ONLITE central eBox SUB

Emergency-supply subdistribution board Art. no. 22185290

Application

One sub-distribution station for the ONLITE central eBox MS 1200/1700 is designed to accommodate optional final-circuit modules and is used to monitor and supply power to up to 120 LED emergency and escape sign luminaires in the same fire compartment. Using sub-distribution stations reduces the fire loading by up to 70% and cuts installation costs significantly. The ONLITE central eBox SUB distribution station has three empty slots available for ONLITE central eBox OCMs (output circuit modules). The number and type of OCM modules that are actually fitted in these slots depend on what the customer requires for the final circuits (a mixture of OCM module types can also be used).

Design notes

The ONLITE central eBox SUB distribution unit is supplied from the ONLITE central eBox MS 1200/1700 via a 5-way cable (L/N/PE/B+/B-) ((designed to maintain circuit integrity) and a standard data line laid separately for system bus B1/B2. It is installed inside a fire compartment and therefore any additional fire protection measures can be dispensed with. If switching of final circuits or even individual switching of single luminaires is

required, then these can be read over the system bus via the 4-way mains switching inputs and assigned individually.

ONLITE central eBox EPDs (bus phase monitors, max. 9 on one system bus) can be used to monitor the voltage of a sub-distribution unit for the general lighting. These provide a further two separate alarm loops in order to monitor as well any auxiliary contacts of the general-lighting circuit breakers.



Functional description

- Individual addressing and monitoring by DALI

(using optional ONLITE central eBox OCM NDA output circuit modules) with separate status and name display per luminaire in conjunction with standard DALI electronic ballasts or DALI LED power supplies by means of 2-wire communication without additional monitoring module in the luminaire. Flexibly adjustable emergency lighting level for the respective DALI circuit or even for each individual luminaire. Combination of maintained and non-maintained modes possible. DALI "in" function for integrating an external lighting management system. An optional component can also be used to switch luminaires individually in the DALI circuit.

- Individual addressing and monitoring by Powerline

(using optional ONLITE central eBox OCM NSI output circuit modules) with separate status and name display per luminaire in conjunction with ONLITE central PLC DALI, ONLITE central PLC relay or an ONLITE central PLC LED driver without additional data line; bidirectional communication with the emergency and escape sign luminaires is performed using Powerline via the mains input line in the final circuit. Flexibly adjustable emergency lighting level for the final circuit concerned or even for each individual luminaire. Combination of maintained and non-maintained modes possible. DALI "in" function for integrating an external lighting management system. It is also possible to switch luminaires individually using a switching input (L^{\vee} / N°) directly at the luminaire.

- Circuit monitoring

(using optional ONLITE central eBox OCM NPS output circuit modules) Each final circuit containing all the emergency and escape sign luminaires can be calibrated by a sensor on the module, which enables power monitoring. Maintained or non-maintained modes are available for each output circuit. Optional modules can be used to integrate external switching inputs for switching the entire final circuit.

The rear Z-rail mounting allows the cable to be inserted from above or below. Enclosed metal housing with closure along three edges; designed like a vehicle hood or bonnet allowing wide access for wiring.



Technical data

Nominal voltage	230 V AC 50 Hz (L/N/PE)
Battery voltage	216 V DC (B+/B-/PE)
Power	AC: 1000 VA (fully populated, load-dependent) DC: 750 W (fully populated, load-dependent)
Power loss	10 W (full load)
Miscellaneous	Testing: TÜV Rheinland / CE / EN 50171 for EN 50172 compliant installations
Installation	Wall-mounted cabinet
Housing material	sheet steel, powder coated
Case colour	light grey (RAL 7035)
Dimensions	370 x 300 x 164 mm
Protection type	IP20
Protection class	Class I
Terminals	1.54 mm²
Permitted ambient temperature	Ta max. 40 °C
Weight	Approx. 9.3 kg
Miscellaneous	Slots: for 3 ONLITE central eBox OCMs