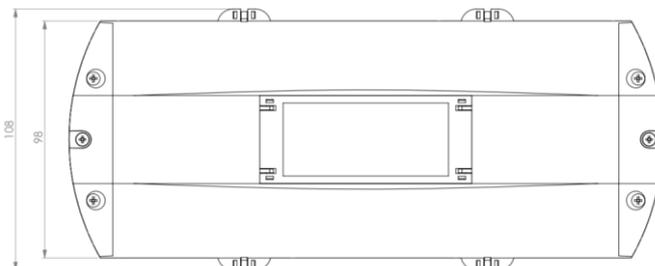


EMERGENCY LIGHTING INVERTER EMCU A
Emergency lighting inverter for the conversion of LED luminaires



Scope

The EMCU A self-contained emergency lighting inverter adds emergency lighting and self-testing functions in accordance with the relevant European standards to regular LED luminaires of different wattages. One or two battery compartments designed to hold a number of 18650 or 26650 LiFePO₄ battery sticks may be connected to one or both sides of the slim, space-saving polycarbonate housing.

The inverter can be placed in suspended ceilings together with the battery housings, making it ideal for downlights, LED panels and similar luminaires. Battery regeneration to optimise capacity is initiated automatically immediately after initial commissioning and after each battery change.

Technical data

Mains voltage range	220...240 V
Mains frequency	50 / 60 Hz
Output voltage range	10...220 V
Max. output voltage (55 V variant)	60 V
Max. output voltage (105 V variant)	120 V
Max. output voltage (220 V variant)	350 V
Output power in emergency mode	approx. 3 W, others upon request
Power consumption	max. 5 W / 7 VA
Mains to emergency switchover	< 0,5 s
Max. housing temperature t _c	65 °C
Ambient temperature t _a	5...50 °C
Functional test	random each 8 to 8.25 days
Duration test	4 annual battery discharges
Battery charging time	24h
Protection class	II
Protection type	IP20
Weight	80 g
Dimensions inverter housing	L 244 x B 35 x H 32 mm
Dimensions battery compartment	L 244 x B 35 x H 35 mm

The maximum LED current in maintained mode, i.e. in active operation, in the LED module must not exceed 2,5 A.

Characteristics

- Self-contained emergency lighting inverter for LED luminaires
- LED forward voltages ranging from 10 to 220V
- 1 h and 3 h emergency durations, others upon request
- Approx. 3 W of constant emergency output power, others on request
- Automatic battery regeneration
- Deep discharge protection
- Selftest conforming to IEC 62034
- Bi-colour LED status indicator
- Compatible with all dimmable and non-dimmable LED drivers
- 3-pin technology: LED module changeover switching and delayed LED driver power switching
- Optional bus communication (DALI, M-Bus or Wireless)
- Polycarbonate housing with one or two battery compartments
- Suitable for protection class II luminaires
- 60 months warranty

Selftest

- Selftest as per IEC 62034
- Bi-colour battery and LED module status indicator

Batteries

- High-temperature LiFePO₄ battery cells 5 to 60 °C
- Cell sizes 18650 and 26650
- Charging time 24 h
- Automatic battery regeneration for capacity optimisation
- EN 62620 (Performance), EN 62133 (Safety)

Safety

- Protection class II
- Protection type IP20
- SELV (55 V and 105 V variants)

Standards

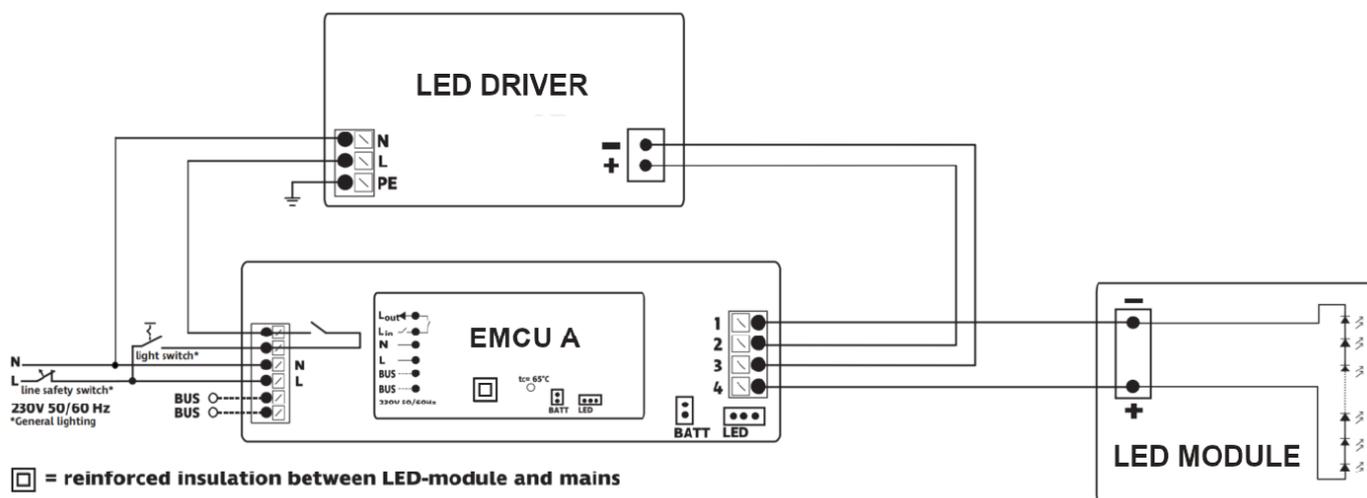
- EN 60598-2-22
- EN 61347-2-7
- EN 61347-2-13
- EN 62384
- EN 62034
- EN 55015
- EN 61000-3-2
- EN 61000-3-3
- EN 61547
- EN 50172 (VDE 0108-100)



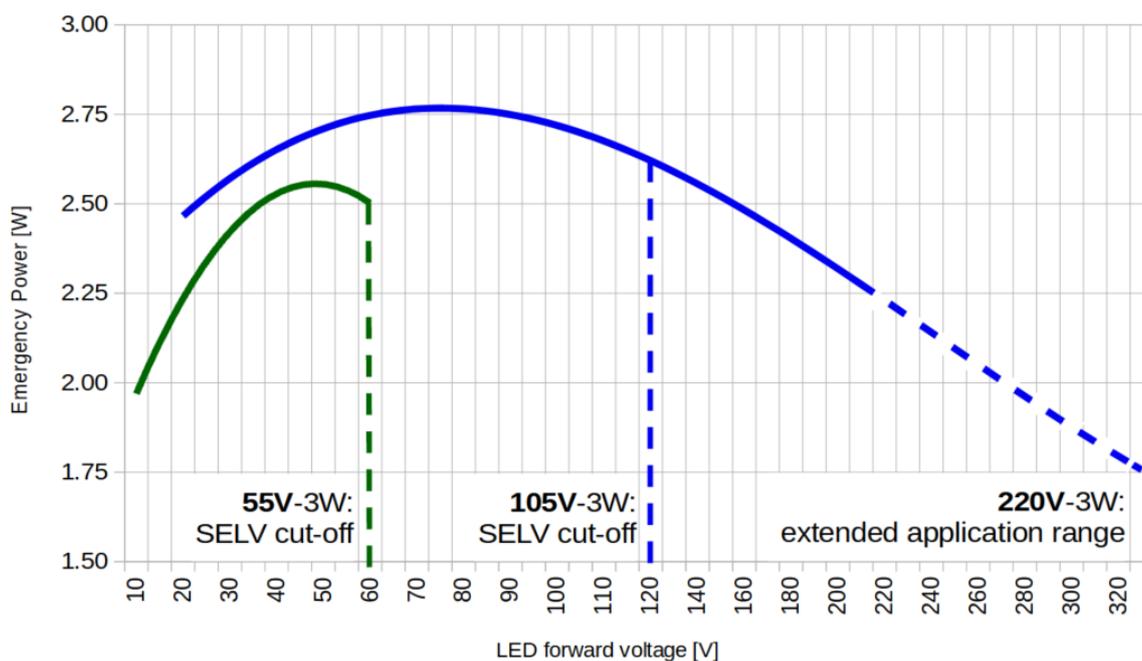
Product variants

Specifications	Types		
	EMCU A product variants		
LED forward voltage	min. 10 V max. 55 V	min. 20 V max. 105 V	min. 100 V max. 220 V
Max. output voltage	60 V	120 V	350 V
SELV	touchable LEDs	isolated LEDs	non-SELV
Selftesting variants	EMCU AS 55V	EMCU AS 105V	EMCU AS 220V
DALI variants	EMCU ADS 55V	EMCU ADS 105V	EMCU ADS 220V
Wireless variants	EMCU AWS 55V	EMCU AWS 105V	EMCU AWS 220V
Batteries	LiFePO ₄ (18650 and 26650 type cells)		

Wiring diagram



LED voltage vs typical emergency power (3W product variants)



All information supplied without liability. Technical data subject to change without prior notice.