

Installation Instruction Model BDS051A Addressable Smoke Detector

These instructions are written in accordance with the installation guidelines of NFPA 72, National Fire Alarm Code, The installation of Fire Alarm Systems.

Features

- Comply with UL268.
- High reliability and stability through new, high-quality optoelectronic sensor system and fully automatic manufacturing and stringent inspection processes.
- Homogenous response behaviour across a wide smoke spectrum, ranging from light-coloured to dark smoke.
- High resistance to electromagnetic interference achieved through specially designed circuit.
- High immunity to contamination, temperature fluctuations, humidity and corrosion.

Application

- Suited to early detection of smoldering fire in building and can also quickly detects flaming fires that produce smoke and can send corresponding signal to control unit.
- Can be connected to BC80 series control units by BDS000A base via Detection Bus.
- 2-wire detection-bus (polarity free) allowing transmission distance up to 1,000m (twisted pair wire 18 AWG; evenly distributed devices).
- Up to 127 detectors on each line.

Technical Specification

Items	Value
Operating Voltage	18~26VDC
Quiescent Current	0.8mA
Alarm Current	1.0mA
Max. Quiescent Current	3.5mA
Max. Alarm Current	3.5mA
Electromag. Compatibility	20V/m
Sensitivity Range	0.77-3.24%/ft

Installation

Detector placement should follow the drawings provided or approved by Siemens Building Technologies or by its authorized distributors. This is extremely important! The detector placements shown on these drawings were chosen after a careful evaluation of all facets of the protected area, such as air currents, temperature, humidity, pressure, the nature of the fire load and type of ceiling etc. When drawings are not available, refer to relevant items of NFPA 72.

Detector base for SIEMENS Model BDS051A should be connected as shown in Figure 2.

Figure 1
BDS051A



To install detector head:

- Set the detector address by Dip-Switch according to drawings provided or approved by Siemens Building Technologies or by its authorized distributors.
- Align the LED in detector with the positioning symbol on base and insert detector into base.
- Rotate the detector clockwise until it stops.

To remove detector head:

- Rotate the detector counter clockwise until stop is reached.
- Pull detector out of base.

Note:

- Do not install detector until all construction is completed.
- It is recommended wiring with twisted-pairs from base to base, the wiring requirement is 18 AWG to 14 AWG.
- Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

Operation

LED indicator

Status	Condition
Flash	Alarm
Off	Normal supervisory operation

Maintenance and Storage

- Cleaning intervals should be geared to the individual environment.
- Do not store detectors where it can be contaminated by dirt, dust or humidity. It should be stored with sealed packaging.

Order Information

Type	Description	Stock Code
BDS051A	Addressable smoke detector	A5Q00016747
BDS000A	Base for addressable detector	A5Q00016958

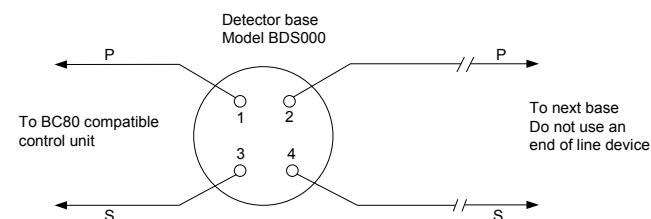


Figure 2 Installation and wiring diagram