

# Mounting instruction

## CabinLED-NSG-24V- 60W-3pole

art.-no. 20421

### Warning advice:



This emergency power device is suitable only for the cabin lighting “CabinLED“ and “SquareLED“ by the company W+W Aufzugskomponenten. It is allowed to use it only for the lighting of lift cabins.



The assembly has to be effected by specialised persons\* only. When mounting all corresponding safety regulations and measures for the assembly of lifts are to be considered.



Assembly, disassembly and maintenance can only be carried out if the lift system is switched off.



All indications in the assembly instruction are absolutely to be followed.

Keep the instruction for later use!

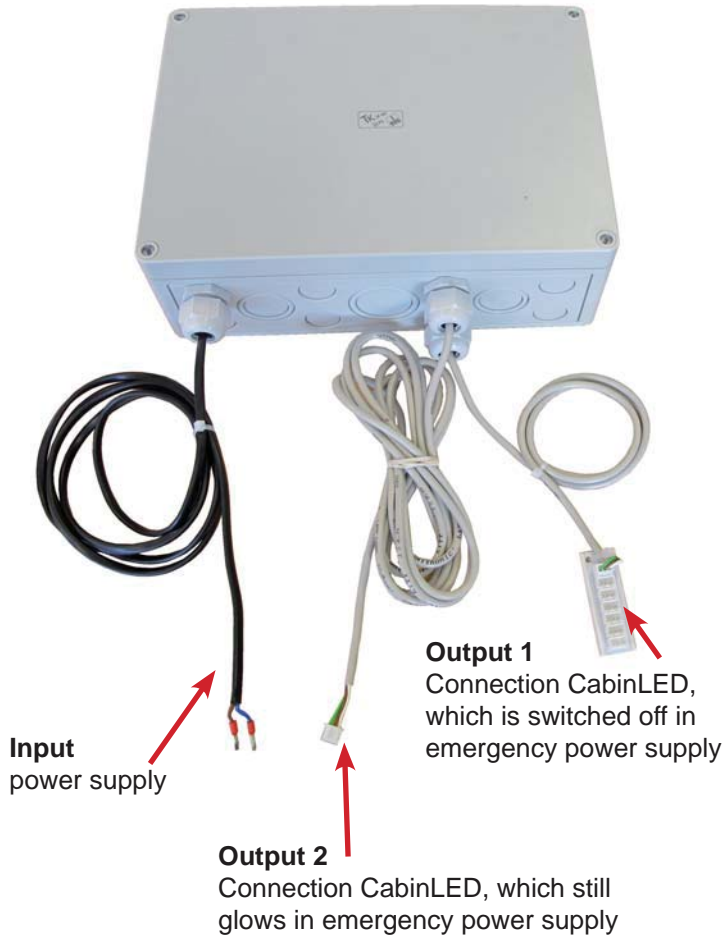
\*A specialised person is someone who has received training especially for lifts, or who has several years of experience in mounting, disassembling or maintaining lifts, someone who was instructed on the particular lift and who is familiar with the tools and appliances which have to be used (according to BGI 779).

## Scope of delivery:

art.-no.	description
20421	CabinLED-NSG-24V-60W-3-pole

- 1x emergency power device IP20 equipped and pre-wired with:
  - power supply unit 230VAC/24VDC with 2m supply line H05VV-F 2x0.75mm<sup>2</sup>
  - emergency power supply with capacity monitoring acc. to EN81-28
  - 2x battery 12V/1.2Ah
  - 1x outgoing feeder 3m LIYY 3x0.34mm<sup>2</sup> with 6-way distributor
  - 1x outgoing feeder 3m LIYY 3x0.34mm<sup>2</sup> with socket

## Technical data:



Input:	100-240V AC 50Hz/60Hz 2m supply line H05VV-F 2x0.75mm <sup>2</sup>
Output 1:	24VDC with 3m connection line LIYY 3x0.34mm <sup>2</sup> to the 6-way distributor (lamps do <b>not</b> glow in emergency power supply)
Output 2:	24VDC with 3m connection line LIYY 3x0.34mm <sup>2</sup> to the lamp (lamp glows in emergency power supply)
Lamps per power supply unit:	<p><b>LED3</b> max. 12 pieces among those max. 6 with emergency light function</p> <p><b>LED5</b> max. 6 pieces among those max. 4 with emergency light function</p> <p><b>LED7</b> max. 6 pieces among those max. 2 with emergency light function</p>
Input:	for cabin light switch-off on purpose (potential-free contact in the control system)
Output:	potential-free signal contact "Battery capacity low" 1x changer, 30VDC 1A SELV
Battery:	2x lead fleece gel accumulator 12V 1,2Ah connection in series
Protection type:	IP20
Operating temperature:	-10°C bis 50°C
Dimensions:	L:255 x B:180 x H:90mm

## Operating mode:

The emergency power unit is suitable for the illumination during normal operation and during emergency power operation. Output 2 is supplied with power without interruptions. The capacity of the interior lead accumulators is controlled in compliance with EN81-28. If the rated capacity is not reached, this is indicated by a potential free contact. During emergency power operation, the accumulators are protected against being destroyed by a deep discharge. During mains operation they are continuously charged with a trickle charge.

Through an input, the emergency power unit can be informed about an intended disconnection of the cabin light. If the light voltage is interrupted and the input is triggered at the same time, the emergency power unit does not switch to emergency power supply.

Optionally a dimmer can be connected to the emergency power unit. During normal operation all lamps are lighted with the adjusted brightness. During emergency power operation the emergency lamps are lighted without being dimmed.

In general the emergency power unit is suitable for operating one emergency lamp. By means of a 6way distributor (which is not included in the delivery) several lamps can be triggered (see the "Technical data").

### Operating mode emergency power supply:

The emergency power supply is a high quality, microprocessor-controlled, uninterruptible power supply which monitors the battery capacity according to EN81-28:2003.

After connecting the accumulator to the device, the device has to be adjusted to the accumulator by pushing the corresponding button. After pushing the button the adjustment process is carried out automatically.

During the adjustment process the device charges the connected lead accumulator so that the maximum capacity of the accumulator is reached. The process is temperature-compensated. During power supply operation the accumulator is charged constantly (trickle charging).

To avoid sulphation and to ensure the maximum capacity of the battery for a long time, a strong load impulse is cyclically applied to the accumulator. During power supply operation no discharging will occur even at full load.

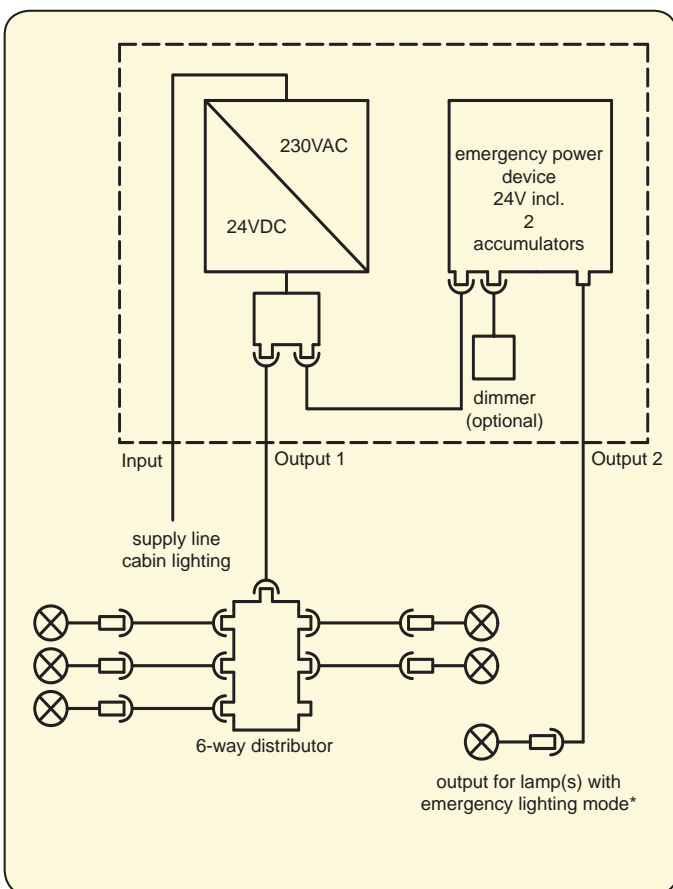
In case of a power breakdown the battery voltage will directly be switched to the output.

During standby power operation the accumulator is protected against destruction by deep discharge.

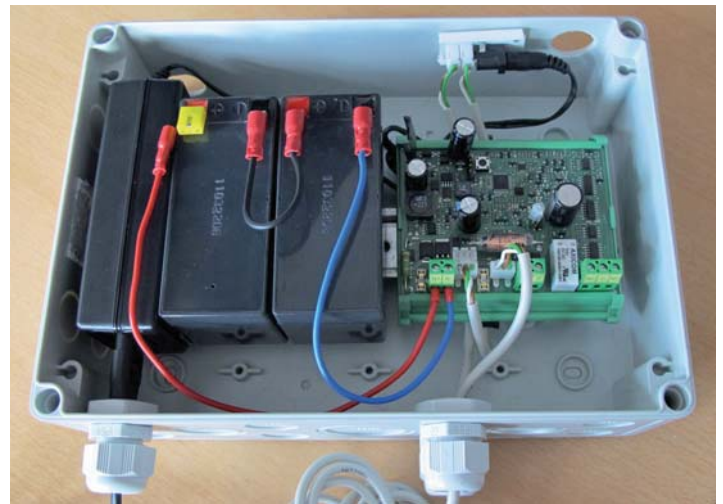
Deeply discharged accumulators will be charged completely after the mains supply is back. The charging current depends on the surrounding conditions and can reach up to 200mA.

The charging process requires the power supply unit to be able to deliver up to 100W.

### Operation:



\*If more than one CabinLED should glow in emergency power supply, another 6-way distributor (art.no. 20427) has to be connected to output 2 (not included in the scope of delivery)



### Operation:

1. Connect CabinLED to Output 1  
(do **not** glow in emergency power supply)
2. Connect CabinLED to Output 2\*  
(glows in emergency power supply, consider the quantity, see page 2)
3. Connect power supply (input) in roof control box
4. Connect positive terminal to the battery
5. Install the battery by pushing the learning key T1 on the plate more than one second. The installation of the batteries is shown by flickering of the LEDs 2, 3 and 4. After a successful installation LED3 is flashing.

### Attention:

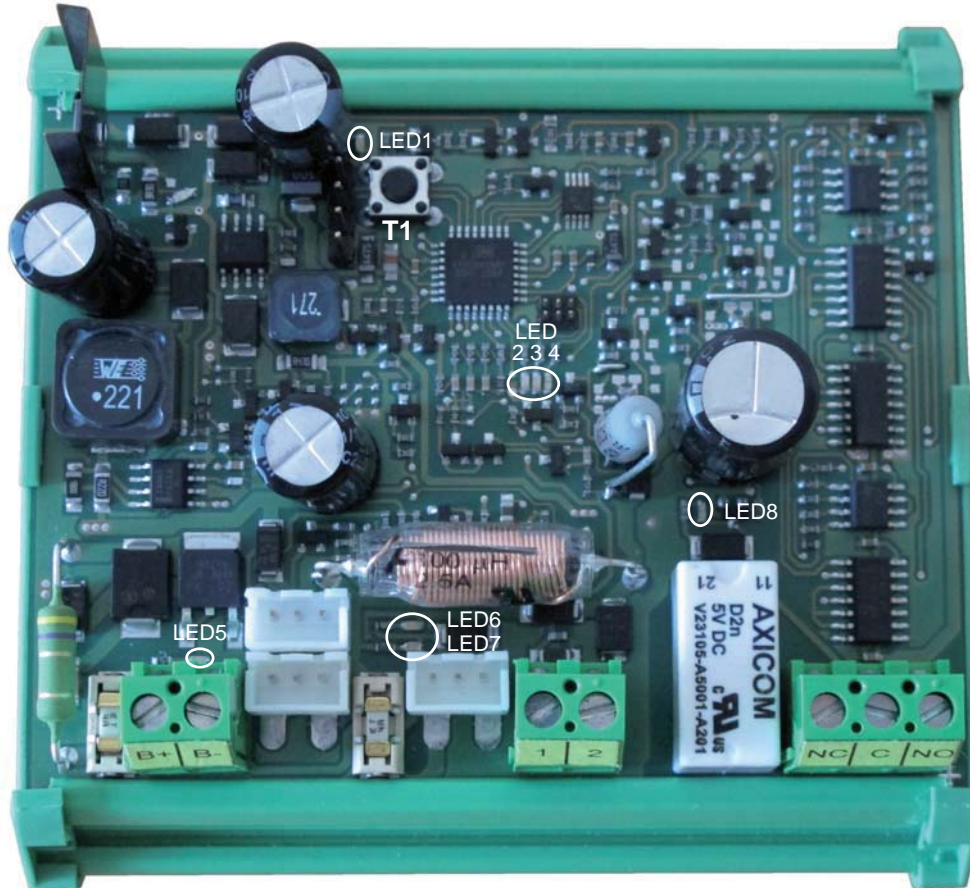
- The installation process is compulsory as soon as:
- the switching is started running for the first time
  - a battery is changed
  - the connected loads are changed

### Optional:

- Plug the dimmer (not included in the scope of delivery) into a free socket on the plate, see page 5
- Deliberate cabin light switch-off: Short circuiting of output 1 and 2, see page 5
- Supply capacity monitoring: potential-free AC: NC-C-NO



## Status display LEDs:



### Status displays of the LEDs

LED 1: Supply voltage display

- On: Battery or power supply is connected ready for use
- Off: No supply voltage for microcontroller

LED 2: Error display (see page 5)

LED 3: Battery display

- Off: No battery, battery not identified or external power supply without voltage
- On: Battery completely loaded, conservation charging, battery capacity calibrated
- Flashing 1x short: Battery is loaded with maximum current, battery capacity calibrated and saved
- Flashing 2x short: Battery is loaded with maximum current, battery capacity **not** calibrated (Condition after initial operation/installation)

LED 4: Feeding output clamps

- Off: External feeding completely switched off. External power supply sends no voltage, deep discharging of the battery
- On: External feeding by external power supply
- Flashing: Feeding by battery, external power supply sends no voltage

LED 5:

- On: Battery connected in a wrong poled way
- Off: Battery connected correctly

LED 6:

- On: Output active
- Off: Output switched off

LED 7:

- On: Fuse ,F2' below the LED damaged (4AT)
- Off: Fuse OK.

LED 8: Capacity relay function indication

- Off: Battery capacity insufficient
- On: Battery capacity sufficient, battery is calibrated and ready for use





## Error display LED 2

The error display - LED 2 can show one or more errors at the same time, which conduce to error detection. In normal mode this LED is switched off.

Every error code is shown by a quantity of short impulses.

Different errors are separated from each other by breaks. The following error codes are possible:

1x flashing: battery empty / deep discharging of the battery / battery supply switched off

2x flashing: device / battery not adjusted (delivery status)

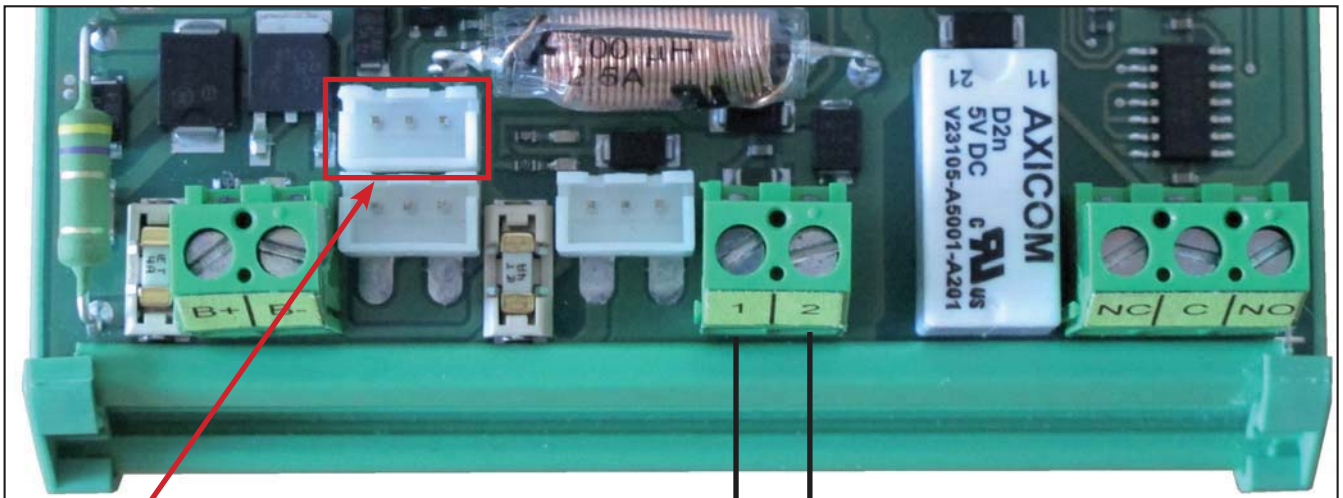
3x flashing: load current output I<sub>A</sub> to high (>2,5A < I<sub>A</sub> and <3A) enabling after 10 seconds

4x flashing: output short-circuited (I<sub>A</sub> > 3A). enabling after 10 minutes

5x flashing: no battery connected / battery damaged

6x flashing: power supply voltage beyond tolerance 24V +/- 10%

7x flashing: adjusting not possible, because battery / power supply combination invalid



Free input for dimmer

Potential free contact in controller for deliberate cabin light switch-off

## Clamps:

B+ battery supply +24V

B- battery supply, GND

1 deliberate cabin light switch-off

2 deliberate cabin light switch-off

NC alarm relay, clamp imprint: NC

C alarm relay, clamp imprint: C

NO alarm relay, clamp imprint: NO

## Dimmer:

A dimmer can be plugged into the free socket on the plate (see picture).