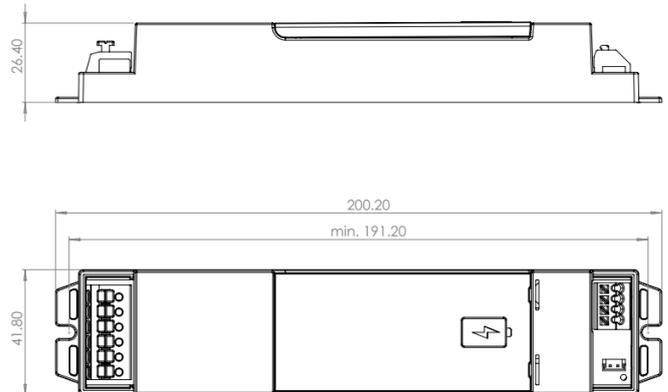
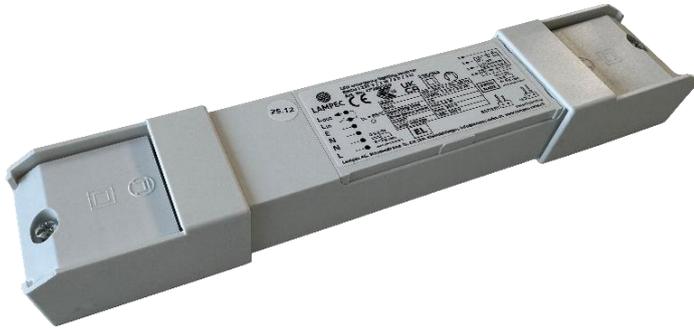


EMERGENCY LIGHTING INVERTER EMCU I
LED emergency inverter with in-built battery for mains lighting conversion



Scope

The EMCU I inverter adds emergency lighting and self-testing functionality to mains LED luminaires. The space-saving polycarbonate case houses an LFP battery and is suitable for a wide range of protection class II lighting applications. An optional strain relief allows for convenient ceiling installation.

Technical data

Mains voltage range	220...240 V
Mains frequency	50 / 60 Hz
Output voltage range	12...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	see page 2
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	180 g
Dimensions	L 200 x W 42 x H 26 mm
Hole spacing	190.2 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 12 to 220V
- 1 h and 3 h emergency durations, others upon request
- constant emergency output power 0.8...2.5 W
- Deep discharge protection
- Compatible with all dimmable and non-dimmable LED drivers
- 3-pin technology: LED module changeover switching and delayed LED driver power switching
- Optional DALI2 monitoring
- Polycarbonate housing
- Suitable for protection class II luminaires
- Optional strain relief for ceiling mounting
- 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 size 18650
- 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)





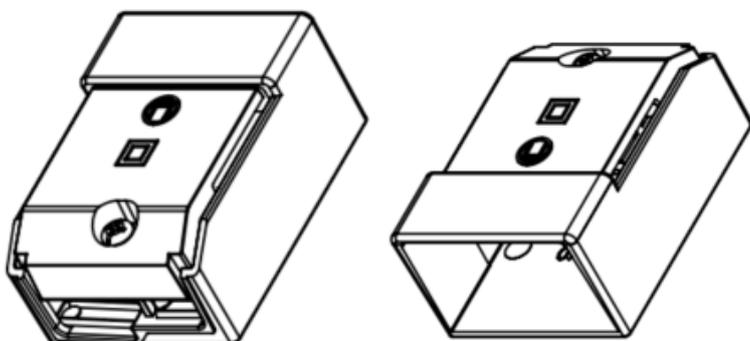
Product variants with selftest

specification	emergency duration	emergency output power	LFP battery type
EMCU IS 55V/3W/3h/2XLi	3 h	approx. 3 W	2x18650 3.2V-4.4Ah
EMCU IS 55V/3W/1h/2Li	1 h	approx. 3 W	2x18650 3.2V-3Ah
EMCU IS 105V/3W/3h/2XLi	3 h	approx. 3 W	2x18650 3.2V-4.4Ah
EMCU IS 105V/3W/1h/2Li	1 h	approx. 3 W	2x18650 3.2V-3Ah
EMCU IS 220V/3W/3h/2XLi	3 h	approx. 3 W	2x18650 3.2V-4.4Ah
EMCU IS 220V/3W/1h/2Li	1 h	approx. 3 W	2x18650 3.2V-3Ah

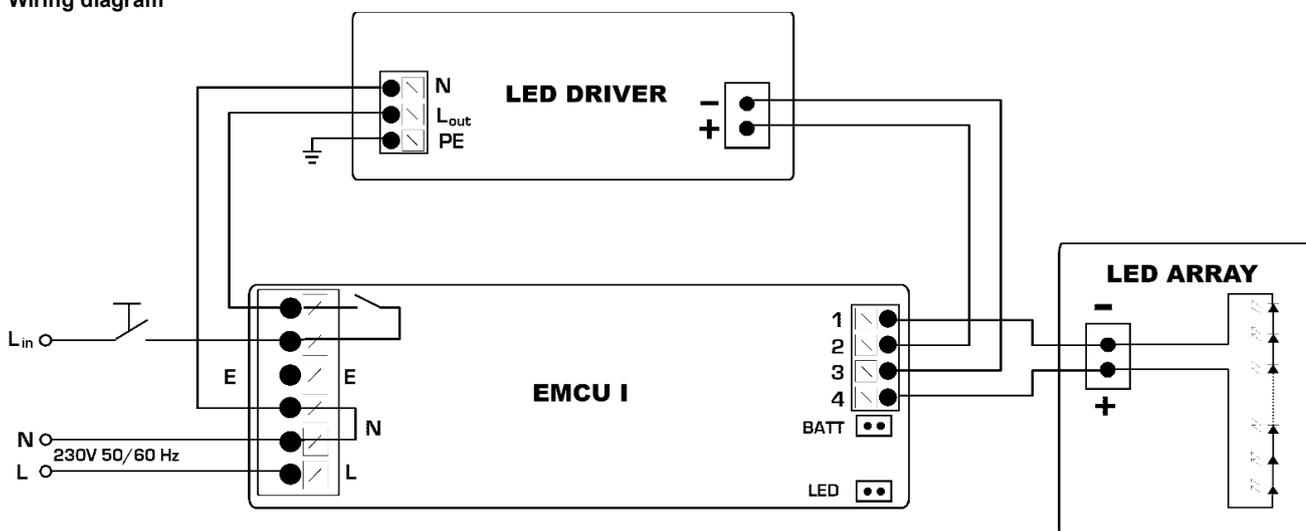
Product variants for DALI2 monitoring

Specification	emergency duration	emergency output power	LFP battery type
EMCU IDS 55V/3W/3h/2XLi	3 h	approx. 3 W	2x18650 3.2V-4.4Ah
EMCU IDS 55V/3W/1h/2Li	1 h	approx. 3 W	2x18650 3.2V-3Ah
EMCU IDS 105V/3W/3h/2XLi	3 h	approx. 3 W	2x18650 3.2V-4.4Ah
EMCU IDS 105V/3W/1h/2Li	1 h	approx. 3 W	2x18650 3.2V-3Ah
EMCU IDS 220V/3W/3h/2XLi	3 h	approx. 3 W	2x18650 3.2V-4.4Ah
EMCU IDS 220V/3W/1h/2Li	1 h	approx. 3 W	2x18650 3.2V-3Ah

Strain relief



Wiring diagram



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