

# INSTALLATION INSTRUCTIONS FOR LED LIGHTS WITH EMERGENCY MODE – SELFTEST – 3HRS, 1HR



Lights for the emergency lighting with emergency unit with power 1,5W (NK3HST) or 2,5W (NK1HST). The whole LED module is backed up in case of emergency. Lights are intended for the lighting in the spaces with ambient temperature 0-25°.

## Electrical installation and safety:

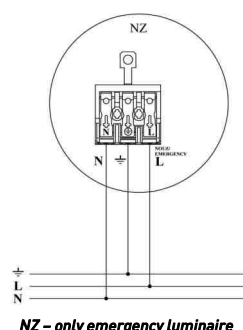
Generally, it is necessary to follow the EU regulations. At any revision or service activity it is necessary to disconnect lighting fitting from the electrical network. Only qualified and experienced person can do this work.

**CAUTION!!!** When handling the LED module and feeder cables to the LED module! Do not touch the LEDs!

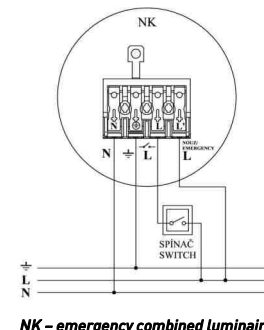


## Installation:

1. Remove the shade from the fitting.
2. Check if the electrical supply is switched off.
3. Take led module out of the clamp holders.
4. Extend the input cable through opening in the fixture and fix it to the wall/ceiling by using screws. In the case of wall mounting, fixture turned so that the battery was placed in the bottom of the fixture (see picture).
5. Attach the connector to the battery. **WARNING!** Lifetime of the battery can be reduced when battery is completely discharged.
6. Connect the input conductors in the terminal block.
7. Mark the date on the battery startup (if not visible label, use the label attached in the luminaire).
8. Insert led module back into the brackets in the original position and snap into the brackets.
9. Turn on the power supply. Use the test button to test the correct operation of the luminaire.
10. Put the shade on.



NZ – only emergency luminaire



NK – emergency combined luminaire

## Technical data:

- operating voltage 230V/50 Hz
- emergency time is according to the type 3 hours (NK3HST) or 1 hour (NK1HST)
- accumulator charging time 24hrs
- accumulators are charged with constant current
- the process of charging the battery and its proper involvement during mains voltage indicated by LED diode
- it is possible to connect 2 conductors at d. 1,5 mm<sup>2</sup> into each terminal block contact

## Self-testing:

### Functional test

- takes 5 seconds and is performed every 7 days, the function of the emergency unit, battery and LED module is checked.

### Duration test:

- the test will take place exactly 24 hours after the initial installation. The emergency lighting unit will enter into a 3-hour (NK3HST) or 1-hour (NK1HST) duration test. The semi-annual test is performed every 180-182 days to check the battery capacity. The testing during these two days begins randomly so that it does not take place on all luminaires at the same time. But to be 100% sure that multiple fixtures in the same space cannot be tested at the same time, they must be installed more than 2 days apart. Or the timing can be set with the test button as described below.

### Note:

- A duration test shall only be started when the battery supply is fully charge if a mains supply failure occurs while a duration test is in progress, the test shall be postponed, and the system shall enter emergency operation. Following restoration of the mains supply, a postponed duration test shall re-commence automatically when the battery supply is fully re-charge.
- The indicator will be slow flashing green within 5 days if the duration test be carried out successfully.

### Functionality of the test button:

- A short press (>1s) on the button starts a function test lasting 5 seconds (The battery's capacity should be more than 5%=charging 30mins)
- Holding down the button (>10s) resets the timer (System-reset)

### Status indicator LED:

LED INDICATION	STATUS	DESCRIPTION
Permanent Green	Standby, System OK	Mains operation, battery is charged
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 (luminaire is shining as in emergency mode)
	Within 5 days after succesful duration test	5 days after the successful duration test (luminaire is operating in normal mode)
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
Slow flashing Red (1s on 3s off)	Battery temperature error	When power on and battery temperature is above 60[±2]°C or below 0[+2]°C

### Note:

- **Fault status:** 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 will switch back to GREEN when mains power on.
- **Battery failed duration test:** After an exchange of the battery and holding down the test button (>10s) reset the timer, the indicator LED will switch to GREEN.

## ATTENTION!!!

- the light source is irreplaceable
- accumulator in the light must be replaced only by the same accumulator (same type, same parameters)!
- for the perfect operation of the emergency lights, it is highly recommended to change the accumulator after 4 years!
- accumulator must be replaced if the light is shining less than hour
- only qualified and experienced personnel must undertake this work
- the producer does not guarantee the possible damage if the assembly instructions are not obeyed
- the light does not require any special maintenance. If the shade is dirty, the tepid water with detergent will be enough for cleaning.