

EMERGENCY LIGHTING UNIT

EMCU K

Emergency lighting LED driver for the conversion of existing LED luminaires



Technical specifications

Mains voltage range	220...240 V
Mains frequency	50 / 60 Hz
Output voltage range	10...220 V
Max. output voltage (55 V device)	60 V
Max. output voltage (105 V device)	120 V
Max. output voltage (220 V device)	300 V
Output power in emergency mode	3 W *
Power consumption	max. 5 W / 7 VA
Main input current	35 mA
Switchover time mains to emergency	< 0,5 s
Max. housing temperature t_c	65 °C
Ambient temperature range t_a	5...50 °C
Functionality test	randomised every 8 to 8.25 days throughout 2 min.
Duration test	four full battery discharges annually
Battery charging time	24 h
Protection class	I
Protection type	IP20
Weight	110 g
Dimensions	L 150 x B 30,2 x H 22,1 mm
Hole spacing	142 mm

* ± 15 %

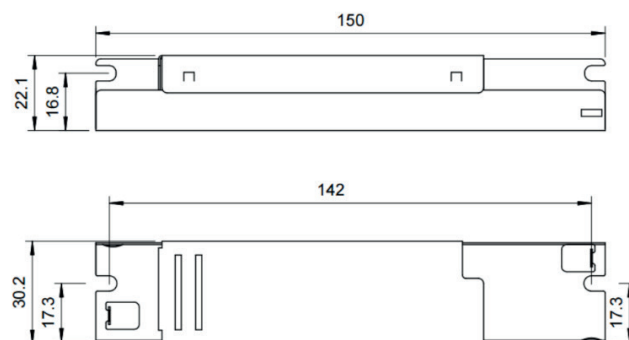
Product description

The emergency lighting unit EMCU K serves the extension of existing LED luminaires with emergency lighting and self-testing functionality conforming to the IEC 62034 standard. The short and space-saving metal housing fits into a wide range of protection class I luminaires along with the equally compact LFP batteries. A battery regeneration process for capacity optimisation is initiated automatically after commissioning as well as after each battery exchange to allow for the maximum battery lifetime.

- Self-contained emergency lighting unit for LED luminaires and LED applications
- forward voltage ranging from 10 to 220 V
- 1 h and 3 h emergency durations, others upon request
- 3 W of constant emergency output power, others upon request
- automatic battery regeneration
- deep discharge protection
- Selftest conforming to IEC 62034
- Bi-colour LED status display
- Compatible with all dimmable and non-dimmable LED drivers
- 3-pin technology: LED module changeover switching and delayed LED driver power switching
- Metal housing L 150 x W 30,2 x H 22,1 mm
- suitable for protection class I luminaires
- 60 months warranty

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

K housing



Technical specification of different executions

device type specification	EMCU Emergency Lighting Units for the Conversion of Existing LED Luminaires battery outside the housing		
LED module voltage	min. 10 V max. 55 V	min. 20 V max. 105 V	min. 100 V max. 220 V
Maximum output voltage (with faulty or defective LED array)	60 V	120 V	300 V
SELV	touchable LEDs	isolated LEDs	non-SELV
Device types with metal housings for class I luminaires	EMCU KS 55V	EMCU KS 105V	EMCU KS 220V
Device types for DALI installations	-	-	-
Batteries	LFP (18650 cells)		

Product liability

Please note that the maximum voltage in case of LED module failure may reach 60 V, 120 V or 300 V for the 55 V, 105 V, and 220 V types respectively. The requirement of the EN 60598-1 standard concerning security must be fulfilled after the integration of the emergency lighting unit in the LED luminaire. It is the emergency lighting unit's user's full responsibility to comply with the EN 60598-1 standard. Any liability concerning standards compliance and correct emergency lighting unit selection will be denied by the manufacturer.

Selftest

- Selftest as per IEC 62034
- Bi-colour LED status display
- Battery status
- LED module status
- Charging cycle

Batteries

- High-temperature cells 5 to 50 °C
- LFP batteries
- 18650 cells
- Specific capacities depending on emergency operation duration
- Charging time 24 h
- Battery regeneration for capacity optimisation
- See battery data sheets for details

Certification marks

- CENELEC certificate no. ENEC 88-105320
- CE
- EN 62620 (LFP battery performance)
- EN 62133 (LFP battery safety)



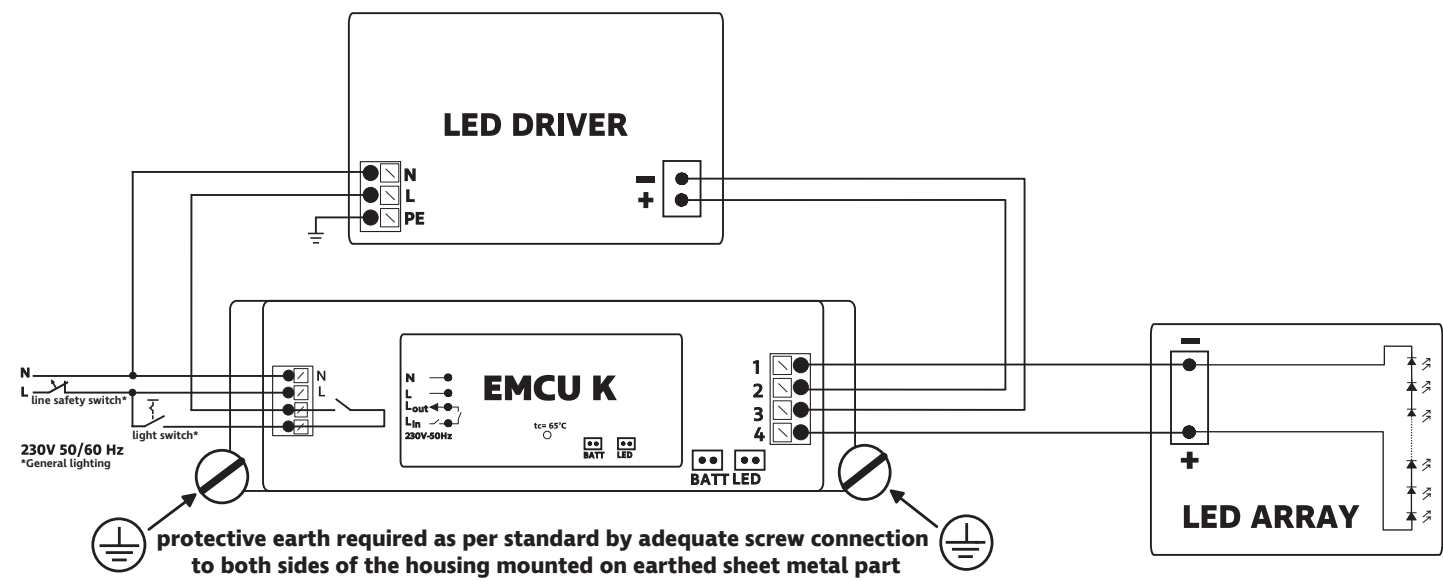
Safety

- Protection class I
- Protection type IP20
- SELV (55 V and 105 V devices)

Standards

- EN 60598-2-22
- EN 61347-2-7
- EN 61347-2-13
- EN 62034
- EN 55015
- EN 61000-3-2
- EN 61000-3-3
- EN 61547
- Suitable for systems conforming to: VDE 0108 or EN 50172

Connection diagram



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