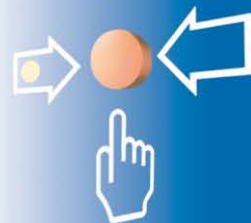# Extinguishing Control Panel
Series LC600

- **Actuation of up to 128 extinguishing systems / 2048 flooding zones**

- **Fully integrated into Fire Detection Control Panel Series BC600**

- **Individual control panel or flexibly expandable control panel network**

- **Suitable for all system sizes and extinguishing agents**

- **Scalable hardware redundancy**

- **EN 54, EN 12094-1, VdS certified**

Fire is a permanent threat to life and property. Therefore, an immediate response to a fire alarm is imperative. The main objective of the Extinguishing Control Panels Series LC600 is to alarm and to extinguish in time and, consequently, protect people and preserve property.

For decades LST have focused their aims to undertaking unrivalled efforts in order to realise new innovations in the security area. Research, development and production are united in one company. Highly skilled employees, stringent test methods and a mature quality management system form the basis for high-grade products.

Thanks to the use of cutting-edge microelectronics and a thoughtful mechanical design, the Extinguishing Control Panels Series LC600 provide completely new possibilities and at the same time offer a high degree of reliability – prerequisites for saving lives and minimising damage to property.

Description

The Extinguishing Control Panel Series LC600 is a comprehensively expanded Fire Detection Control Panel Series BC600 with a huge number of additional functions for controlling extinguishing systems. It fulfils all compulsory requirements and all options of EN 12094-1. Depending on the application and requirement, the unit can be implemented

- as pure Extinguishing Control Panel LC600-x, with 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 54-4. The combined Control Panel BC600-x/EXT has additionally been tested and certified according to EN 54-2.

The following control panel types are available for the implementation of an Extinguishing Control Panel Series LC600:

- The compact Fire Detection Control Panels BC600-1L/LTF and BC600-1D for an extinguishing system with one flooding zone according to EN 12094-1 or with up to 32 flooding zones that do not consider EN 12094-1.
- The Fire Detection Control Panels BC600-8 and BC600-CE8 with 8 function module slots and up to 32 flooding zones according to EN 12094-1.
- The Fire Detection Control Panel BC600-16 with 16 function module slots and up to 64 flooding zones according to EN 12094-1.
- The Fire Detection Control Panel BC600-E in a switch cabinet for up to 56 function modules and up to 128 flooding zones according to EN 12094-1.
- 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, thereby forming a decentralised fire detection and extinguishing control system. This control panel network opens up manifold possibilities for the realisation of specific requests of fire detection and fire fighting, especially in spacious buildings, high-rise buildings or wide-stretched areas.

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System design

The compact Extinguishing Control Panel LC600-1 can be used to realise an extinguishing system with one flooding zone according to EN 12094-1. In an extinguishing system that does not require a design accor-ding to EN 12094-1, up to 32 flooding zones can be actuated. An Extinguishing Control Panel LC600-1 can be implemented with the Fire Detection Control Panels BC600-1L/LTF and BC600-1D.

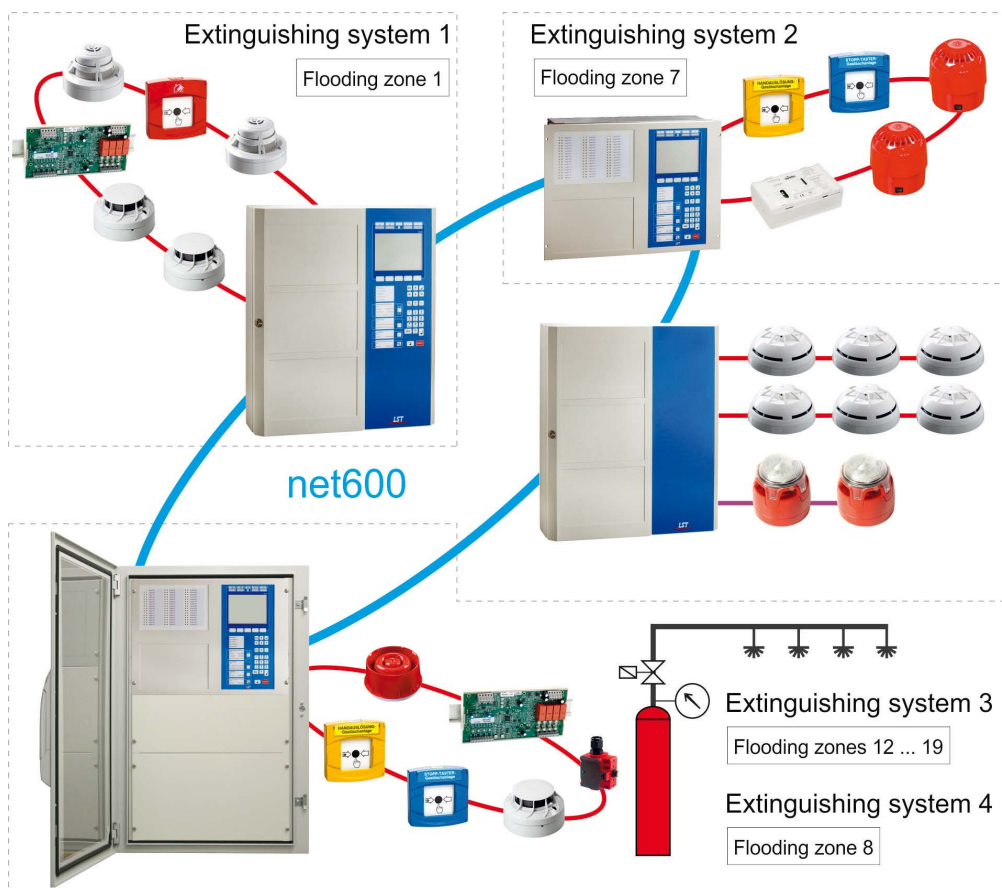| Flooding zone 1 |
| Flooding zone 2 |
| Flooding zone 3 |
| : |
| Flooding zone 8 |

The modular Extinguishing Control Panels LC600 can be expanded to up to 128 flooding zones which can be assigned to a maximum of 128 extinguishing systems. Every sectional control panel of a networked Control Panel BCnet600 can be upgraded to up to 128 flooding zones. The total number of flooding zones that are managed and can be operated in the security network is limited to 2048 flooding zones.
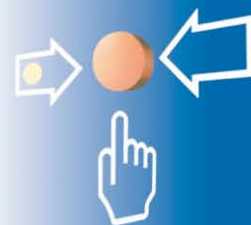
With the exception of the compact control panels BC600-1x, the networked Control Panel BCnet600 can be implemented with any combination of control panel types Series BC600. The decentralised security network that has been created by the BCnet600 offers highest security and reduces the total expenses due to a much lower cabling volume. The consistent ring-shaped cabling guarantees communication between the sectional control panels even in the event of a line fault.

A redundant design of the extinguishing control panel according to EN 12094-1 can be implemented by means of redundant control panel components. According to EN 12094-1, standard components Series BC600 – without redundancy – may only be assigned functions for one flooding zone.

Extinguishing system 1 — Flooding zone 1
Extinguishing system 2 — Flooding zone 7
net600
Extinguishing system 3 — Flooding zones 12 ... 19
Extinguishing system 4 — Flooding zone 8

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Features

The extinguishing control function is fully integrated into the Fire Detection Control Panel Series BC600. Combined fire/extinguishing control panels only differ from pure extinguishing control panels in the parameter setup and the connected devices. The Extinguishing Control Panel Series LC600 comprises the following additional features:

- All zones with automatic fire detectors or manual call points can be used for the actuation of the extinguishing system. The respective detectors and detector zones are assigned to the individual flooding zones by defining combinations and dependencies.
- Input signals for the actuation of the extinguishing system can be received through zone inputs in conventional or loop technology, as well as via control panel inputs.
  The loop technology allows connection of detectors, signalling devices as well as monitor and control modules in intelligent ring-bus technology. A safe supply of the loop elements is achieved through the redundant cable path. Standard fire detection cable can be used for wiring.
- Various combination types, such as „Emergency hold device", „Manual mode", „Extinguishing medium active" or „Reset extinguishing system" provide specific functions for the actuation of the extinguishing system.
- For the actuation of valves or signalling equipment, various types of actuation are available, which can be assigned to any outputs of the control panel or to a loop control module. The activation of these actuations is timed according to EN 12094-1.
- The condition of flooding zones or extinguishing systems can be output by the status outputs of the control panel or via loop modules. Furthermore, status LEDs can be freely parameterised as optical condition display.
- Depending on the size of the flooding zone and the capacity of the extinguishing agent cylinders, for each flooding zone the actuation of further flooding zones can be unblocked or blocked.
- In the appropriate authorisation level, a flooding zone can be operated at the display and operating unit of the fire detection control panel or at freely parameterisable LED button fields. In addition to disablements, enablements and toggling between manual and automatic mode, it is also possible to test the signalling equipment for pre-alarm and evacuation alarm.
- The Extinguishing Control Panel Series LC600 is conveniently parameterised via PC by using the Windows Parameter Setup Software PARSOFT. The clear user interface allows an almost self-explanatory definition of the system configuration and thereby minimises the requirement for training. The entered parameters can be loaded into the control panel after an automatic verification for technical correctness.

Advanced features

In addition to all compulsory functions of EN 12094-1, the extinguishing control panel fulfils all options of this standard. These are:

- Delay of extinguishing signal
- Signal representing the flow of extinguishing agent
- Monitoring of the status of components
- Emergency hold device
- Monitoring of a disable device
- Control of flooding time
- Initiation of secondary flooding
- Manual only mode
- Triggering signals to equipment within the system
- Extinguishing signals to spare cylinders
- Triggering of equipment outside the system
- Emergency abort device
- Control of extended discharge
- Release of the extinguishing media for selected flooding zones
- Activation of alarm devices with different signals

Redundant design

The Extinguishing Control Panel Series LC600 can be optionally implemented with a hardware-redundant design. A redundant design is required according to EN 12094-1 for fixed gas extinguishing systems, if one control panel actuates more than one flooding zone. Thanks to the scalable redundancy concept of the BC600, any componentries can be of the redundant type.

Upgrading later from standard componentries to redundant componentries is fully supported by the Parameter Setup Software PARSOFT without changing the individual parameters of the componentry.

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Extinguishing control licence

For the function of the extinguishing control, an options circuit into which the extinguishing control licence has been programmed must be installed in the Extinguishing Control Panel Series LC600. In the compact control panel LC600-1x, an options circuit for up to 32 flooding zones can be installed. In all other extinguishing control panels, options circuits for up to 128 flooding zones can be installed.

Specifications

Extinguishing Control Panels LC600-1x	
Number of extinguishing systems	1
Number of flooding zones	1 (according to EN 12094-1) max. 32 (without considering EN 12094-1)

Approvals
    as pure extinguishing control panel
 	
    as combined fire detection and extinguishing control panel
	FT 14/847/18 (Austria)
	 VdS G218066
	 0786-CPR-21610
	 VdS G218062
	 0786-CPR-21612

Extinguishing Control Panel LC600-8 / -16 / -CE8 / -E	
Number of flooding zones or extinguishing systems	max. 32 (BC600-8 and BC600-CE8) max. 64 (BC600-16) max. 128 (BC600-E)
Number of flooding zones or extinguishing systems in the net600	max. 2048

Approvals
    as pure extinguishing control panel
 	
    as combined fire detection and extinguishing control panel
	FT 14/847/18 (Austria)
	 VdS G218063
	 0786-CPR-21609
	 VdS G212164
	 0786-CPR-21611

Extinguishing control licence for 1 flooding zone	
Order number	218027
Order name	Extinguishing-Control 1-Area-Licence LC600-1LB

Extinguishing control licence for 4 flooding zones	
Order number	218028
Order name	Extinguishing-Control 4-Area-Licence LC600-4LB

Extinguishing control licence for 8 flooding zones	
Order number	218029
Order name	Extinguishing-Control 8-Area-Licence LC600-8LB

Extinguishing control licence for 16 flooding zones	
Order number	218030
Order name	Extinguishing-Control 16-Area-Licence LC600-16LB

Extinguishing control licence for 32 flooding zones	
Order number	218031
Order name	Extinguishing-Control 32-Area-Licence LC600-32LB

Extinguishing control licence for 64 flooding zones	
Order number	218032
Order name	Extinguishing-Control 64-Area-Licence LC600-64LB

Extinguishing control licence for 128 flooding zones	
Order number	218033
Order name	Extinguishing-Control 128-Area-Licence LC600-128LB

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