



# CEBLV – CENTRAL BATTERY LOW VOLTAGE SYSTEM

Product Group: Emergency Lighting



## DESCRIPTION:

Central battery system CEBLV is a high-tech device created to power and monitor emergency lighting in buildings of small and medium size and in closed fire zones. The system can work with up to 160 LED luminaires supplied by SELV 48V (Safety Extra-Low Voltage) and was designed in Smart technology.

The application of the SELV voltage ensures high level of safety of servicing of the system and its elements compliant with the currently valid regulations. Small dimensions of the central unit enable the installation of the system in places where one cannot fit a large-size central battery system. The CEBLV central unit is equipped with a big touch panel enabling both the current reading of the status of the system, circuits and fittings and the introduction of all settings and parameters of the system with the use of the user interface. Statuses are displayed in both graphic and text form. Using the central unit one can assign a name to the fitting that will clearly help to identify the fittings installed in the system. Using the central unit one can program and freely configure the emergency fittings in constant, non-constant, switching and switching-dimming modes as well as night work mode. The system has its own IP address and RJ45 slot which is used for direct connection to Ethernet. With a built-in WEB module, you can directly access the system from any computer and print the event log by using any web browser. Additionally, the system has an input and an SD card that allows to record and upload system settings (back-up) and the record reports of the Event Log in accordance with EN 50172.

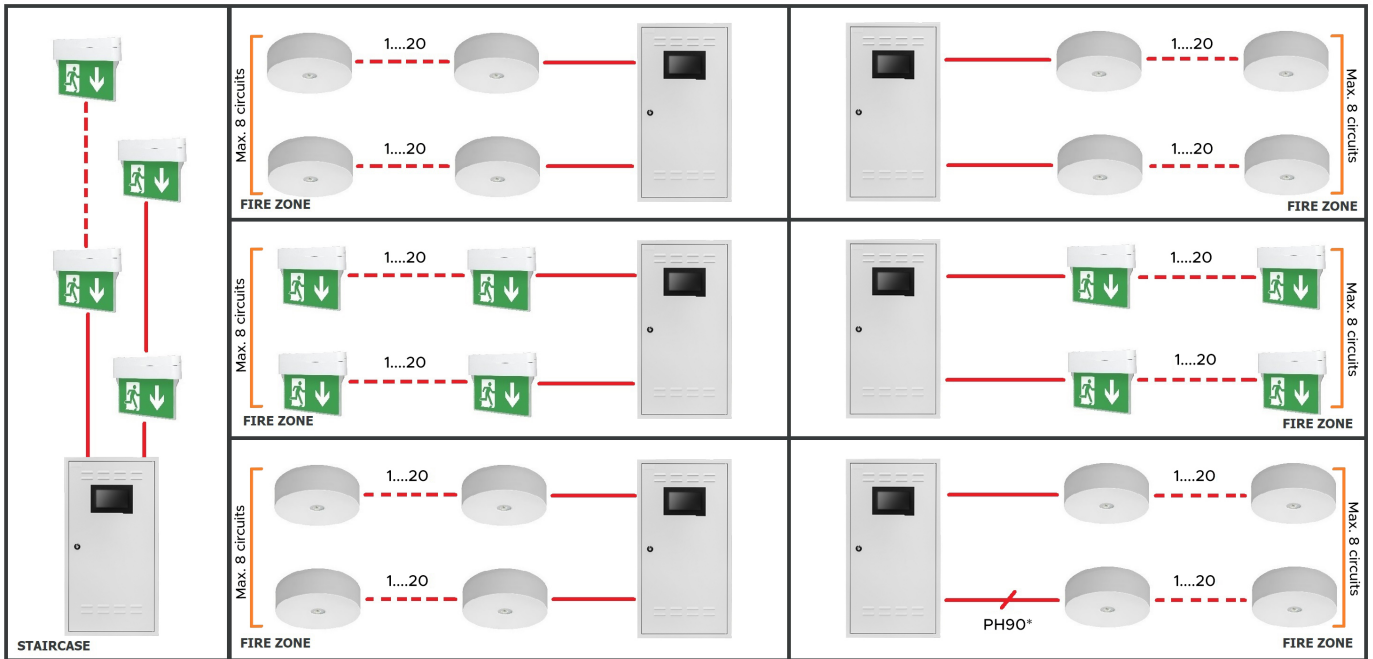
## FEATURES:

- Power supply and monitoring up to 160 individual LED fittings in CEBLV smart technology.
- Up to 8 independent circuits, which make it possible to connect up to 20 fittings per circuit. The maximum load of a single circuit is 2.5A.
- Safe supply SELV 48V.
- Smart technology – any mode of a fitting.
- Easy to read, big LCD touch screen.
- Easy and intuitive menu with simple icons.
- Automatic or manual activation of short or long tests of the whole system.
- Automatic detection and adding of the fittings to the system.
- Built-in WEB module.
- Built-in clock and calendar with DST adjustment and synchronization with a time server.
- Programming and configuration of the fittings directly from the system.
- Assigning names to luminaires.
- Assigning design addresses to luminaires.
- Communication with luminaires through the power supply cable.
- SD slot and SD card for recording, transmission and printing emergency lighting reports from any PC, in accordance with EN 50172.
- Possibility to store the system settings (back – up) on SD card.
- Contained security light mode (night operation).
- Testing of each fitting separately as well as group of fittings.
- Internal rechargeable battery with a designed life of 10 years.
- RJ45 slot for direct connection to Ethernet.
- Individual IP address.
- Preview of the system via any web browser.
- Works with any BMS (Building Management System) by using the module of potential-free contacts or a CAN-bus.
- Unlimited grouping of systems and joint supervision by smart touch screen controller.
- Control menu with language selection.
- Management and visualization of the system using a dedicated CEBLV smart platform.

*\*For safety reasons, the control unit communicates with luminaires continuously and has a built-in powers supply source. All EMS systems are manufactured in compliance with applicable European standards*

CEBLV unit can be supplied from a 230V AC or a 216V DC power source. As a result, the unit can be connected to a central battery system as a substation without installing internal batteries. This functionality enables the system to be used in facilities where a central battery system is required, but a safe voltage must also be ensured in areas where there is a risk of electric shock.

**CEBLV TOPOLOGY:**



\*National regulations apply

**Decentralized system:**

- Main station failure.
- Cable failure: main station – substation.
- Damaged insulation of the branch circuit.
- No central system.
- Each system is independent; the failure is limited to one fire zone.
- Negligible fire hazard (SELV).

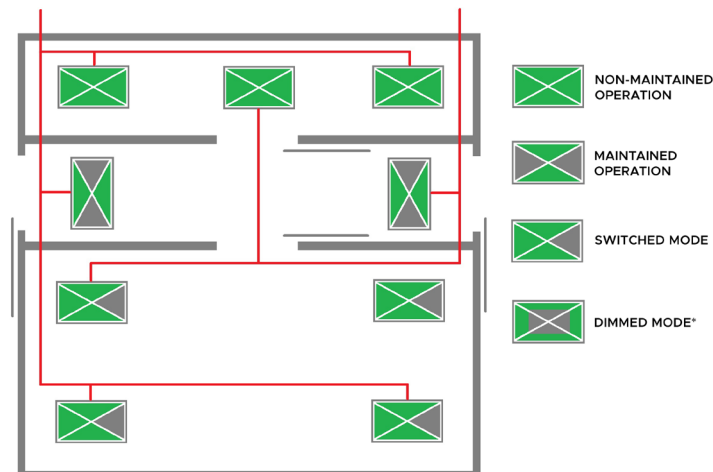
**SMART – SWITCHING METHOD AND REVISION TECHNOLOGY**

A conventional installation requires that the operating mode of each circuit is specified at the design stage. Subsequent modifications or errors may cause extra costs. In order to eliminate such drawbacks, NORTHCLIFFE has introduced a new technology with automatic monitoring and individual control of each luminaire in a system.

**Switching  
Method  
And  
Revision  
Technology**

or SMART for short. This technology enables installation of luminaires- in a common circuit- operating in four modes: continuous, intermittent, switched and dimmed. Programming and monitoring of the luminaires are provided via power supply cables. The applied technology does not require the use of special communication cables. It can be implemented if appropriate address modules are installed in the luminaires. The modules are fitted as standard in all luminaires designed to work within CEBLV central battery system. Each address module is assigned with a unique address which enables its accurate identification in the system.

**A SMART TECHNOLOGY SYSTEM LAYOUT:**



\*CEBLV systems only

**SMART advantages:**

- Luminaires operating in different modes can be installed within a single circuit.
- Less cable is required.
- Smaller number of circuits.
- Lower installation costs.
- Operating modes of the luminaires can be changed at any time.

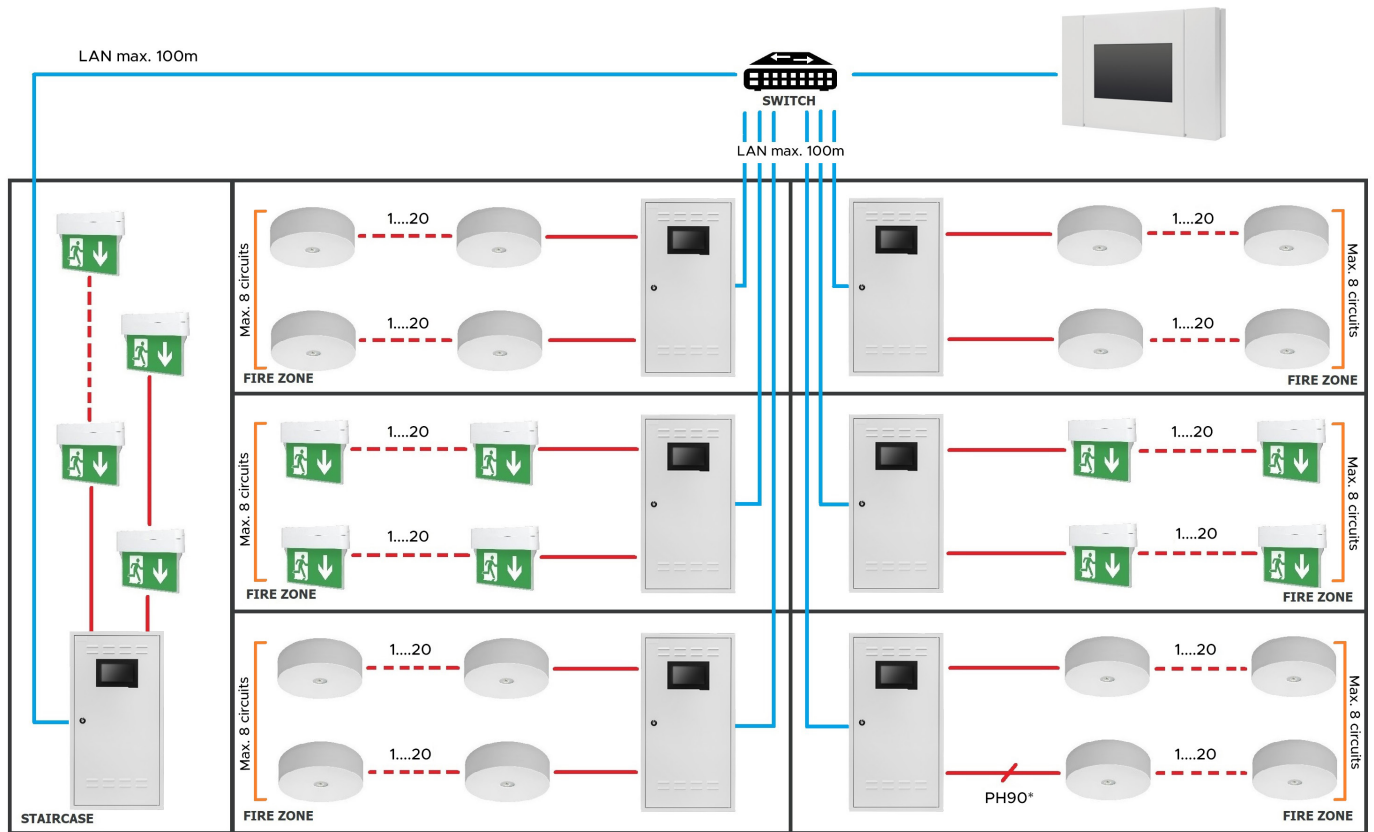
**SMART touch controller**

The SMART touch controller enables remote control and monitoring of any number of units from a single location. The controller provides remote monitoring, configuration and reading of events for each connected CEBLV unit.

**Features:**

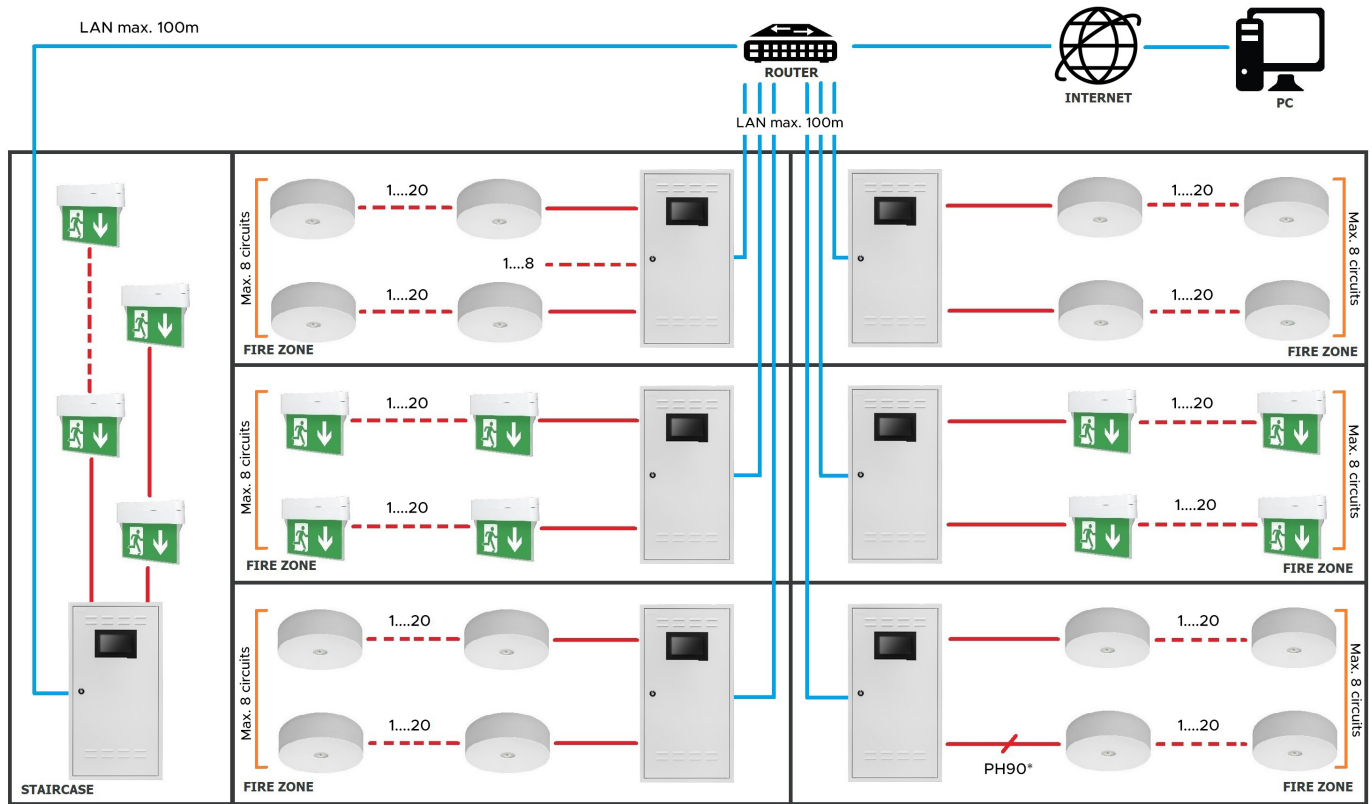
- Functional test/Battery test activation for each device.
- Global system locking/unlocking.
- Password-protected access to the controller.
- Checking the status of individual systems.
- Full remote configuration of all systems.
- Active list of systems enabling quick status checks.
- Four globally configured inputs and outputs.
- Standard fitted Ethernet interface to enable remote control and visualization of the system via a web browser.

**CEBLV WITH SMART TOUCH CONTROLLER TOPOLOGY:**



The CEBLV system is equipped with an Ethernet port as standard. The connection enables remote checking of the status and setting up of the system via FIRE ZONE a dedicated website. This solution provides the user with the ability to control and monitor the system from a computer with a web browser installed. To check the system status using a computer, the user only needs to log in to the structural network of the facility or building where the CEBLV is installed. Each unit, circuit and luminaire can be monitored via the Internet. The access to the dedicated website is password protected.

**CEBLV REMOTE CONTROL TOPOLOGY:**



**LIST OF CABINETS:**

TECHNICAL SPECIFICATIONS:	CEBLV-7.2 AH	CEBLV-12 AH	CEBLV-18 AH	CEBLV-26 AH	CEBLV-33 AH	CEBLV-40 AH
<b>Supply voltage:</b> AC 230 ±10%, 50/60Hz or DC 216 V ±20% <b>AC protection:</b> T8A/250V, 5x20 mm <b>Circuit protection:</b> T4A/250V, 5x20 mm <b>DC protection:</b> T20A/440V, 6,3x32 mm <b>Max cross-section of mains power connector:</b> 2,5mm <sup>2</sup> <b>Protection class:</b> I <b>Ingress protection:</b> IP20 <b>Output voltage:</b> 48V DC ±20% <b>Working temperature:</b> -5...30°C						
<b>Dimensions</b>	650x350x150	650x350x150	870x460x220	870x460x220	870x460x220	870x460x220
<b>Battery capacity</b>	7,2 Ah	12 Ah	18 Ah	26 Ah	33 Ah	40 Ah
<b>No of batteries</b>	4	4	4	4	4	4
<b>Maximum power</b>						
1 h	166 W	280 W	423 W	600 W	734 W	890 W
3 h	64 W	110 W	168 W	241 W	309 W	375 W
8 h	25 W	46 W	72 W	106 W	137 W	167 W
<b>Number of circuits</b>	4	4/8	8	8	8	8
<b>Max. cross-section of circuit connector</b>	2,5mm <sup>2</sup>	2,5mm <sup>2</sup>	2,5mm <sup>2</sup>	2,5mm <sup>2</sup>	2,5mm <sup>2</sup>	2,5mm <sup>2</sup>
<b>Max circuit load*</b>	120 W	120 W	120 W	120 W	120 W	120 W
<b>Cable grommets</b>	24 X M20 or MC 35 multi-line cable grommet	24 X M20 or MC 35 multi-line cable grommet	MC 35 multi-line cable grommet	MC 35 multi-line cable grommet	MC 35 multi-line cable grommet	MC 35 multi-line cable grommet
<b>Weight</b>	18,5 kg	25,5 kg	45,0 kg	52,3 kg	60,0 kg	72,5 kg

\*Loss of power in luminaire supply cable and modules not considered