

OUTPUT MODULE, MONITORED - BSB-310A

AutoSafe Interactive Fire Detection System Product Datasheet

Features

- Provides four output circuits monitored for break and short-circuiting
- Easily plugged onto each other or onto other I/O modules on a standard mounting rail
- Automatic addressing of the I/O module
- Designed to meet EN 54 requirements, and conforms to CE standards
- Galvanically isolated power to activated outputs

Description / Application

The output module BSB-310A provides four monitored output circuits for alarm sounders, Fire Alarm Routing Equipment (FARE), Fault Warning Routing Equipment (FWRE), Fire Protection Equipment (FPE) and other output functions.

The module is easily plugged onto a mounting rail inside the Fire Alarm Control Panel or the Controller.

Each alarm output has programmable signal patterns. The standard frequency is 0,5 Hz.

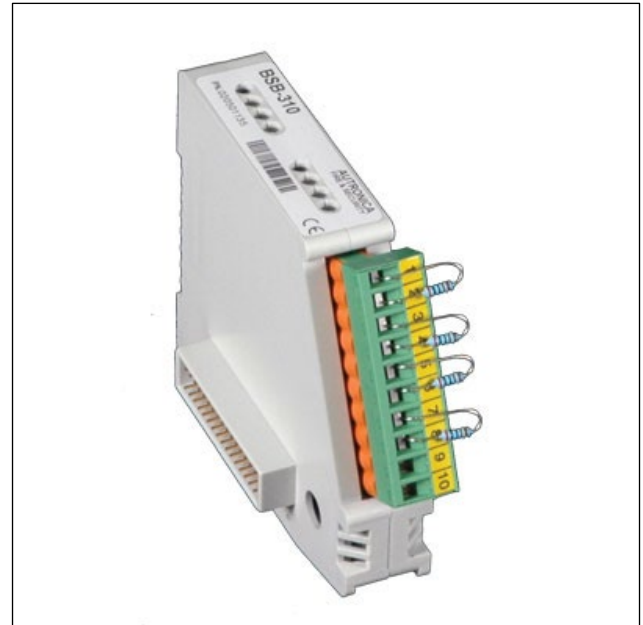
Each output is fused with a 1A self-resetting fuse.

External 24V DC power must be supplied to screw terminal 9 and 10 for each module.

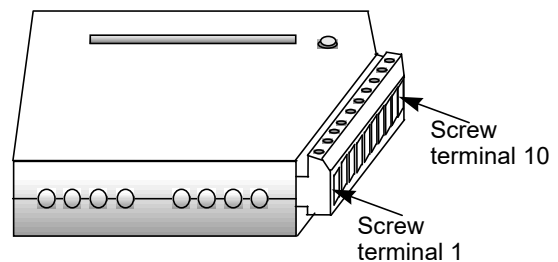
The internal power and the external power supply are galvanically isolated. An activated relay output draws current from the external 24V.

If BSB-310A is used as a spare part to replace an existing BSB-310 module, 24 VDC power must be supplied from the BSS-310 module.

The module will automatically detect its own address; no dipswitch or jumper settings are required.



Front view when mounted on rail



Screw terminal no.	Signal
1	Output AK1- 0V
2	Output AK1+ (+24V)
3	Output AK2- 0V
4	Output AK2+ (+24V)
5	Output AK3- 0V
6	Output AK3+ (+24V)
7	Output AK4- 0V
8	Output AK4+ (+24V)
9	External 24V
10	External 0V

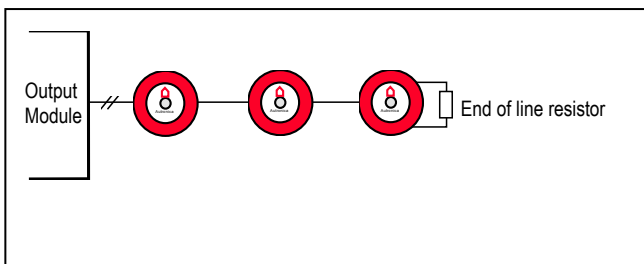
The output AK4 is configurable to be used as a monitored Fault Warning Routing Equipment (FWRE) output (an output which routes a fault warning signal to a fault warning signal receiving station).



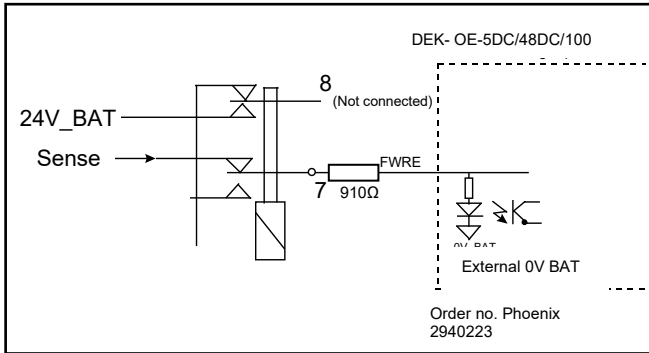
Product Name	Part number	Description
BSB-310A	116-BSB-310A	Output module, monitored

Technical specifications	
Dimensions (mm)	95x89x32
Weight (g)	95,5
Materials	Plastic encapsulation and PCB
Operating temperature	-25°C to +70°C
Storage temperature	-40°C to +85°C
Humidity	Up to 95% non-condensing
Electrical connection	Internal system: plug in connection Outputs: pluggable (maximum cable dimension 2,5mm ²)
Mounting	Onto a standard 35mm TS mounting rail
Control outputs: four pieces monitored	Voltage: 24 VDC Maximum load: 1A each output 3A total Derated load: Temperature range 40°C to 50°C: 0,8A per output Temperature > 50°C: 0,6A per output Maximum length of cable connected to output: 50m
Maximum inrush current	3 A
External power	18 to 32 VDC
End of line resistor	2000 Ohm
Internal current consumption	24VREG, 15mA
Output monitoring – short-circuit	< 200 Ohm
Output monitoring – normal	1000 - 2500 Ohm
Output monitoring – break	> 3000 Ohm
Galvanic isolation strength	50V
Dimensions (mm)	95x89x32

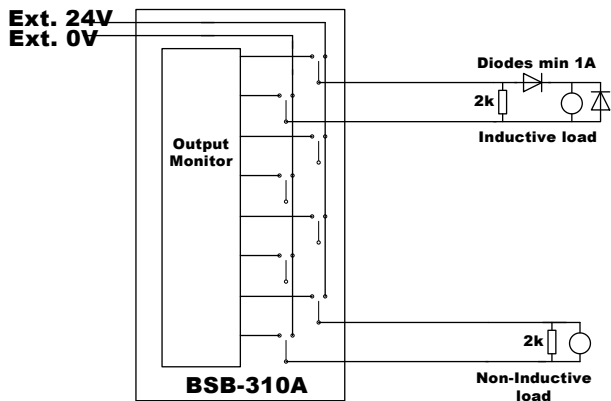
Installation overview



Schematics - Fault Warning Routing Equipment (FWRE) output, output 4 only



NOTE
FWRE: If external power is used, connect the external and internal 0V wires together.



NOTE
At inductive load, a protection diode shall be used.

The 24V supply to the relays is monitored. If power is missing, the fault message “Open circuit” will be indicated for all the BSB-310 outputs on the panel display.