

# PRODUCT DATASHEET

EL-49

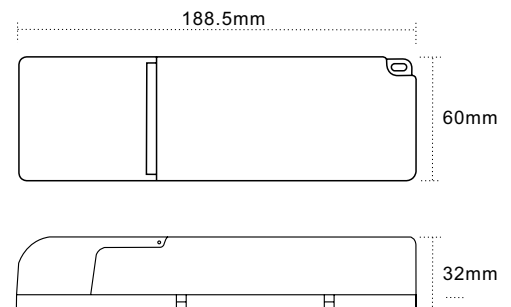
Emergency Lighting LED Conversion Kit

## Application

- LED emergency lighting supply unit for manual & auto testing
- For LED module with a forward voltage of 10-55Vdc
- For independent use, ideal solution of LED panel light
- 5-year guarantee (inc. battery)

## Properties

- Non-maintained operation
- Compact dimensions, easy installation
- Constant power mode
- 3h rated duration
- Automatic shutdown of output if LED load is out of range
- Electronic charge system
- Over charge protection
- Deep discharge protection
- Short-circuit-proof battery connection
- Open-circuit-proof



## Technical Data

Rated supply voltage	220VAC~240VAC
Mains frequency	50/60Hz
Typical $\lambda$ (at 230V, 50 Hz)	0.5
Over voltage protection	300 V (for 1 h)
Surge protection	1000 V
Battery charge time	24h
Ambient temperature $t_a$	0 ... +55 °C
Max. Casing temperature $t_c$	70 °C
Mains voltage changeover threshold	According to EN 60598-2-22
Type of protection	IP20

## Specific technical Data

Type	Rated Duration	Typ. EM power	Battery	Charge Current
EL-49	3 hours	2W	1 cell, 3.2V 4.0Ah, built-in	200mA

\* ST for auto-test; A for power adjustable

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## Auto-test instruction

### Commissioning Test

After installation of the luminaire and initial connection of the mains supply, the unit will commence charging the batteries for 16 hours (initial charge, green indicator ON). Afterwards the module will conduct a commissioning test for the 3 hour full duration (green indicator slow flash). The following automatic commissioning duration test is only performed when a battery is fully charged for 16 hours. During the period if the mains fails (system in emergency mode) or battery lose connection, the commissioning test will restart again from 16 hours initial charge.

\* Battery dis-connected: green indicator off, red indicator slow flash. System recovery after battery reconnected.

\* Duration less than 3 hour: red indicator fast flash. System shifts to emergency mode if the mains fails. Press the test button for 12s to restart the commissioning test, red indicator fast flash turns off only when the system pass the commissioning test.

\* Load dis-connected: red indicator ON. Power off the mains, dis-connect the battery before connect the load, and press the test button for 12s to restart the commissioning test, red indicator turns off only when the system pass the commissioning test.

### Manual Test

After the commissioning test, press the test button to initiate a 5s manual function test. Green indicator fast flash during the test.

\* Load dis-connected: red indicator ON. Power off the mains, dis-connect the battery before connect the load, and press the test button again restart the manual test, red indicator turns off only when the system is recovery.

### Weekly / Monthly / Half-year Test

After the commissioning test, the system will initiate function tests for 5s every week, 120s every month, 30min every half a year automatically.

\* Duration less than test time: red indicator fast flash. System shifts to emergency mode if the mains fails. Press the test button for 12s to restart the commissioning test, red indicator fast flash turns off only when the system pass the commissioning test.

\* Load dis-connected: red indicator ON. Power off the mains, dis-connect the battery before connect the load, and press the test button again restart the manual test, red indicator turns off only when the system is recovery.

### Yearly Test

After the commissioning test, the system will initiate a 3 hour duration test every year automatically. Green indicator slow flash during the test.

\* Duration less than 3 hour: red indicator fast flash. System shifts to emergency mode if the mains fails. Press the test button for 12s to restart the commissioning test, red indicator fast flash turns off only when the system pass the commissioning test.

\* Load dis-connected: red indicator ON. Power off the mains, dis-connect the battery before connect the load, and press the test button again restart the manual test, red indicator turns off only when the system is recovery.

### Operation Priority

Emergency Mode > Commissioning Test > Yearly Test > Half-year Test > Monthly Test > Weekly Test > Manual Test

### Auto-test status indication

LED Indication	Status	Commentary
Permanent green	System OK	AC mode
Fast flashing green (0.25s on - 0.25s off)	Function test underway	Manual test / Weekly test / Monthly test / Half-year test
Slow flashing green (0.5s on - 0.5s off)	Duration test underway	Yearly test / Commissioning test
Permanent red	Load failure	Open circuit / Short circuit / LED failure
Fast flashing red (0.25s on - 0.25s off)	Battery capacity is insufficient	Duration test failure (duration time is less than set value)
Slow flashing red (0.5s on - 0.5s off)	Battery failure	Incorrect battery / Battery dis-connected
Green & red off	DC mode	Battery operation (emergency mode) / Duration finished