

EXIT-LUME-CW-DALI

ITEM NO. 34755

Features

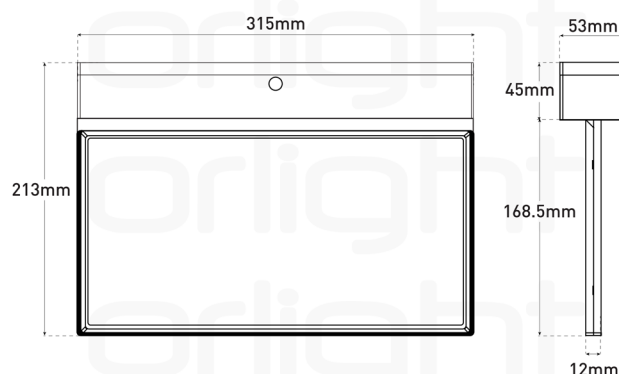
- Emergency lighting LED escape sign with DALI-2 interface and automatic testing function
- For LED module with a forward voltage of 12-14Vdc/9-12Vdc
- Complete set with integrated electronics, LED module, housing, and battery
- Plug-in Lithium Iron Phosphate battery
- SELV for output voltage
- Very low stand-by power loss
- Polycarbonate white RAL 9016
- 850°C Glow-wiring

Functions

- Maintained and non-maintained mode
- DALI-2 automatic testing function
- After the battery is fully charged, in order for the luminaire to provide at least 50% of its rated duration of emergency operation, when in rest mode, it can hold for one day



Dimension



Technical Specification

Rated supply voltage	220 - 240 V
AC voltage range	140-180VAC
Mains frequency	50/60Hz
Power factor	≥0.5
Starting time	0.5S

Technical Specification Continued

Ambient temperature t_a	5-45°C
IP rating	IP20
In-rush current	1.5A
In-rush current duration	1ms
Mains surge capability (between L – N)	1KV
Emergency Lumens	60LM
Colour Temperature	6000K

Item Code	Typical output emergency power	Mains input current, min	Mains input current, max	Input power in mains operation, min	Input power in mains operation, max
EXIT-LUME-CW-DALI (Maintained)	1W	10mA	30mA	2W	4W
EXIT-LUME-CW-DALI (Non-maintained)		1mA	20mA	0.5W	2.5W

Item Code	LED module forward voltage range Min-Typ-Max	LED module forward current range Min-Typ-Max	LED module forward power range Min-Typ-Max	Visual Distance	Maintained Non-maintained
EXIT-LUME-CW-DALI	12-13-14V	44-47-50mA	0.6-0.62-0.65W	28m	Maintained/ Non-maintained

Note:

1. All specifications are typical at 25°C unless otherwise stated.
2. All specifications are typical on the 230VAC unless otherwise stated.

Testing

DALI Control:

A DALI command from a suitable control unit can be used to initiate function and duration tests at individually selected times. Status flags are set for report back and data logging of results.

When a DALI bus has not been connected or when a DALI bus is connected but the DALI default DELAY and INTERVAL times have not been re-set by sending appropriate DALI commands, then the DEF will conduct self-tests in accordance with the default times set within the EEPROM. These default times are factory pre-set, in accordance with the DALI standard EN 62386-202, to conduct an automatic function test every 7 days and a duration test every 52 weeks. Since the DELAY time is factory pre-set to Zero, all units are tested at the same time. Test times can be changed with a command over the DALI bus.

The DELAY and INTERVAL time values must be re-set when the emergency system test times are to be scheduled by a DALI control and monitoring system. Note that once the default values have been set to Zero, tests will only be conducted following a command from the control system. If the DALI bus is disconnected the DEF does not revert to self-testing mode.

Addressing:

For single handed addressing using this method it is necessary to send a broadcast ident command every 3 to 9 seconds. During this command the LEDs will be switched off and the indication LED will flash the 6 bit binary address preceded by a 3 second start indication period.

Rest Mode / Inhibit Mode:

Emergency operation is automatically started when the mains supply is switched off. If the Rest Mode is activated, the discharging of the battery will be minimized by switching off the LED output. If the Inhibit Mode has been activated before the mains supply is switched off, Rest Mode will be automatically switched on if the mains supply is switched off within 15 minutes. REST Mode and Inhibit Mode can be initiated by the DALI controller. The REST command has to be sent after the mains supply

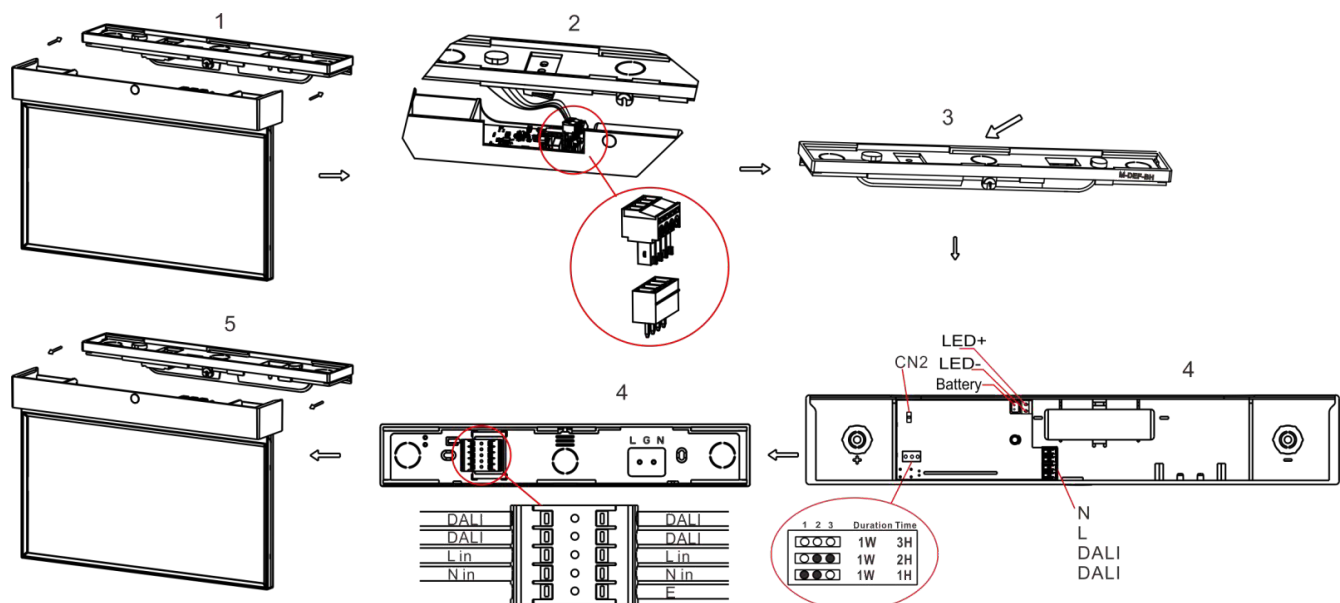
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Indicator LED System status is locally by a bi-color indicator LED.

has been disconnected and whilst the DEF is in emergency operation. The inhibit command has to be sent while the DEF is supplied by mains. After a mains reset the DEF exits the Rest Mode. Rest Mode and Inhibit Mode can both be disabled by sending the RE-LIGHT/RESET inhibit command.

LED Indication	Status	Description	
Permanent Green	Standby ,System OK	Mains Operation, battery is charged	NOTICE If an error is detected , the indicator LED will switch to RED. If the error has been corrected please re-connecting the battery after the mains power off, the indicator LED immediately switches back to GREEN when mains power on . If the battery voltage is below 2.8V,the moment you start function test,may show battery error(red indicator flashes 0.5S on,0.5S off),to clear this error ,you need to remove and reconnect the battery or, charge the battery at least 3min,then start the function test,once the test finish, the error will be clear. So,in order to avoid this, we suggest to start function test after the battery charged for 10min.
Fast flashing Green (0.25s on 0.25s off)	Function test underway	Function test underway	
Slow flashing Green (1s on 1s off)	Duration test underway	Duration test underway	
Permanent Red	Lamp failure	Open Circuit or Short circuit or LED failure	
Fast flashing Red (0.25s on 0.25s off)	Battery capacity failure	Battery failed duration test	
Slow flashing Red (1s on 1s off)	Battery fault	Incorrect battery voltage or Short circuit or Open Circuit	
Green and Red off	Battery Operation	Emergency mode: Mains disconnected or Mains failure	

Wiring Diagram



Note:

Step "1": Push out the upper cover according to diagram to open the product.

Step "2": Disconnect the DALI cables from the terminal.

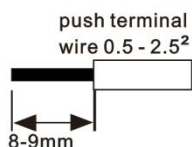
Step "3": Lead the AC cables and DALI cables through the inlet hole indicated in the diagram, then fix the upper cover to the ceiling.

Step "4": Connect the AC cables and DALI cables respectively to the positions marked on the AC terminal.

Step "5": After wiring, push the cover back according to the diagram to finish the installation.

Wiring Diagram Continued
Requirements for wiring wires:

1. Wire diameter range: 0.5-2.5 square meters;;


For CN2 connector:

1. Non-maintain mode: set short-circuit plug on CN2 connector.
2. Maintain mode: move the short-circuit plug away.

Battery Data

Emergency power	Batteries	Battery fully charged time	Charge Current	Battery discharge voltage Min-Typ-Max	Battery discharge current Min-Max	Battery output power Min-Max	Emergency Duration
1W	3.2V 1500mAh LiFePO4	16/24h	200mA±10%	2.8-3.2-3.6V	220-340mA	0.8-1.2W	2h
							3h

Note:

Automatic recharge when battery voltage falls below 3.4V.Charger off (0mA)when battery voltage exceeds 3.6 V.

The emergency lighting LED driver will recharge the battery normally after running the test of 61347-2-7 CL22.3 (abnormal operating conditions).

When the voltage is below 2.0 V, the battery will not enter an emergency state.

The minimum charging environment temperature of the battery is 5°C , to ensure that the battery can be charged.

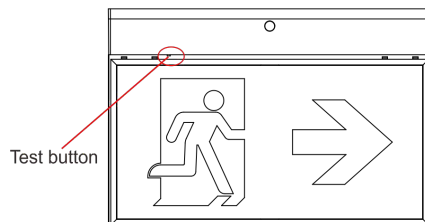
Capacity	1.5 Ah
International designation	IFpR 18/65
Battery voltage/cell	3.2V
Cell type	18650
Case temperature range to ensure	
4 years design life	+5°C to+55°C
5 years design life	+5°C to+45°C
6 years design life	+5°C to+35°C
Max. short term battery case temperature (shorter than 1 month over the battery lifetime)	70°C
Max. number discharge cycles	50 cycles total
Max. storage time	6 months

Notice: Storage condition

- Batteries should be stored within the specified temperature range in low humidity conditions.
 - Optimal storage conditions are
 - Temperature: -20°C to +40°C
 - Humidity: 45% - 85%
- Avoid atmosphere with corrosive gas
- It is recommended to disconnect the battery before storage or delivery
- Battery should be charged every three months in order to keep it's initial performance.

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Test Button



Test button:

When 220VAC is powered on, press this button, the standard product will enter an emergency state, the self test product will enter a functional test for 5 seconds.

Standards

This product meets the following standards:

- | | | | |
|-----------------------|--------------------|------------------------------|---------------------|
| • EN IEC60598-1 | • EN IEC61347-1 | • AS/NZS 60598-1 | • AS/NZS 61347-1 |
| • EN IEC60598-2-1 | • EN IEC61347-2-7 | • AS/NZS 60598-2-1 | • AS/NZS 61347-2-7 |
| • EN IEC60598-2-22 | • EN IEC61347-2-13 | • AS/NZS 60598-2-22 | • AS/NZS 61347-2-13 |
| • ISO3864-Parts 1&3&4 | • EN 61000-3-2 | • DALI standard EN 62386-202 | • EN 61000-3-3 |
| • EN 61547 | • EN 62034 | • EN 55015 | • ROHS 2.0 |

Service Life

Average life-time 50,000 hours under rated conditions with a failure rate of less than 10% for the emergency converter as rated power. Average failure rate of 0.2% per 1000 operating hours.

Important

It is recommended that the unit is installed by a competent person ensuring the installation complies with the necessary standards. The company accepts no responsibility for incorrect installation, incorrect operation or improper maintenance. After installation of the fitting, the battery must be charged for 16/24 hours for duration test.