Fire Detection Control Panel
BC216-1

- **For application in small and mid-sized systems**
- **Analogue ringbus technology with unshielded detector cabling**
- **Addressable conventional technology**
- **Menu-driven operation**
- **Easy commissioning through AUTO setup**
- **32–bit multiprocessor system**
- **EN 54/VdS-certified**

Fire is a permanent threat to life and property. Therefore, immediate response to a fire is imperative. The main objective of the Fire Detection Control Panel Series BC216 is to alarm and to react in time and, consequently, save lives and protect property. For decades LST have focused their aims to undertaking unrivaled efforts in order to realize new innovations in the security area. Research, development and production are located within LST premises, thus guaranteeing flexible and reliable individual solutions.

Using a 32-bit multiprocessor system, the Fire Detection Control Panel Series BC216 ensures topmost efficiency and speed – prerequisites for saving lives and minimizing damage to property.

Description

The Fire Detection Control Panel BC216-1 is designed as a modular system. According to your system's concept and size, it can be expanded individually.

The control panel provides two slots for the connection of function modules (Conventional Detector Interface GIF8-1, Loop Interface LIF64-1 or LIF128-1) to which a maximum of 16 detector lines in addressable conventional technology or a maximum of two ADM loops or a combination of the both can be connected. In this way, you obtain the highest degree of flexibility for virtually any task.

The ADM loop principle offers intelligent analogue ringbus technology with bi-directional data transfer. Each loop provides for the software-aided administration of up to 318 physical address points in a maximum of 144 detector zones. Addressable conventional technology allows for the connection of automatic and non-automatic fire detectors as well as the unambiguous identification of the activated detector in the event of an alarm.

Depending on the respective system, a Fire Brigade Interface FWI2-1, a Fire Brigade Interface Additional Board FWZ2-1, an LED-Display Field LAB48 as well as further optional componentries can be installed in addition.

Easy parameterisation on the control panel's display and operating unit, via a PC keyboard, or by means of a PC software enables you to tailor the control panel to your individual requirements.

VdS

CE

0786–CPD–20866

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Clear Concept

The Fire Detection Control Panel BC216-1 constitutes the basic component of Series BC216 and has been designed for use in small and mid-sized systems. Depending on its configuration, it provides the following features:

- The Conventional Detector Interface GIF8-1 permits the connection of automatic detectors and manual call points in conventional technology as well as special detectors with contact output. Individual detector identification can be achieved by means of an optional address module.
- Detectors and modules in ADM loop technology can be connected to the Loop Interfaces LIF64-1 and LIF128-1. Depending on the parameterisation, either the Apollo/Discovery protocol or the System Sensor/200 protocol or, in case of the LIF128-1, the Labor Strauss/700 protocol is used to achieve bi-directional data transfer.
- The BC216-1 is able to control up to 400 detectors or modules, 144 detector zones, 128 actuations, 10 transmission devices and 99 alarming devices.
- Since the BC216-1 is compatible to LST fire detection control panels of previous generations, the exchange or expansion of existing systems in conventional technology or ADM loop technology is possible. The existing detector installation can be used without changes.
- The optional Fire Brigade Interface FWI2-1 serves for the connection of two independent transmitting devices for a direct interconnection to a designated alarm respondent (e.g., the fire brigade) as well as for the connection of a country-specific fire brigade control unit. By using the Fire Brigade Interface Additional Board FWZ2-1, a line supervision for both of the transmitting devices is accomplished.
- Customizable outputs and logical combinations of detectors and detector zones for the activation of external controls and alarming devices facilitate maximum flexibility. Thus, no additional expenses arise for external relays, logic gates or timers. Thanks to the wide range of parameterisation possibilities, individual requirements even under the most difficult ambient conditions can be combined into a reasonable fire protection strategy.
- By integrating input and output modules on any position in the loop you can realize enablements or disablements as well as control tasks in your system without having to care for additional wires.
- The free combination of detectors and modules into logic sectors allows for the joint operation of defined parts of the system even beyond loop limits. Up to 199 sectors can be controlled by the BC216-1.
- The use of unshielded loop cables allows for cost-saving and uncomplicated installation as well as for the possibility of reusing the existing cabling.
- The LC text display shows events with the full information such as floor, room identification as well as date and time. This allows for quick and targeted reaction in the event of a fire as well as for easy maintenance.
- An event memory allows for the display of the latest 500 events at any time, including all required information. Thus, all system conditions and user operations that occurred are documented in a clearly laid out way.
- At a central processing board failure, the diversified redundancy concept ensures secure alarm recognition.
- The processor-monitored power supply ensures permanent surveillance and charging of the batteries. This way, even during a mains power failure the untroubled and uninterrupted operation (for more than 72 hours depending on the design) is guaranteed.
- Three hierarchized authorization levels for operation and parameterisation facilitate a high degree of security against unauthorized access.
- The control panel is easily operated menu-driven via the display and operating field. Clear instructions on the display guide the user during commissioning, operation and maintenance.
- The parameter data can be entered either on the control panel via the display and operating field or via a PC keyboard or, in a more comfortable way, created on a PC by means of the Parameter Setup Software PARSOFT and loaded into the control panel. Thus, a quick and efficient transfer of the system configuration into the control panel is guaranteed.
- AUTO setup facilitates parameterisation when the control panel is commissioned or expanded and thus helps to save time.
- After commissioning, the panel's basic functions immediately make it ready for operation. A monitored siren output and dry relay contacts for alarm and fault are available by default.

The flat wall mount cabinet allows for an easy mounting in virtually any place of the building. Thanks to its modern, ageless design, architectural requirements and demands of the respective regulations are ideally combined. The compact design allows for the accommodation of the function modules, the auxiliary modules and batteries up to 22Ah apart from the central processing board in the standard case. If a higher battery capacity is needed, an auxiliary case of the same design is available. The BC216-1 thus stands for modularity and easy expansion.

This product complies with all relevant standards of EN 54 and is VdS-certified. In addition, the product also holds several country-specific approvals and certificates. LST's high quality level is secured by a permanently monitored quality management system certified to ISO 9001.

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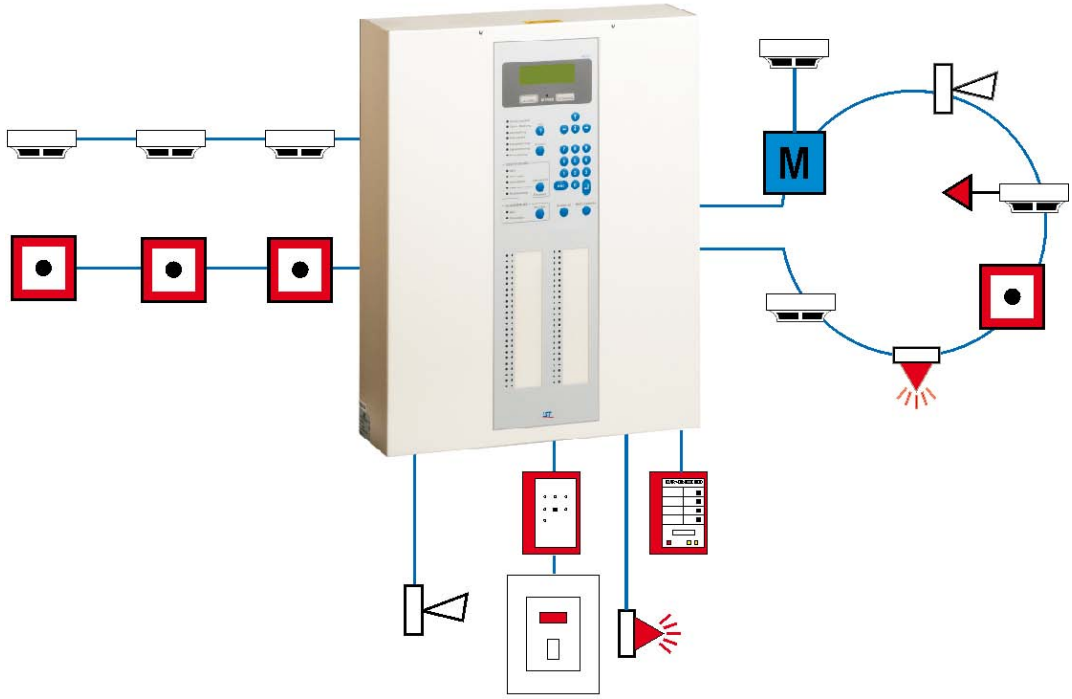
Permanent Connection

A variety of peripheral devices can be connected to the Fire Detection Control Panel BC216-1:

- Fire brigade key safe
- Fire brigade control unit
- Acoustic and optical signaling devices
- External protocol printer
- Remote display and operating panels
- Remote indication unit
- Actuations
- Electronic monitoring system
- Transmitting device for the actuation of pagers via ESPA protocol
- Modules for remote parameterisation and remote maintenance via computer network, modem or GSM connection
- Transmitter module for the transmission of messages via SMS or e-mail

– and much more.



Network Expansion

By upgrading the control panel, the BC216-1 can be integrated into a Global Security System network (GSSnet): the BCnet216 is a comprehensive control panel network that is made up of sectional control panels Series BC216 and works as an entity beyond the boundaries of the individual loops and sectional control panels. The system is designed modularly and can be expanded nearly without limitation, according to future demands.

The maximum size of a BCnet216 comprises 127 network members, 9700 detector zones, 9700 actuations, 999 alarming devices as well as 99 transmitting devices.

Extinguishing Control System

If required, the BC216-1 can be easily expanded to an Extinguishing Control Panel LC216-1 according to EN 12094-1. The panel can control up to 8 flooding zones in one extinguishing system, without hardware redundancy.
The function of the extinguishing control panel is fully integrated into the Fire Detection Control Panel BC216-1, a combined operation is therefore possible.
The LC216-1 is certified to EN 54-2, EN 54-4, EN 12094-1 and VdS as a pure extinguishing control panel and as a combined fire detection and extinguishing control panel.

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Specifications

Mains voltage	230VAC +10/-20%, 47 to 63Hz
Connection power	75VA
Output voltage	typ. 27.6VDC
Output current of power supply	max. 2.3A
Own current consumption at 24V	typ. 90mA (without optional componentries)
Ambient temperature	-5°C to +50°C
Dimensions W × H × D	420 × 520 × 120 (mm)
Colour	grey-white, RAL 9002
Weight without accumulator	approx. 7.2kg
Approvals (EN 54-2, EN 54-4)	VdS G201017 0786-CPD-20866 FT 14/147/x/99 (Austria),
Order name	Fire Detection Control Panel BC216-1

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