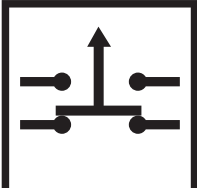

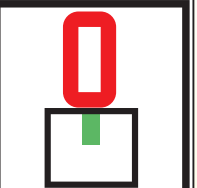

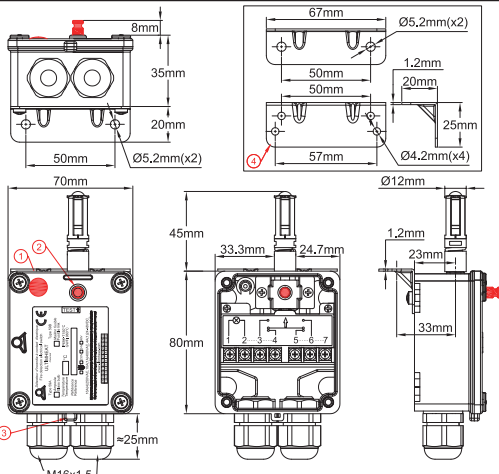
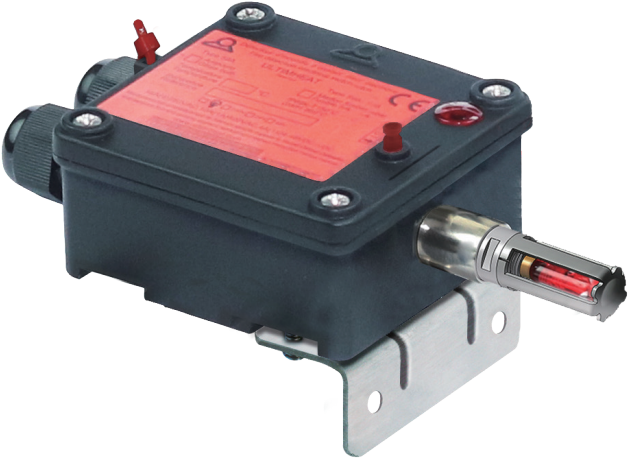


# Electric fire detection switches with thermal glass bulb for air duct

P1

Double break SPDT	Rating	Manual reset	Air duct mounting		Models
	16A 250V 10A 400V 4A 24V DC				<b>59A8</b>
					
<p>1: Pilot light (option) 2: Test button (option) 3: security seal hole 4: Mounting bracket (removable)</p>					

## Applications

Fire detection in air ducts. This device operates electrical contacts for remote alarm and simultaneous control of electrical servo-controls such as electric cylinders, electric motors or solenoids, for opening or closing air conditioning dampers.

## Main Features

- Thermal sensitive part:** Thermo-breakable bulb Operation: The break of the bulb activates, by means of a pusher, an electric switch.
- Mounting:** Enclosure with stainless steel bracket for mounting on air duct wall, with sensing element located inside the air flow.
- Electrical contact:** Double snap action contact with two independent circuits, one normally open and the other normally closed. Total contact spacing is larger than 3mm, providing full disconnection upon IEC standards.
- Electrical rating:** 16A (4A) 250VAC; 10A (1A) 400VAC; 4A (100mA) 24 and 48VDC. Compatible with electric door magnets in 24V and 48V, 500 N.  
(Version with gold plated contacts for low level electronic circuits available on request).
- Enclosure:** 70 x 80 x 40mm in UV resistant black PA66, with captive lid screws in stainless steel.
- Flammability: UL94V0 and GWFI 960°C.
  - Deformation temperature under load: 225°C. (ISO 75-2, 1.8 MPa).
  - Ambient temperature class T150°C.
  - Resistance to corrosion better than 1000 hours in salt spray fog at 5%.
  - Ingress resistance: The highest class, IP69K (washable at high pressure hot water cleaner).
  - Impact resistance: The highest class, IK10 (except stainless steel support for temperature-sensitive parts and glass bulbs).
- Electrical connection:** On screw terminal block, 7 terminals 2.5mm<sup>2</sup>. Shipped with a 3-way shunt and a 2-way shunt, allowing different contact and connection arrangement solutions. Cable outlet by two M16 cable glands.
- Maintenance:**
- Easy replacement of the temperature-sensitive part.
  - A test button (option) accessible from the outside allows to check instantly the operation of the switch without any disassembly or opening.

Because of permanent improvement of our products, drawings, descriptions, features used on these data sheets are for guidance only and can be modified without prior advice

# Electric fire detection switches with thermal glass bulb for air duct

P2

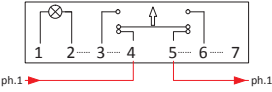
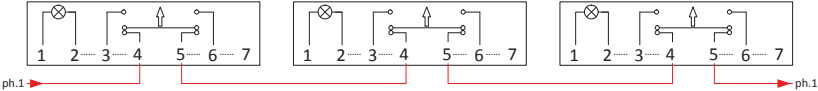
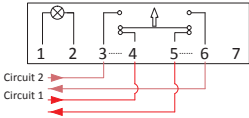
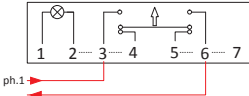
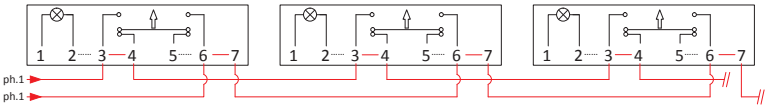
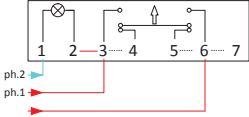
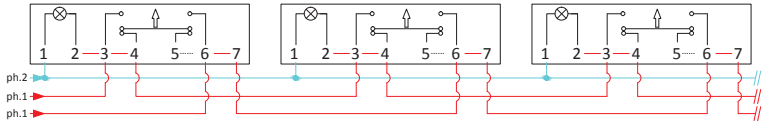
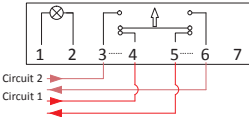
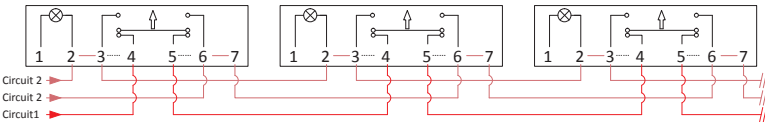
- The enclosure has holes for the installation of seals preventing unauthorized opening.

**Visualization:** Optional 230 V, 24V or 48V pilot light. This pilot light can be used to visualize the presence of voltage on the line, a critical parameter for “contact closes on fire” detection systems.

**Other options:** Customization and customer labelling. Output by a single cable gland.

## Wiring diagrams

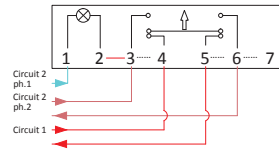
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<p>Contact opens when the device triggers.</p>	
<p>Wiring in serial of devices whose contact opens when the device triggers.</p>	
<p>Contact opens circuit 1 when the device triggers, and closes circuit 2 for alarm. <b>The 2 circuits may have different voltages.</b></p>	
<p>Contact closes when the device triggers.</p>	
<p>Wiring in serial of devices whose contact closes when the device triggers.</p>	
<p>Contact closes when the device triggers, with pilot light showing that power supply is on.</p>	
<p>Connection in parallel of many devices with contact closes when the device triggers, with pilot light showing that power supply is on.</p>	
<p>Serial connection of open on trigger contact (Circuit 1) and in parallel of close on trigger contact (Circuit 2). <b>The 2 circuits may have different voltages.</b></p>	
<p>Connection of many devices in serial of open on trigger contacts (Circuit 1) and in parallel of close on trigger contacts (Circuit 2). <b>The 2 circuits may have different voltages.</b></p>	

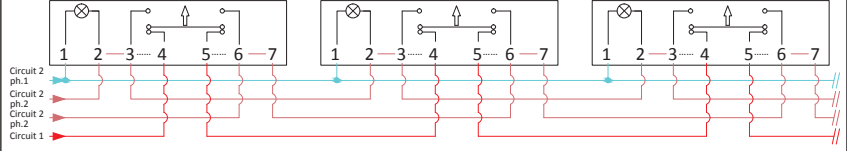
# Electric fire detection switches with thermal glass bulb for air duct

P3

Serial connection of open on trigger contact (Circuit 1) and in parallel of close on trigger contact (Circuit 2), with pilot light on circuit 2 showing that power supply is on. The 2 circuits may have different voltages.



Connection of many devices in serial of open on trigger contacts (Circuit 1) and in parallel of close on trigger contacts (Circuit 2), with pilot light on circuit 2 showing that power supply is on. (The 2 circuits may have different voltages).



## Main references ( type 59A8 )

Operating temperature	Reference without test button, without pilot light	Reference without test button, with 230V pilot light*	Reference with test button, without pilot light	Reference with test button and 230V pilot light**
Without thermal bulb	59A80PS1630003C	59A81PS1630003C	59A8AP2S1630003C	59A8BP2S1630003C
57°C (135°F), orange color bulb	59A80PS1630573C	59A81PS1630573C	59A8AP2S1630573C	59A8BP2S1630573C
68°C (155°F) red color bulb	59A80PS1630683C	59A81PS1630683C	59A8AP2S1630683C	59A8BP2S1630683C
79°C (174°F) yellow color bulb	59A80PS1630793C	59A81PS1630793C	59A8AP2S1630793C	59A8BP2S1630793C
93°C (199°F) green color bulb	59A80PS1630933C	59A81PS1630933C	59A8AP2S1630933C	59A8BP2S1630933C
141°C (286°F) blue color bulb	59A80PS1631413C	59A81PS1631413C	59A8AP2S1631413C	59A8BP2S1631413C

- \* - For models without test button with 24V pilot light, replace 1P by 2P in the reference
- For models without test button with 48V pilot light, replace 1P by 3P in the reference
- \*\* - For models with test button with 24V pilot light, replace BP by CP in the reference
- For models with test button with 48V pilot light, replace BP by DP in the reference

## Spare parts references\*

Thermal glass bulbs for 59A7 (Packing units 50 and 250p)	
57°C 68°C 79°C 93°C 141°C	
	57°C (135°F) 6658GBB057
	68°C (155°F) 6658GBB068
	79°C (174°F) 6658GBB079
	93°C (199°F) 6658GBB093
	141°C (286°F) 6658GBB141

\* Maintenance or replacement of thermal bulbs must be made by specially trained personnel and in accordance with our technical instructions.



Page (.pdf)



Drawing 2D (.dwg)



Drawing 3D (.stp)