aumüller

# Installation and Commissioning Instruction

# Sensor-Module SM

## Sensor-Module SM

**Part.-No.:** **688150**

**Application:** **Module for the self installation on customer side** into the SHEV Control Unit **EMB 8000+** for the connecting of automatic smoke detectors and breakglass units.

| | |
|---|---|
| Operating voltage: | 24 V DC |
| Detector line voltage: | 24 V DC |
| Internal consumption: | 12,6 mA |
| Housing (WxHxD): | **100 x 120 x 22,5 mm**, ABS, black |
| Module units: | 1 ME |
| Inputs: | 3 detector lines (max 10 detectors / line)<br>1 ventilation push button (max. 10 pcs.) |
| Outputs: | 1 feedback contact (change-over switch, 42 V / 0,5 A) |
| Display: | Power, fault, alarm |
| Control elements: | Front push button: Reset |
| Connections: | Plug-in terminals 1 mm² (rigid wire),<br>socket and plug with cable for internal BUS |
| Mounting: | Fixing on 35-mm mounting rail. |
| Feature: | Configuration of the functional and performance features which deviates from the standard systems via configuration **EMB 8000+** |

**Sensor-Module SM**
Setting of functions requires the software of the control unit's manufacturer.

**Functions:**
- Monitors three fire signalling lines for triggering and faults.
- Processes signals from ventilation buttons.
- Has connections for external relaying of signals from operation, faults and alarm.
- Can only be employed, if a Control-Module **CM** is already present.

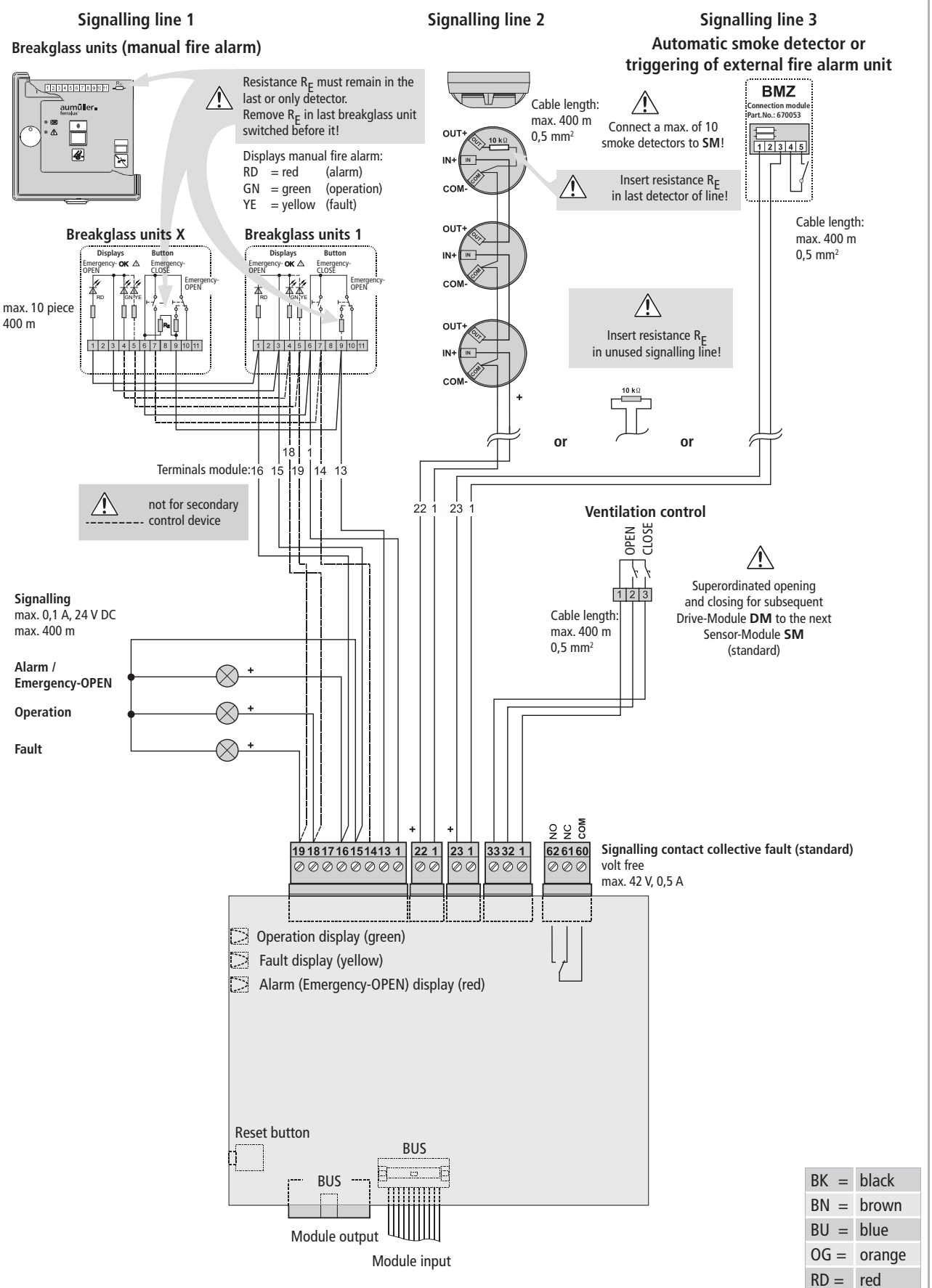
**Take the module into operation:**
- Integrated module into the internal **BUS**.
- Position behind Power-Module **PM** / Power-Module-Extension **PME** / Control-Module **CM** freely selectable.
- Fixing on 35-mm mounting rail.

Warranty claims require proper and professional assembly, installation and maintenance in accordance with national regulations and manufacturer's instructions as to SHEV Control Unit EMB 8000+.
Always disconnect the system from power supply and back-up battery voltage prior to any installation or modification work on the control unit.

Strictly observe the information given in the SHEV Control Unit EMB 8000+ description when mounting Sensor-Module **SM**.
Setting of functions requires the software of the control unit's manufacturer.
Keep this instruction over the lifetime of the control unit.

# CONNECTION: SENSOR-MODULE SM

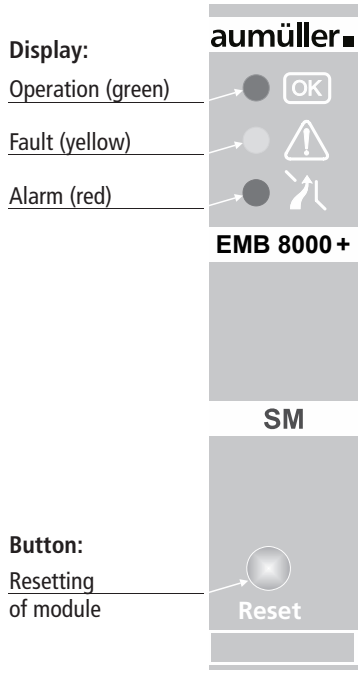
## Connection: Sensor-Module SM



## Indicator and Control elements

| Simple LED states | | |
|---|---|---|
| **LED** | **Reaction** | **Cause** |
| OK operation (green) | ON | Normal operating state |
| | OFF | Fault present |
| | fast flashing | Modbus-communication fault |
| ⚠ fault (yellow) | ON | Manual fire alarm fault |
| | OFF | Not a fault |
| | slow flashing | Smoke detector line 1 is fault |
| | fast flashing | Smoke detector line 2 is fault |
| | flash | System in battery mode |
| alarm (red) | ON | Alarm or Emergency-OPEN |
| | OFF | Normal operating state |
| | slow flashing | Smoke detector still active after Emergency-CLOSE |
| | fast flashing | Manual fire alarm still triggered after Emergency-CLOSE |

### Display: Sensor-Module SM




## Troublshooting and Repair

All functions and system components that are important for the SHEVS operation are constantly monitored for faults. A fault indication signals the type of fault and, respectively, possible errors when connecting system components during commissioning of the Control Unit.

| Fault: Sensor-Module SM | | |
|---|---|---|
| **Triggering of alarm (Emergency OPEN)** | | **Cause / possible solution** |
| red<br>Displays also valid for external LEDs (breakglass unit) | ▬▬▬ | Emergency-OPEN has triggered |
| red<br>Displays also valid for external LEDs (breakglass unit) | ▪ ▪ ▪ | Smoke detector still active after Emergency-CLOSE |
| red<br>Displays also valid for external LEDs (breakglass unit) | ▮▮▮▮▮▮▮▮▮▮▮▮▮ | Manual alarm still triggered after Emergency-CLOSE |
| **Fault** | | **Cause / possible solution** |
| OK green | no signal | and |
| ⚠ yellow | ▬▬▬ | Fault signalling line 1 (breakglass unit) |
| ⚠ yellow | ▬ ▬ | Fault signalling line 2 (automatic detector or external fire alarm) |
| ⚠ yellow | ▮▮▮▮▮▮▮▮▮▮▮▮▮ | Fault signalling line 3 (automatic detector or external fire alarm) |
| ⚠ yellow | ▮ ▮ | System in battery operation |
| OK green | | No correct **BUS** connection ( ☞ check voltage supply) or Fault at Control-Module **CM** ( ☞ check voltage supply) |

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