



Lighting-Power-Control

TM TECHNOLOGIE
only one way

TM-CB A Addressable DC Central Battery System



PARAMETERS

Basic version for monitoring of circuits only

Only the current of individual circuits is monitored. The system informs the user about any fault occurrence, giving the circuit number on which the failure occurred

Extended version monitoring of single luminaires (fully addressable)

Each luminaire has a built-in addressable module that monitors the current. Thanks to this, the system can inform the user exactly which luminaire is a problem. Thanks to the use of addressed modules it is possible to flexibly configure the operation mode (i.e. maintained / non-maintained).

Maximum number of emergency fittings / circuit

20

Maximum number of circuits

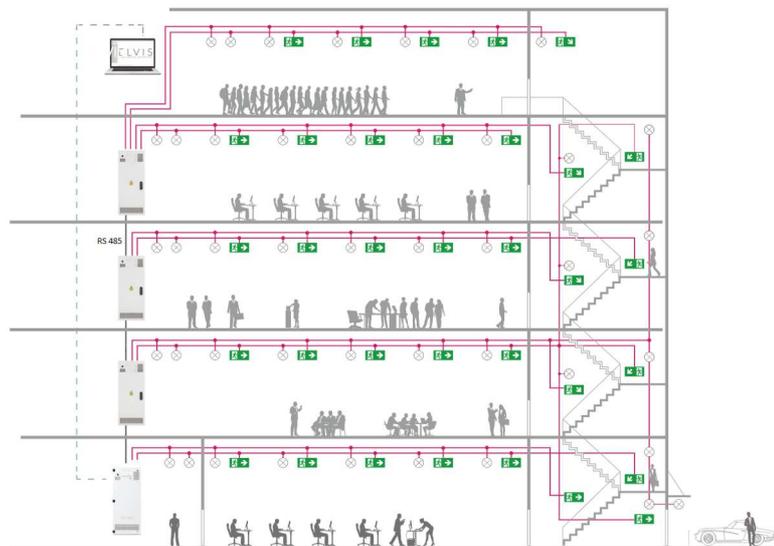
24

Maximum number of substations (63) + station (1)

64

Maximum number of emergency fittings in the system

30720





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SYSTEM COMPONENTS

STATION



A control unit with a touch panel. The station monitors the correct operation of emergency lighting devices. It determines their status through automatic function and autonomy tests and by checking the accuracy of parameters. With this solution, information on all circuits and fittings installed in the building and connected to the system are readily and promptly available to the user at one location.

Material	Powder coated steel
Insulation class	I
S1 : 1208 x 501 x 321 mm	≤ 1560 W / 7 -12 Ah
S2 : 1253 x 601 x 412 mm	≤ 2330 W / 22 Ah
S3: 1553 x 646 x 502 mm	≤ 4280 W / 33 Ah
Power supply	230 V AC / 50Hz
Nominal voltage	216 V DC
Batteries	Maintenance-free lead-acid batteries, service life up to 12 years.
Charging	CC/CV
Power	500 VA / circuit (max. 2.5 A)
Circuit operation	AC - mainmode / DC - battery mode
Mode	Flexible programming of individual circuits: mains, out-of-the-box, mixed.

SUBSTATION



It has the same parameters as the station except for one feature - it is not equipped with a touch screen LCD panel. It has 9 diodes indicating the system status and operation accuracy. The TM-CB A Central Battery System enables connection of up to 63 substations.

CABLING



RS 485 port	connection between station/substation with I/O module
RS 485 port	connection between station with substation
LAN	communication with vizualization ELVIS / BMS
cross-section 2.5 mm ²	AC main supply
cross-section 3 x 1.5 - 2.5 mm ² , fireproof, maximum circuit length 200 m	AC/DC for luminaires





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I/O MODULE

Device enabling control of emergency lighting groups, dedicated to DATA 2 and TM-CB emergency lighting systems. IN input and OUT output models are available. The DATA 2 and TM-CB system allows the connection of up to 16 I/O modules. The address of each module is set on DiP-switches on their housing. IN SW, IN 24, IN 230 versions are used to control the night lighting, fire-emergency lighting groups, fire scenarios and have 8 inputs. The output module (OUT) is used to provide the system status. It has 8 potential-free outputs.

IN SW	potential-free input
IN 24	24 V voltage detection
IN 230	230 V voltage detection
OUT	potential-free output 400 V AC / 250 V DC, max. 6 A



CIRCUIT CONTROLLER

Device that controls the operation of the output circuits. Depending on the operation mode, it switches on the appropriate voltage type, controls monitor fittings, conducts current measurements and switches luminaires to modified mode. One circuit controller supports two output circuits.



COORDINATOR

Controller of the entire station. Performs all control and monitoring functions. LEDs on the front panel indicate the correct operation of the station in real time. It is responsible for: measurement of battery charge and discharge current, battery voltage, battery symmetry voltage, power supply voltage, internal system temperature.



CHARGER

The charger continuously monitors charging current, battery voltage and temperature. It is a Plug&Play type device. The device charges by selecting charging voltages depending on the cell temperature. The correct operation of the charger, as well as errors are indicated by means of diodes.

