

BS-100 loop interface - BSD-330

AutoSafe interactive detection system
Product datasheet

Features

- Interface between the AutoSafe interactive fire detection system and BS-100 loop units
- Easily plugged onto other I/O modules on a standard mounting rail
- Automatic addressing
- Designed to meet EN 54 requirements, and conforms to CE standards

Description

The BS-100 loop interface, BSD-330 is used as an interface between the AutoSafe detector loop protocol and BS-100 loop protocol. The interface makes it possible to connect BS-panel type detectors to the AutoSafe system, including detectors used in systems BS-3, BS-30, BS-60, BS-80, BS-90 and BS-100.

The loop interface is easily plugged onto a mounting rail inside a fire alarm control panel/controller.

Indicators

The module provides eight LEDs (see drawing on the right).

The upper four LEDs represent the following:

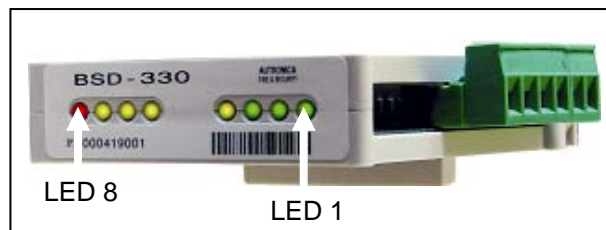
- | | |
|-----------------|---|
| LED 1 (green): | Power (blinking light) |
| LED 2 (green): | ASSP communication* |
| LED 3 (green): | AI_Com+ com** |
| LED 4 (yellow): | Error (blinking light in the event of an error) |

*ASSP: Autronica standard short protocol (communication protocol for BS-100 loop communication)

** AI_Com+ com: AutoSafe loop communication (communication protocol for the AutoSafe loop communication)

The lower four LEDs represent the following:

- | | |
|-----------------|------------------|
| LED 5 (yellow): | Disables on loop |
| LED 6 (yellow): | Fault |
| LED 7 (yellow): | Prealarm |
| LED 8 (red): | Alarm |



Capacity / Limitations

In cases where one, two or three BS-100 loops are to be connected to an AutoSafe panel, the power module BSS-310 has enough power to feed the BSD-330 modules. If more than three modules are used, BSS-310A must be installed instead of BSS-310; this allows up to eight BSD-330 modules to be installed in the panel.

Of the BS-100 DYFI functions, the following are not supported by this module: pollution algorithm, address control, calculation of performance factor, "smouldering fire" algorithm, printout of detector sensitivity, printout of detector sensitivity beyond limit.

BK-50 functionality is not supported.

Technical specifications	
Dimensions (mm)	95 x 89 x 32 (DxHxW)
Weight (g)	81
Materials	Plastic cover
Mounting	Onto a standard 35mm mounting rail inside the fire alarm control panel or controller
Electrical connection	Internal system: plug in connection Detector loop: plug in screw terminals (maximum cable dimension 2.5mm ²)
Operating temperature range	-5 to +55 °C
Storage temperature range	-10 to +85 °C
Humidity	5 % - 95 %
EMC requirements	EN 55022 EN 55024 EN 54
Loop output voltage	14 VDC ± 0.2 V
Maximum current output to loop (14V, BS-100 loop)	160 mA (short circuit monitored) Fault message at 60 mA (level 1) Fault message at 100 mA (level 2)
Internal current consumption from internal regulated 24VDC	Module, idle 12mA Answer pulses: approx. 40mA Max. 99 detectors: approx. 30mA (number of detectors x 0,3mA) <hr/> Max. with 99 detectors: approx. 82mA
Internal current consumption from internal 5VDC	38 mA
Max. loop resistance	30 Ohm
Compatibility	AutroSafe Software Version 3.5.0, or later version
Maximum number of addresses on BS-100 loops	99
Detector loop output control	One transistor output (open collector) 100mA. Controlled by all detectors on the loop.

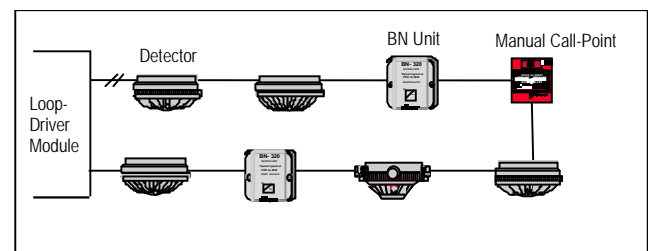
Part number	Description
116-BSD-330	BS-100 loop interface

Termination

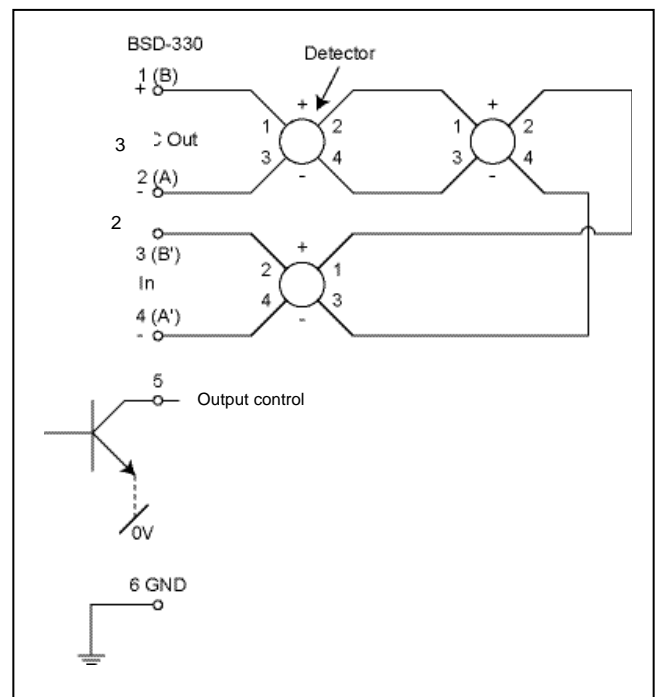
The BSD-330 has a plug-in terminal block, which takes up to 2.5mm² cables.

Screw terminal no.	Signal
1	Positive loop output (B)
2	Positive loop return (B')
3	Negative loop output (A)
4	Negative loop return (A')
5	Output control (100mA)
6	GND

Installation overview



Schematics - detector loop



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