For decades, security systems by Labor Strauss have been associated with innovative technology and highest quality, serving safety. All steps of the value-adding process – including market analysis, development, manufacturing, distribution and customer service – are united in one company. The products of the Austrian family business ensure safety – in many parts of Europe and the world.

MEP – the safety specialists. Apart from the development and manufacturing of innovative electromechanical components – such as manual call points, fire brigade control units and sabotage-monitored key safes – the company offers complete solutions around the topic „Fire Protection".

Fire Detection Control Panels
Series BC600

Modular. Flexible. Trendsetting.

LST

MEP

LABOR STRAUSS SICHERUNGSANLAGENBAU GMBH
office@lst.at · www.laborstrauss.com
  WIEN · GRAZ · INNSBRUCK

LABOR STRAUSS SICHERHEITSSYSTEME GMBH
office@laborstrauss.de · www.laborstrauss.com
  MÖNCHENGLADBACH

LABOR STRAUSS SICHERHEITSSYSTEME NORD GMBH
office@lst-nord.de · www.laborstrauss.com
  HAMBURG

LABOR STRAUSS SICHERHEITSSYSTEME SÜD GMBH
office@lst-sued.de · www.laborstrauss.com
  AUGSBURG

MEP-GEFAHRENMELDETECHNIK GMBH
office@mep-pockau.de · www.laborstrauss.com
  POCKAU-LENGEFELD

THE PROTECTION OF PEOPLE AND PROPERTY IS THE GOAL

Today, just like in the past, safety is the most basic need of people. A fire involves a considerable potential danger, as it threatens the safety of people and the integrity of material goods. Therefore, if a fire breaks out, an immediate and targeted reaction is required.

A fire detection system's contribution to the protection of people and property can be crucial. Here the fire detection control panel has the main task: to process the data of the connected fire detectors and to react to dangerous events. Depending on the system configuration, signalling devices or actuations are activated, extinguishing systems are released or alarm messages are forwarded to a designated alarm respondent.

However, a high-quality fire detection control panel has many more tasks than fulfilling the standard-compliant basic functions. A thoughtful control panel structure is crucial for time-saving commissioning and easy maintenance. Functions that conform to

the market and which go far beyond the applicable standards, play an important role in the successful implementation of the requirements. By integrating numerous additional functions into the hardware and software of the control panel, the need of external devices is reduced, which constitutes an essential factor for trimming costs.

The ease-of-use that is achieved through self-explanatory menu navigation as well as the clearly arranged, comprehensible event indication facilitate the handling of the entire fire detection system in dangerous situations just as easy as in the normal condition.

Because of the wealth of functions and system components, the control panel can be used in systems of any size and complexity. The very easy operation and application provide the prerequisites for the successful usage in order to protect people and preserve property.

Cutting-edge microelectronics

The development of the new Fire Detection Control Panel Series BC600 is based on more than 50 years of experience in building safety technology. Electronics based on state-of-the-art technologies, powerful microprocessors and a thoughtful mechanical design provide completely new possibilities and at the same time offer a high degree of reliability. Well-tried software routines and integrated self tests additionally guarantee a high operational safety.

The control panel is manufactured completely by Labor Strauss. Highly skilled employees, stringent test methods and a mature quality management system form the basis for high-grade products – 100% quality from Austria.

Flexibility and expandability thanks to modular structure

The structure of the fire detection control panel follows a modular concept, and therefore it can be flexibly adapted to the requirements of the application. The componentries – from the central processor to the loop interface as well as the serial interface – are designed as plug-in units and are connected via a powerful bus system.

The central processor can serve a total of 54 function modules – including up to 20 loop interfaces.

Therefore, up to 20 detector loops can be connected to a Fire Detection Control Panel Series BC600, which considerably reduces the investment cost per loop. Apart from loop interfaces, the control panel can be equipped with conventional detector interfaces, modules with monitored inputs and outputs, interfaces and a variety of additional devices.

A redundant design ensures highest safety

The redundant structure of the Fire Detection Control Panel Series BC600 ensures a high degree of failure safety. A basic principle of the software architecture is its redundancy – in the event of a malfunction of a software component, the alarm processing of the control panel is still ensured. Thanks to the freely scaleable hardware redundancy, all essential control panel components can be implemented redundantly if requested. As a result, the control panel meets even the highest demands of especially critical applications.

Certified quality

The Fire Detection Control Panels Series BC600 have been tested and certified by VdS, as required by the Construction Products Directive CPD, according to the standard EN 54 and according to the VdS guidelines.

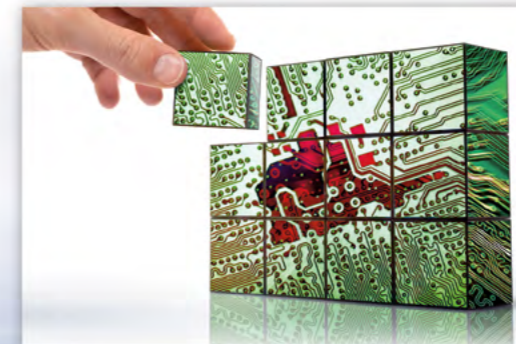Successfully protected by LST building safety systems for years:

Klosterneuburg Monastery, Lower Austria

Industriepark Höchst, Frankfurt, Germany

Oosterschelde Storm Surge Barrier,   The Netherlands

Building Safety.   Building Security.

A GOOD OVERVIEW
IN EVERY SITUATION

The large 5.7" 1/4 VGA graphics display provides comprehensive information on all conditions of the fire detection system. The incoming events are sorted according to the type of message and are listed in 6 main menu windows. Depending on the length of the message, up to 10 entries can be shown on the display at the same time. Graphic symbols next to each message and the switching between overview and detailed indication improve the comprehensibility. By parameterising optional additional information, danger messages can be supplemented with further help texts. These additional texts can also be entered or edited directly on the control panel without using a PC.

The most important operating conditions of the control panel, such as alarm, fault or disablement, are indicated by means of status displays. For the system-specific individual lettering of all light emitting diodes, labelling strips are used.

Easy operation through intuitive navigation

The self-explanatory user guidance allows easy operation of the control panel. In this way the safe operation in case of danger is ensured and the training costs are reduced. For the worldwide use of the control panel, the menu texts are included in several languages. The desired language can be conveniently changed during operation.

Via 5 function keys with situation-dependent function, important menus and frequent functions can be selected directly. The 4 buttons of the functional groups are freely parameterisable and therefore allow system-specific adaptation.

Specific access rights for different users

For the selective enablement of operations and parameterisation, the Fire Detection Control Panel Series BC600 is provided with an extensive user rights management. In this way, specific access rights of up to 256 different users, which can be combined in 32 user groups, are managed.

Parameterisable logic

The thoughtful combination logic makes the parameterisation of outputs easier, and as a result, external logic components are not needed. Not only detectors and detector zones, but any events can be combined with each other in order to activate, reset or disable actuations or alarming devices. With the optional definition of flags, several outputs can be provided with the same logic function in an easy way. Therefore, the repeated parameterisation of similar combinations is not necessary.

Programmable timers with daily or weekly program and public holiday logic facilitate the automatic control of time-dependent functions. Thanks to definable sectors, different system parts can be jointly operated in an easy way, using a single switching command. As a result, the time-consuming selection of the individual system components used for operation is avoided.

Convenient commissioning

By means of the graphic PC software PARSOFT, the Fire Detection Control Panel Series BC600 can be configured in an easy way – even if the PC is not connected to the control panel. The intuitive user interface of PARSOFT keeps the required setup time as well as the training costs low.

To upload the setup or an update of the control panel firmware, the PC is simply connected to the integrated USB interface of the control panel and the transfer is started. For maintenance purposes, the event memory as well as the current parameterisation of the control panel can be read out with PARSOFT.

Using the AUTO-setup function, the componentries that are installed in the control panel are configured and all connected loop components are automatically parameterised and addressed.

User friendly service and maintenance

The maintenance of the BC600 is especially convenient. The „hot plug & play" function allows insertion and removal of componentries without switching off the power supply. Since this does not interrupt the ongoing operation of the system, outages are avoided. There is no need for fire watches and the automatic closing of the fire doors is omitted.

The central processor automatically detects a newly installed componentry and puts it into operation immediately. Thanks to the use of pluggable screw terminals, the exchange of componentries is made much easier and wiring faults are avoided.

Status displays

5,7" graphics display

5 function keys

Navigation keys

Alphanumeric keypad

Status displays

Functional groups
• Transmission

• Actuation

• Auxiliary

• Alarming

THE PRODUCT FAMILY SERIES BC600

The product range of the Fire Detection Control Panels Series BC600 comprises a vast number of control panel versions, function modules, expansions and mechanical accessories. For each application and task, very well matched products are available. The high integration of the individual components allows the especially compact design of the control panel. At the same time, the modular concept of the control panel and the generous extension possibilities ensure future-proof use if additions and changes are desired later.

Various housing versions

The Fire Detection Control Panel Series BC600 is offered in different mechanical versions. The wall-mount cabinet is available in 2 different sizes and has been designed for standard applications. The 19" version in low profile design is intended for installation in a rack or in a pivoting frame. For especially extensive applications there is a modular version for integration into a switch cabinet. Up to 4 power units with an output current of 2A, 4A or 8A each can be installed in a fire detection control panel. Together with the stand-by batteries they provide an uninterrupted power supply of the control panel and of optional additional devices and special detectors.

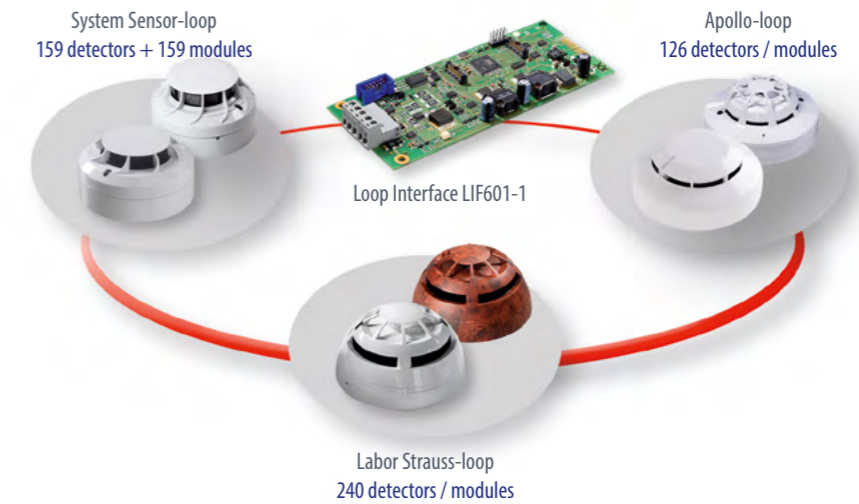## Extensions at the front of the housing

The use of additional devices on the BC600, such as LED tableaus, button fields, a fire brigade control unit or an event printer is especially easy. Up to 4 mounting spaces for expansions are available at the front of the housing, allowing direct integration of the additional devices into the control panel. In this way, space is saved and a tidy arrangement is ensured. At the same time the costs for an auxiliary case, mounting and cabling are reduced. The extensions are parameterised together with the control panel by means of PARSOFT.
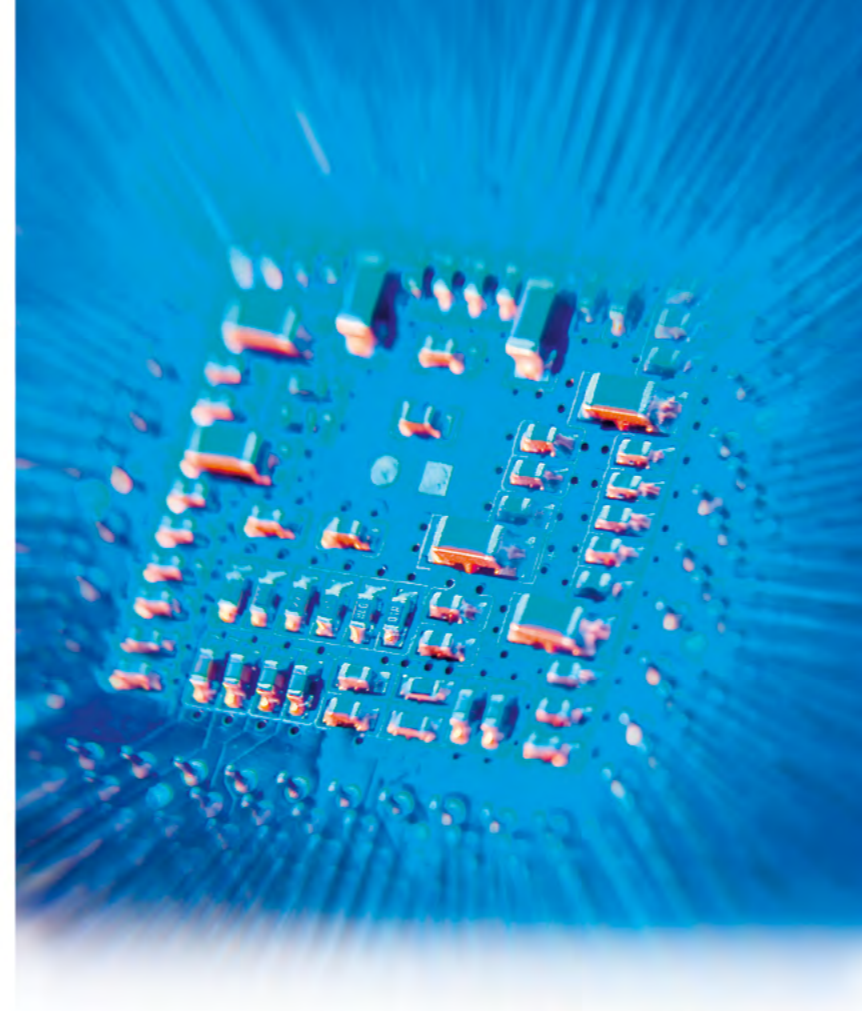
3 loop protocols – one interface

Every loop interface can be operated with either the Labor Strauss-protocol, the System Sensor-protocol or the Apollo-protocol. In this way, even fire detection systems with different detector brands can be easily realised. The maximum loop current of 500mA allows connection of numerous components with increased current demand. The integrated loop analysis functions of the BC600 make commissioning and maintenance of the loop easier and facilitate troubleshooting.

System Sensor-loop
159 detectors + 159 modules

Apollo-loop
126 detectors / modules

Loop Interface LIF601-1

Labor Strauss-loop
240 detectors / modules

Power units

Install printer

System components

For expanding the Fire Detection Control Panels Series BC600, a huge selection of function modules is available, for example
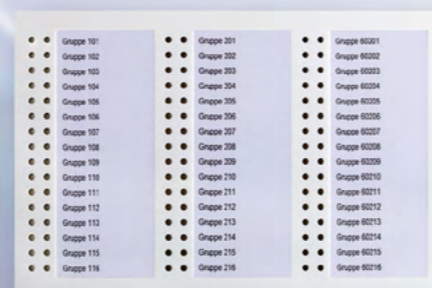- a loop interface for connection of intelligent loop components,
- a conventional detector interface with 8 conventional lines,
- a fire brigade interface for connection of standardised fire brigade control units or
- different serial interfaces for connection of event printers or transmission equipment.
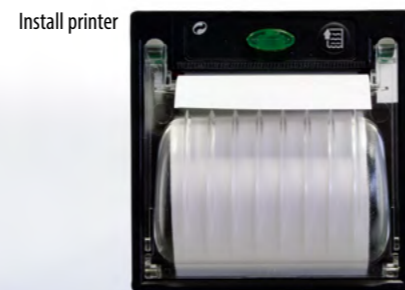
LED display field

Function modules

Fire Detection Control Panel BC600-16
for 16 function modules

Fire Detection Control Panel BC600-8
for 8 function modules

Fire Detection Control Panel BC600-CE8
installation in 19" rack

Extension Housing GEHZ600-16

FIRE DETECTION CONTROL PANEL NETWORK

The Fire Detection Control Panel BCnet600 is composed of individual control panels which are connected with each other via the redundant high-security network net600. The control panel network opens up manifold possibilities for the realisation of specific requests of fire detection, especially in spacious constructions, high-rise buildings or wide-stretched areas.

The individual control panels are normally installed on the spot – adapted to the object and distributed across the building. The decentralised arrangement reduces the total expenses due to a lower cabling volume for connecting the fire detectors. At the same time, the operational reliability of the entire system is significantly improved compared to conventionally designed fire detection control panels.

For the BCnet600, the same control panel components and the same software tools are used as for a stand-alone control panel Series BC600. This guarantees a minimum of training and maintenance costs and thus ensures the optimal use of resources during the usable life of the building.

Reliable networking of control panels

The network technology used warrants top failure safety and exceeds the redundancy requirements of the European Standard EN 54-2. The consistent ring-shaped cabling guarantees communication between the network members even in the event of a single fault on the network line.

Normally a shielded network cable is used as transmission medium in the net600. Longer distances can be bridged by means of long distance modem connections or optical fibre connections. In order to meet the requirements of ÖNORM F 3000, a second, redundant network can be created in addition.

Operation and parameterisation

The indication of events and the operation of the entire fire detection system can be carried out on any control panel with display and operating field. The system-specific parameter setup of the entire control panel network is created in a convenient and clear way, by means of the Windows Parameter Setup Software PARSOFT. In order to transfer the data of the parameter setup or of a new device firmware, the PC only has to be connected to one control panel, which distributes the data to all other network members.

Remote Display And Operation Panel ABF600-1

As a remote tableau, the Remote Display And Operation Panel ABF600-1 can be integrated into the network net600. It offers the same ease of use and, using LED displays and a graphics display, indicates the same information as a sectional control panel that can be operated. The small dimensions of the flat housing allow easy mounting in virtually any place of the building.

Almost unlimited expandability

A „virtual" Fire Detection Control Panel BCnet600 can be formed of up to 127 network members. For this purpose, different control panel types and designs can be combined in any way. By integrating additional members into the network, expanding the fire detection system in the future will be especially easy. Altogether, the networked Fire Detection Control Panel BCnet600 allows connection of:

- 2,540 loops with Labor Strauss/700, System Sensor/200AP or Apollo/Discovery protocol,
- 20,000 detector zones in loop technology or addressable conventional technology,
- 9,700 actuations or alarming devices as well as
- 99 transmitting devices.

Remote access with mobile devices

By means of the remote access system REACT, the operation of the fire detection system or the query of the system events can be conveniently carried out from afar through a PC, a tablet or a smartphone. For the connection to the REACT server, the fire detection control panel only needs an internet connection. A data connection that is protected by state-of-the-art methods offers an effective protection against unauthorized access.

With the remote access, the work of the user, of a service, of the maintenance staff, or of the public safety personnel is definitely made easier. Since the travel or walk to the fire detection control panel is not necessary, early and location-independent reaction to system events is possible. As a result, valuable time is saved and at the same time the costs for an operation are also reduced.

There is a choice of different license models for the remote access system REACT – including the basic version with a simple common indication of important conditions, the detailed view of all system events in the form of a list, and the depiction on a ground plan. With the product versions that allow operation, system parts can be disabled and enabled, activated or reset remotely.

MEP

LST

COMPACT FIRE DETECTION CONTROL PANELS BC600-1

The compact Fire Detection Control Panels BC600-1 are intended for use in small fire detection systems with a single intelligent detector loop. The basic version of the BC600-1 already includes all functional units that are needed for the operation. At the same time, the control panels offer high flexibility and a large number of combination options that are not taken for granted even with larger fire detection control panels. The easy parameterisation by means of the PC software PARSOFT allows you to optimally adapt the control panels to your individual requirements in a time-saving way.

The integrated loop interface with selectable loop protocol offers ringbus technology with bi-directional digital data traffic. On the loop, up to 318 components (detectors, modules or signalling devices) can be addressed. A built-in power unit with an output current of 2.3A supplies the system components and charges the optional stand-by batteries. The integrated IP interface allows remote access to the control panels in order to indicate events and operate the control panels via an electronic data processing network. In addition, the control panels can be expanded with a fire brigade interface, a conventional detector interface or a serial interface. For this purpose, function modules and expansion modules Series BC600 are used.

The compact control panel is available in three different versions:
• The Fire Detection Control Panel BC600-1L with 1/4 VGA graphics display and operating field offers a high degree of control comfort as well as a clear indication of all events and system conditions. The menu navigation and parameterisation of the control panel is virtually identical to that of the „large" Fire Detection Control Panels Series BC600.
• The Fire Detection Control Panel BC600-1L/LTF with additional LED button field is ideally suited for small extinguishing systems.
• The Fire Detection Control Panel BC600-1D with LED button field clearly indicates the system conditions, and its operation is almost self-explanatory. The LED button field has 32 freely parameterisable keys for direct operation of the zones, actuations or further system parts. For the indication of the events, 2 light emitting diodes are assigned to each key. The optional preset of the keys and LEDs makes handling the control panel especially easy and keeps the training costs low.

Compact Fire Detection Control Panel
BC600-1L with 1/4 VGA display

Compact Fire Detection Control Panel
BC600-1D with LED button field

Compact Fire Detection Control Panel
BC600-1L/LTF with additional LED button field

EXTINGUISHING CONTROL PANEL SERIES LC600

An Extinguishing Control Panel Series LC600 is an extensively upgraded Fire Detection Control Panel Series BC600 with a huge number of additional functions for controlling extinguishing systems. It fulfils all mandatory requirements as well as all options of EN 12094-1. Depending on the application and the requirement, the unit can be implemented
• as pure Extinguishing Control Panel LC600-x – with a connection to an external fire detection control panel – or
• as combined Fire/Extinguishing Control Panel BC600-x/EXT. Both control panel versions have been certified by VdS according to EN 12094-1 and EN 54.

The following control panel types are available for building an extinguishing control according to EN 12094-1:
• The compact Fire Detection Control Panels BC600-1L/LTF and BC600-1D for an extinguishing system with one flooding zone.
• The Fire Detection Control Panels BC600-8 and BC600-CE8 for up to 32 flooding zones.
• The Fire Detection Control Panel BC600-16 for up to 64 flooding zones.
• The Fire Detection Control Panel BC600-E in the switch cabinet for up to 128 flooding zones.

Up to 127 fire detection control panels, combined fire/extinguishing control panels or pure extinguishing control panels can be connected to each other by means of the redundant high-security network net600 so that they form a decentralised fire detection and extinguishing control system. This control panel network opens up manifold possibilities for the realisation of specific requirements of fire detection and fire fighting, especially in spacious buildings, high-rise buildings or wide-stretched areas.

MEP

Building Safety.   *Building Security.*

LST