ABAV-S3 unit will trigger alarm relays, which can be used to stop ventilation fans and to close fire dampers.

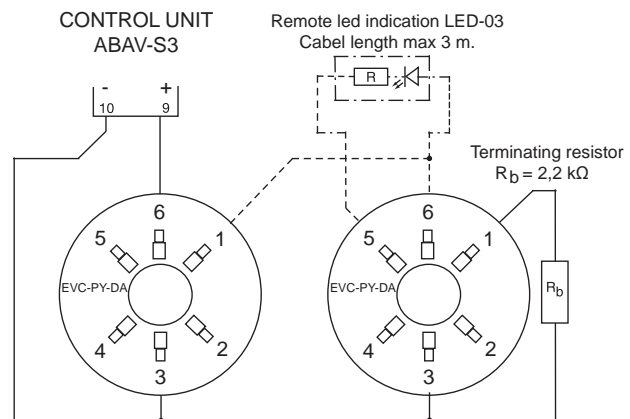
At alarm, a red LED is lit and at the same time the alarm relays drops. When a smoke detector indicates service alarm the yellow service alarm LED flashes quickly for one minute. After that, the relay is energized and the LED is showing fixed yellow light. If the service alarm of the smoke detector is remedied, the service alarm relay is de-energized and the yellow LED starts to blink slowly (alarm memory). Service alarm is an indication that the smoke detector is contaminated and should be replaced. Short circuit or interruption will energize the failure relay and at the same time a yellow LED is lit (for interruption there is a ten second delay).

If the short circuit or interruption is remedied, the failure relay is de-energized and the yellow LED starts to blink slowly (alarm memory).

Test of relays: Press the reset button during five seconds.

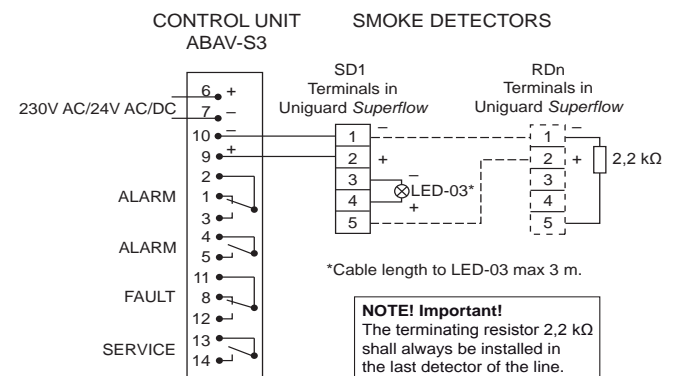
## WIRING DIAGRAM

### CEILING MOUNTED SMOKE DETECTORS



**Base marking (relief No. in base = earlier No. on label):**  
5 = -R, 6 = 2□E, 1 = 5□0, 2 = -RS, 3 = -1

### DUCT MOUNTED SMOKE DETECTORS



The alarm relay and the failure relay outputs are shown in alarm/no power on condition and the service alarm relay is shown in operative/no power on condition.