



Portable Lamp

Series 6148



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1 General Information

1.1 Manufacturer

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1.2 Information regarding the Operating Instructions

ID-No.: 206676 / 614860300010
Publication Code: 2023-06-01·BA00·III·en·09

The original instructions are the German edition.
They are legally binding in all legal affairs.

1.3 Further Documents

- Data sheet






For documents in additional languages, see r-stahl.com.

1.4 Conformity with Standards and Regulations

For certificates and declaration of conformity, see r-stahl.com.

2 Explanation of the Symbols




2.1 Symbols in these Operating Instructions

Symbol	Meaning
	Tips and recommendations on the use of the device
	General danger
	Danger due to explosive atmosphere
	Danger due to energised parts
	Risk of damage to the eyes caused by optical radiation





2.2 Warning Notes

Warnings must be observed under all circumstances, in order to minimize the risk due to construction and operation. The warning notes have the following structure:

- Signalling word: DANGER, WARNING, CAUTION, NOTICE
- Type and source of danger/damage
- Consequences of danger
- Taking countermeasures to avoid the danger or damage

	DANGER
	Danger to persons Non-compliance with the instruction results in severe or fatal injuries to persons.
	WARNING
	Danger to persons Non-compliance with the instruction can result in severe or fatal injuries to persons.
	CAUTION
	Danger to persons Non-compliance with the instruction can result in light injuries to persons.
NOTICE	
Avoiding material damage Non-compliance with the instruction can result in material damage to the device and / or its environment.	

2.3 Symbols on the Device

Symbol	Meaning
	CE marking according to the current applicable directive.
	UKCA marking according to the currently applicable directive.
	Device certified for hazardous areas according to the marking.
	Risk of damage to the eyes caused by optical radiation.

3 Safety Notes

3.1 Operating Instructions Storage

- Read the operating instructions carefully.
- Store the operating instructions at the mounting location of the device.
- Observe applicable documents and operating instructions of the devices to be connected.

3.2 Safe Use

Before mounting

- Read and observe the safety notes in these operating instructions!
- Ensure that the contents of these operating instructions are fully understood by the personnel in charge.
- Use the device in accordance with its intended and approved purpose only.
- Always consult R. STAHL Schaltgeräte GmbH if using the device under operating conditions which are not covered by the technical data.
- We cannot be held liable for damage to the device caused by incorrect or unauthorised use or non-compliance with these operating instructions.

For assembly and installation

- Observe national assembly and installation regulations (e.g. IEC/EN 60079-14).
- Observe national safety and accident prevention regulations.
- During installation and operation, observe the information (characteristic values and rated operating conditions) on the type plates and data plates and information signs located on the device.
- Before installation, make sure that the device is not damaged.

Maintenance, repair, commissioning

- Before commissioning, make sure that the device is not damaged.
- Work on the device, such as installation, maintenance, overhaul, repair, may only be carried out by appropriately authorised and trained personnel.
- Perform only maintenance work or repair described in these operating instructions.

3.3 Intended Use



The luminaire is equipment

- usable in a motor vehicle
- can be used indoors and outdoors
- for mobile applications
- for use in Zones 1, 21, 2, 22 and in the safe area


A charging unit (e.g. charging unit included in delivery, third-party charging unit LG443 or KFZ 90) is required to charge the portable lamp 6148.

The charging unit may only be used in the safe (non-EX) area and indoors.

3.4 Modifications and Alterations

	DANGER
	<p>Explosion hazard due to modifications and alterations to the device! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Do not modify or alter the device.
	<p>No liability or warranty for damage resulting from modifications and alterations.</p>

4 Function and Device Design

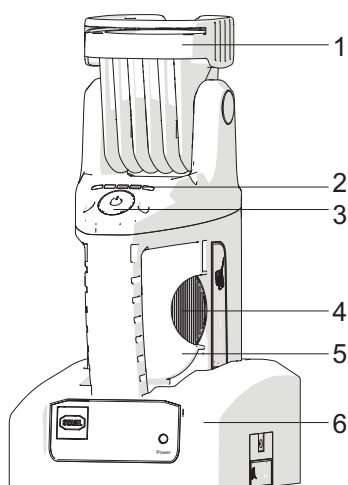
	DANGER
	<p>Explosion hazard due to improper use! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Use the device only in accordance with the operating conditions described in these operating instructions. • Use the device only for the intended purpose specified in these operating instructions.

4.1 Function

The portable lamp can be used as follows:

- To switch on, switch off, dim and make main light with LED blink
- To switch on and switch off secondary light with LED
- To provide emergency light (can be activated/deactivated; only in conjunction with the charging unit)
- To charge the battery (only in conjunction with the charging unit)
- To test the battery capacity

4.2 Device Design



- 1 Lamp head with main light and secondary light
- 2 LED display
- 3 Pushbutton
- 4 Diffusing lens
- 5 Enclosure
- 6 Charging unit

14769E00

5 Technical Data

Explosion Protection

Global (IECEX)

Gas and dust	IECEX IBE 11.0009 Ex ib IIC T4 Gb Ex tb IIIC T75 °C Db
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Europe (ATEX, UKEX)

Gas and dust	IBExU 11 ATEX 1066, CML 21UKEX21301 ⊕ II 2 G Ex ib IIC T4 Gb ⊕ II 2 D Ex tb IIIC T75 °C Db
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Certifications and certificates

Certificates	IECEX, ATEX, UKEX
Approval for motor vehicles	E1 10 R - 036569

Technical Data

Electrical data

Battery	lead-fleece battery, maintenance-free
Service life	
Battery	> 5 years at 20 °C
LED	> 50,000 h at 50 °C

Luminous characteristics

Lamps	main light, LED: 3 W secondary light, LED: 0.5 W		
Luminous flux	168 lm (main lamp, without diffuser)		
Light intensity	40,000 cd (main lamp, without diffuser)		
Outdoor range	200 m		
Colour temperature	6,500 K		
Light distribution	acc. to DIN 14642		
Functions	continuous light or flashing light of the main light, continuous light of the secondary light, function of the main light continuously dimmable		
Emergency light duration		Main light	Secondary light
	Continuous operation	continuously on, typically 6.5 hours	continuously on, typically 28 hours
	Blinking operation	up to 16 hours	–
Deep discharge protection	At a residual capacity of the battery of < 10 %, the main light is automatically switched to the secondary light.		

Test function

Lamp control	When the main light is defective, the light is switched automatically to the secondary light
Battery capacity	Determination of the current battery capacity

Technical Data

Mechanical data

Degree of protection	IP66 (IEC/EN 60589)
Material	
Enclosure	Polyamid, schlagfest
Head tilting	toward the front: 100°, toward the back: 90°
Pushbutton	main light ON - secondary light ON - main light FLASHING OFF
Charge state display	The LEDs indicate the available capacity for approx. 5 seconds

Ambient conditions

Functional ambient temperature range	-20 to +50 °C
Storage temperature	-20 to +50 °C

Charging unit

Version	charging unit 6148/0000 (for explosion-protected portable lamps) Line voltage: 110 to 240 V AC, 50/60 Hz and 12 to 30 V DC with emergency light function and automatic switch-off in vehicle operation with lead for 110 to 240 V AC, 50/60 Hz A charging cable (12 to 30 V DC) for vehicle operation is optionally available.
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Charging current	at room temperature:		
	charging process		stand by
	12 V DC	max. 170 mA	power consumption < 1 W
	24 V DC	max. 120 mA	
	110 V AC	max. 90 mA	
	240 V AC	max. 60 mA	

Charging time	approx. 11 h
Function	Charging starts when the portable lamp is placed in the charging unit (voltage indication via green LED)
Automatic break device	In motor vehicle operation, the car battery voltage is monitored. If the voltage of the car battery drops below 11.7 V and 23.5 V with a 12 V and 24 V battery, respectively, the charging process of the portable lamp will be interrupted automatically. The automatic break device can be deactivated.
Degree of protection	IP20
Protection class	II (with protective insulation)
Enclosure material	polyamide, impact-resistant, black
Mounting	wall or table mounting
Connection cables	charging cable 110 to 240 V AC: approx. 1.8 m long, with Europlug, 2-pin charging cable 12 to 30 V DC: approx. 1.8 m long, with free ends, 2-pin

For further technical data, see r-stahl.com.

6 Transport and Storage

6.1 General

- Transport and store the device only in the original packaging.
- Store the device in a dry place (no condensation) and vibration-free.
- Do not drop the device.

6.2 Batteries

- Do not transport together with other materials.
- Do not transport in explosive dust atmosphere.
- Handle with care.
- Store protected from fire, sources of dust, harmful gases and liquids.
- Store in a dry and cool location.

NOTICE

Risk of deep battery discharge due to exceeded storage!

Non-compliance can result in material damage!

- The battery should be charged within 26 weeks from date of production by means of operating the luminaire.

Recommendation:

- Store battery at an ambient temperature of +5 to +25 °C and a relative humidity of 65 ±5 %. The storage period is reduced of up to one month if stored outside this temperature range.

7 Mounting and Installation



DANGER

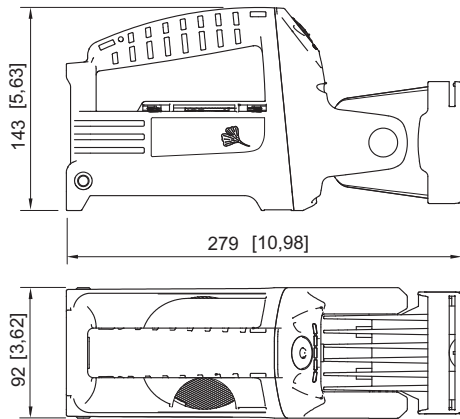
Explosion hazard due to incorrect installation of the device!

Non-compliance results in severe or fatal injuries.

- Carry out installation strictly according to the instructions and national safety and accident prevention regulations to maintain the explosion protection.
- Select and install the electrical device so that explosion protection is not affected due to external influences, i.e. pressure conditions, chemical, mechanical, thermal and electric impact such as vibration, humidity and corrosion (see IEC/EN 60079-14).
- The device must only be installed by trained qualified personnel who is familiar with the relevant standards.

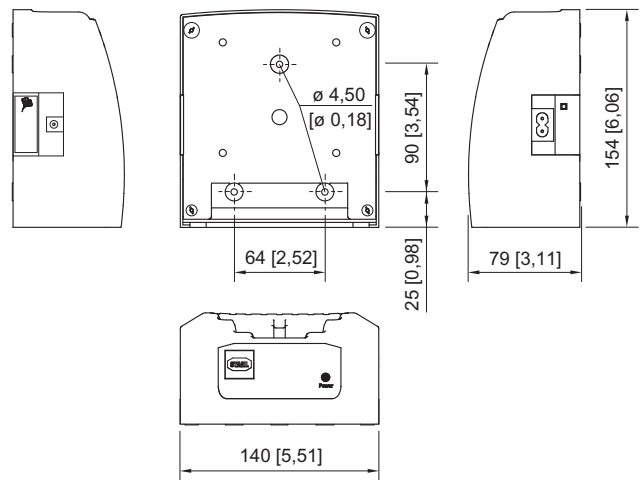
7.1 Dimensions / Fastening Dimensions

Dimensional drawings (all dimensions in mm [inches]) – Subject to modification



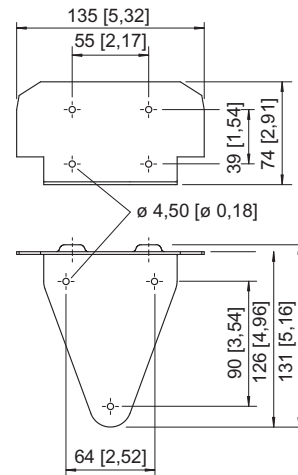
14754E00

Portable lamp



14753E00


Charging unit



14807E00

Drilling hole pattern for wall brackets

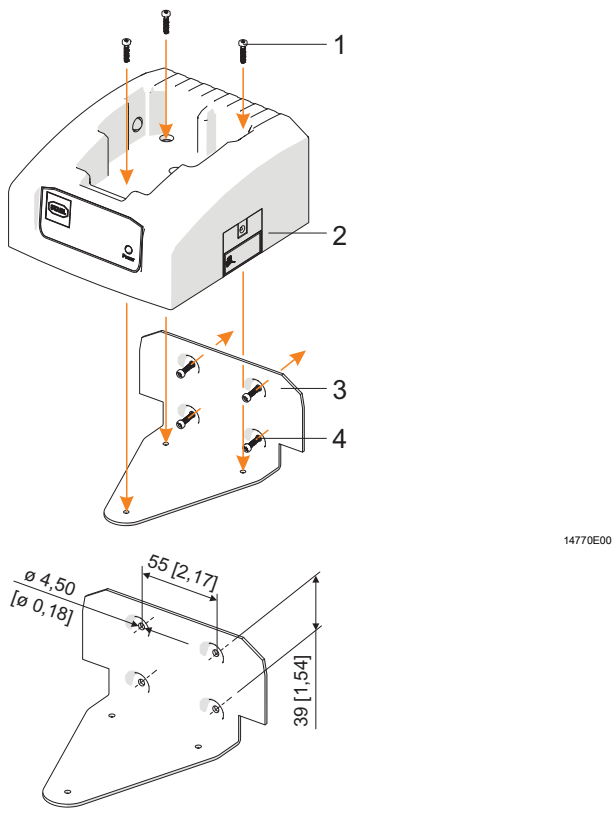
7.2 Mounting / Dismounting, Operating Position

	DANGER
	<p>Explosion hazard when used in hazardous areas. Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only assemble and use the charging unit in safe areas.

7.2.1 Charging Unit Assembly

i	<p>Due to its IP degree of protection, the charging unit is only suitable for indoor use.</p>
i	<p>The assembly site must be level and support the weight.</p>
i	<p>Install the charging unit in such a way that the portable lamp can be inserted into the charging unit vertically from above.</p>

Wall mounting

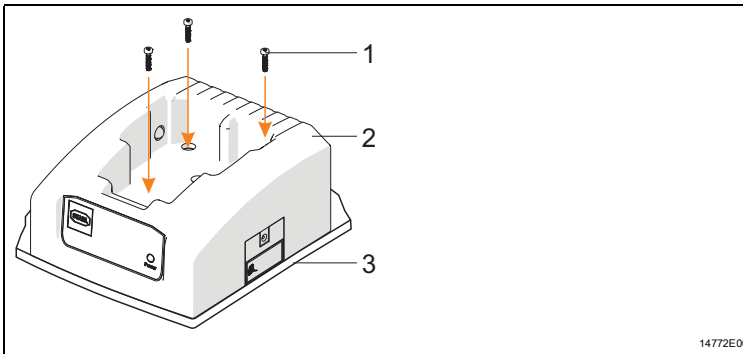


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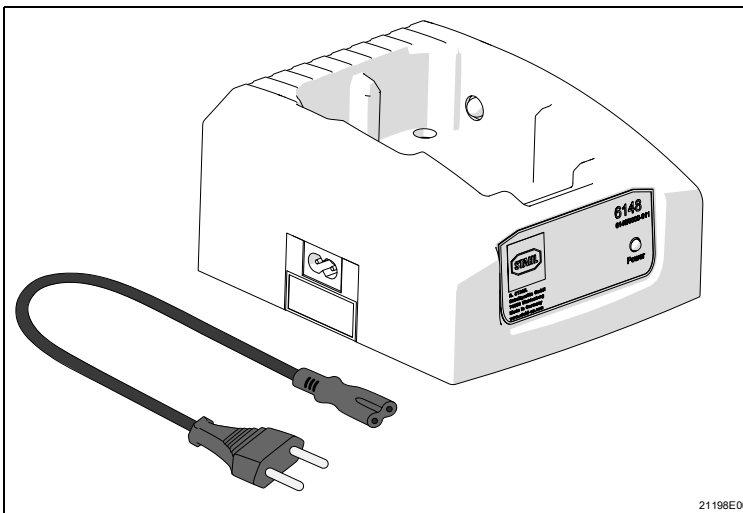
- Align the wall bracket (3) horizontally.
- Secure it in the correct location using 4 screws (4); screws are not included in delivery.
- Slide the charging unit (2) onto the wall bracket (3) from above.
- Fasten charging unit (2) with the 3 screws (1) (Torx 20) included in delivery (tightening torque 1.5 Nm).

Table mounting



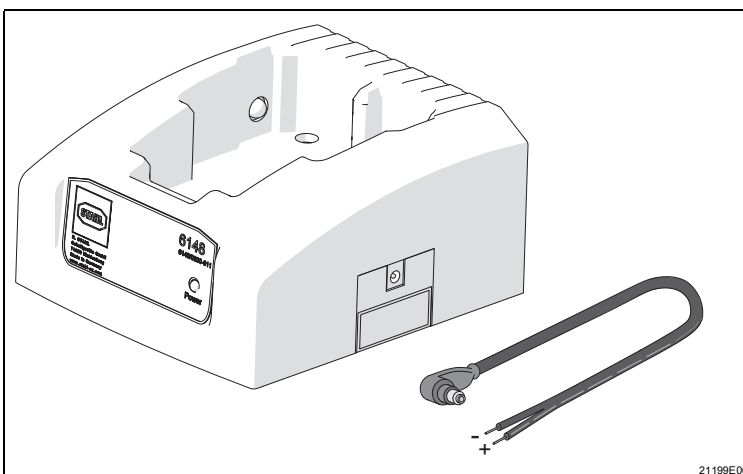
- Place the charging unit (2) on a level surface (3).
- Secure it in the correct location using 3 screws (1) (tightening torque 1.5 Nm); screws are not included in delivery.

7.2.2 Charging Unit Connection 110 to 240 V AC



- The connection cable supplied can be used to connect the charging unit and supply network. (Use a country-specific adaptor for Euro plugs if necessary, depending on the country of use.)

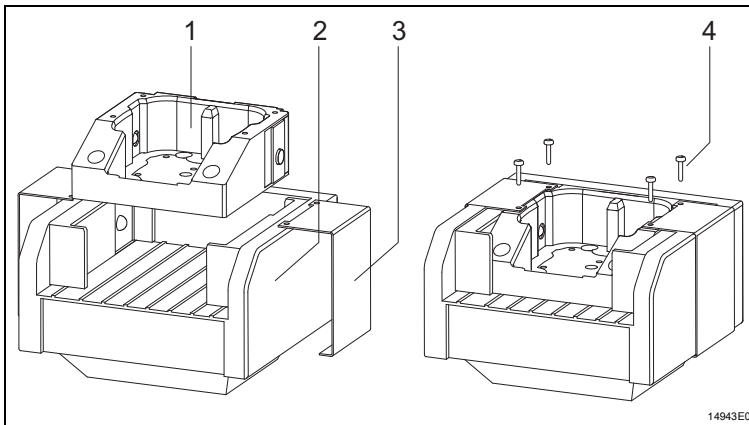
12 to 30 V DC



- Use the vehicle connection cable available as an accessory to connect the charging unit with a DC power supply.

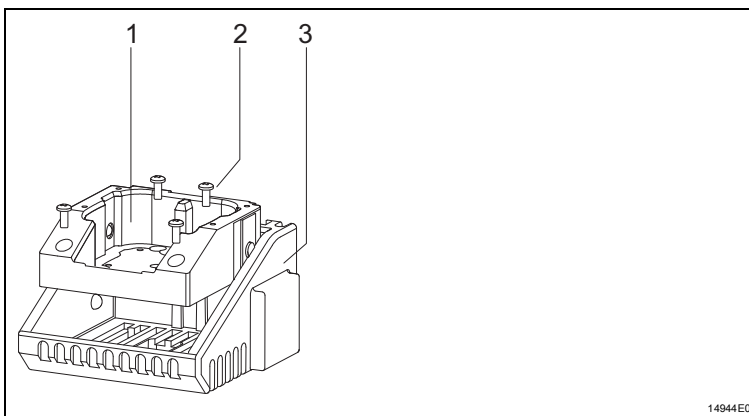
- + wire marked with a line
- black wire

7.2.3 Assembly of the Adapter in third-party Charging Units Adapter for third-party charging units LG443



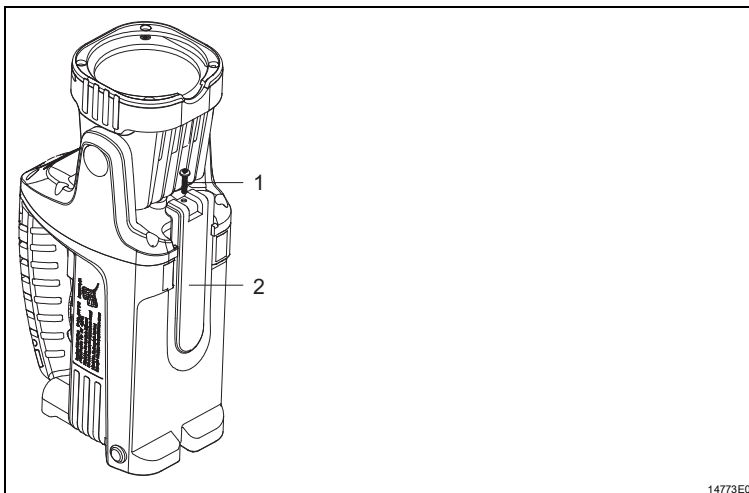
- Insert the adaptor (1) into the third-party charging unit LG443 (2).
- Push the brackets (3) onto the third-party charging unit LG 443 (2).
- Fasten adaptor with the screws (Torx 10) included in delivery (4) (tightening torque 0.5 Nm).

Adapter for third-party charging units KFZ90





- Insert the adaptor (1) into the third-party charging unit KFZ90 (3).
- Fasten adaptor (1) with the screws (Torx 10) included in delivery (2) (tightening torque 0.5 Nm).

7.2.4 Assembly of the Belt Hook



- Slide the belt hook (2) into the guide from above.
- Fasten it with the screw included in delivery (Torx 10) (1) (tightening torque 0.5 Nm).

8 Commissioning

	<p style="text-align: center;">DANGER</p> <p>Explosion hazard when used in hazardous areas. Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only assemble and use the charging unit in safe areas.
	<p>Insert the portable lamp into the connected charging unit before using it for the first time</p>



Charging unit:

- Connect to the supply voltage.
- Ensure that the "Power" LED lights up.
- Insert the portable lamp.

Portable lamp:

The LED display shows information on the charging state or possible faults.

9 Operation


	DANGER
	<p>Explosion hazard due to incorrect installation! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Check the device for proper installation before commissioning. • Comply with national regulations.
	CAUTION
	<p>Risk of damage to the eyes caused by optical radiation! Non-compliance can result in minor injuries.</p> <ul style="list-style-type: none"> • Do not look into the light source.

9.1 Normal Operation

The portable lamp is mobile lighting equipment.

9.1.1 Function


- Main light: Switching on/Dimming/Switching off
- Main light: Blinking (blinking frequency once per second)
- Secondary light: Switching on/Switching off

	<p>The main or secondary light of the portable lamp can only be switched on if the portable lamp is outside the charging unit. The undimmed main light and the secondary light light flicker-free. The main light is switched automatically to the secondary light when:</p> <ul style="list-style-type: none"> • the main light is defective. • the remaining runtime of the battery is less than 10% of the full charging capacity.
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9.1.2 Switching On / Changing the Function

Switching on

- Press the pushbutton.
The main light switches on.

	<p>The LED display shows the battery capacity for 5 seconds.</p>
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Switching

- Press pushbutton repeatedly while the LED display is active.
The secondary light is switched on.
The main light flashes once per second.
The LED is switched off.

9.1.3 Switching off



- Press the pushbutton when the main light is blinking.
- or
- Press the pushbutton at least 5 seconds after the last switching operation.

9.1.4 Dimming Mode

	WARNING
	<p>Risk of injury due to rotating parts under stroboscopic lighting. Non-compliance can result in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Do not use the dimming mode for rotating parts.
	<p>The portable lamp must be completely switched off before switching on dimming mode.</p>

- Press the pushbutton until the desired dimming level is reached.
The LED display shows the selected dimming level.

9.2 Emergency Light Operation

	DANGER
	<p>Explosion hazard when used in hazardous areas. Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only assemble and use the charging unit in safe areas.
	<p>In connection with the charging unit, the portable lamp can be used as emergency light fitting. In case of power failure, the main light will be switched on undimmed.</p>

Charging unit:

- Connect to the supply voltage.
- Ensure that the "Power" LED lights up.
- Insert the portable lamp.

Portable lamp:

The portable lamp reacts when it is placed in the charging unit – it switches off any LEDs that are switched on, performs a function test and indicates the state of charge and any errors via the LED display.

In case of power failure, the portable lamp is switched on automatically.

9.2.1 Switching the Emergency Light Mode on and off

i	Upon delivery, the "Emergency light mode" function is on. With the function switched off and in case of power failure, the following states will be activated at the portable lamp.	
	before insertion into the charging unit:	in case of power failure:
	Main LED and secondary LED: OFF	Main LED and secondary LED: OFF
	Main LED: ON	Main LED: ON
	Main LED: DIMMED	Main LED: ON
	Main LED: BLINKING	Main LED: BLINKING
	Secondary LED: ON	Secondary LED: ON


- Switch the main light on.
- Press button again and keep it pressed.
- Press and hold the button while inserting the portable lamp into the charging unit. Keep holding the button until the LED display shows as follows that a switchover has been performed.

red	green	green	green	green	Description
					Emergency lighting function off
					Emergency lighting function on

Explanation of diagram:

- Field completely filled = LED lights up
- Field half-full: LED blinking
- Field empty = LED off

9.3 Charging Operation

	DANGER
	Explosion hazard when used in hazardous areas. Non-compliance results in severe or fatal injuries. <ul style="list-style-type: none"> • Only assemble and use the charging unit in safe areas.

9.3.1 Charging the Battery

i	At room temperature, the charging time of a discharged battery is approx. 11 hours. The portable lamp can remain in the charging unit even when the battery is completely charged.
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Charging unit:

- Connect to the supply voltage.
- Ensure that the "Power" LED lights up.
- Insert the portable lamp.

Portable lamp:

The portable lamp reacts when it is placed in the charging unit – it switches off any LEDs that are switched on, performs a function test and indicates the state of charge and any errors via the LED display.

The LED main light is switched on upon removal from the charging unit and with the emergency lighting function switched on.

9.3.2 Charging Switch-Off when used in a Motor Vehicle

i	<p>Upon delivery, the function "Switch off charging operation in the event of undervoltage" is active.</p> <p>In case of undervoltage, the charging operation in the motor vehicle will be interrupted.</p> <p>The function can be deactivated and activated.</p>
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Activating and deactivating



- Switch on the secondary light.
- Press button again and keep it pressed.
- Press and hold the button while inserting the portable lamp into the charging unit. Keep holding the button until the LED display shows as follows that a switchover has been performed.

red	green	green	green	green	Description
█					Charging switch-off off
		█	█	█	Charging switch-off on

Explanation of diagram:

- Field completely filled = LED lights up
- Field half-full: LED blinking
- Field empty = LED off

9.4 Battery Capacity Test

	<p style="text-align: center;">DANGER</p> <p>Explosion hazard when used in hazardous areas. Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only assemble and use the charging unit in safe areas.
	<p>The test:</p> <ul style="list-style-type: none"> • should be carried out once a year. • lasts up to 20 hours. • should be carried out at room temperature. <p>The test is cancelled when:</p> <ul style="list-style-type: none"> • the portable lamp is removed from the charging unit. • the button on the portable lamp is pressed. • the main LED is defective. • the power supply of the charging unit is interrupted. • the supply voltage falls below the lower voltage limit.

Charging unit:

- Connect to the supply voltage.
- Ensure that the "Power" LED lights up.
- Insert the portable lamp.

Portable lamp:

The portable lamp reacts when it is placed in the charging unit – it switches off any LEDs that are switched on, performs a function test and indicates the state of charge and any errors via the LED display.

Start battery test

- Keep pressing the button until the LED display shows the battery test.
- The LEDs of the LED display are switched on and off one after the other.

Test sequence

- The battery is charged for 12 hours.
- Then the LED main light is switched on.
- The battery is discharged to 10% of its capacity.
- The discharge time is measured and evaluated.

red	green	green	green	green	Description
Battery test aborted					
red				green	Interruption of the charging operation
red		green		green	After charging, the battery capacity is less than 100%.
red			green		Main light LED defective
red			green	green	Button was pressed during the test
Battery test result					
red	green				Battery capacity ≤ 40%
red	green	green			Battery capacity ≤ 60%
red	green	green	green		Battery capacity ≤ 80%
	green	green	green	green	Battery capacity > 80%

Explanation of diagram:

- Field completely filled = LED lights up
- Field half-full: LED blinking
- Field empty = LED off

9.5 Indications

Explanation of diagram:

- Field completely filled = LED lights up
- Field half-full: LED blinking
- Field empty = LED off

Battery capacity

red	green	green	green	green	Description
red					Battery capacity < 10%
red					Battery capacity ≤ 20%
red	green				Battery capacity ≤ 42%
red	green	green			Battery capacity ≤ 65%
red	green	green	green		Battery capacity ≤ 88%
red	green	green	green	green	Battery capacity > 88%

Dimming mode

red	green	green	green	green	Description
red					Dimming level < 20%
red	green				Dimming level < 40%
red	green	green			Dimming level < 60%
red	green	green	green		Dimming level ≤ 80%
red	green	green	green	green	Dimming level > 80%

Charging operation

red	green	green	green	green	Description
					Battery capacity < 20%
					Battery capacity < 42%
					Battery capacity < 65%
					Battery capacity < 88%
					Battery capacity ≤ 98%
					Battery capacity > 98%

Activating and deactivating the emergency light operation

red	green	green	green	green	Description
					Emergency lighting function off
					Emergency lighting function on

Activating/deactivating the charging switch-off when used in a motor vehicle

red	green	green	green	green	Description
					Charging switch-off off
					Charging switch-off on


Battery test

red	green	green	green	green	Description
Battery test aborted					
					Interruption of the charging operation
					After charging, the battery capacity is less than 100%.
					Main light LED defective
					Button was pressed during the test
Battery test result					
					Battery capacity ≤ 40%
					Battery capacity ≤ 60%
					Battery capacity ≤ 80%
					Battery capacity > 80%

Faults

red	green	green	green	green	Description
					LED input voltage too high
					LED input voltage too low
					Charging unit output voltage too high

9.6 Troubleshooting

	DANGER
	<p>Explosion hazard if the device is opened in a hazardous area. Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only open the device in a safe area.

9.6.1 LED Voltage Errors

The main LED has no function.

Please refer to sequence LED indication.

red	green	green	green	green	Description
					LED input voltage too high
					LED input voltage too low

Explanation of diagram:

- Field completely filled = LED lights up
- Field half-full: LED blinking
- Field empty = LED off

Troubleshooting

- Open the portable lamp (see chapter "Battery replacement").
- Disconnect and then reconnect battery.
- Close the portable lamp.
- Insert portable lamp into charging unit.
- Charge battery.


If the error cannot be eliminated using the mentioned procedures:

- Contact R. STAHL Schaltgeräte GmbH.

For fast processing, have the following information ready:


- Type and serial number of the device
- Purchase information
- Error description
- Intended use (in particular input / output wiring)

10 Maintenance, Overhaul, Repair

	CAUTION
	<p>Risk of electric shock or malfunction of the device due to unauthorized work! Non-compliance can result in light injuries!</p> <ul style="list-style-type: none"> • Before carrying out work on the device, switch off voltage supply. • Work performed on the device must only be carried out by authorized and appropriately trained qualified electricians.

10.1 Maintenance


- Consult the relevant national regulations to determine the type and extent of inspections.
- Adapt inspection intervals to the operating conditions.
- Perform maintenance and repair work in accordance with IEC 60079-17 and IEC 60079-19.

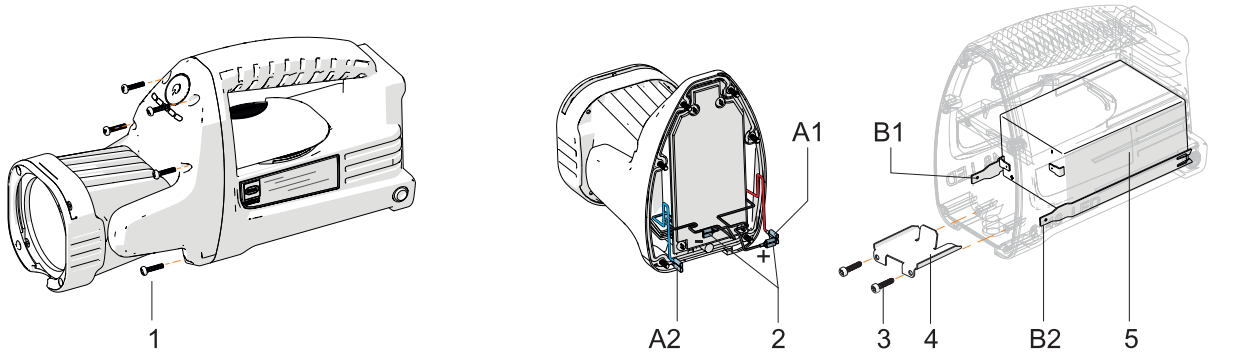
	Observe the relevant national regulations in the country of use.
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During maintenance/overhaul of the device, the following points must be checked:

- Whether the clamping screws holding the electrical lines are fitted securely
- Whether the device has cracks or other visible signs of damage
- Compliance with the permissible temperatures (according to EN 60079)
- Whether the device is used as intended and functions properly

10.1.1 Battery Replacement

	DANGER
	<p>Explosion hazard if the device is opened in a hazardous area. Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only open the device in a safe area.



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<p>1 6 screws for head (Torx 10)</p> <p>2 PCB connection line (+; -)</p> <p>3 2 screws for retaining bracket (Torx 10)</p> <p>4 Battery retaining bracket</p> <p>5 Battery</p>	<p>A1 PCB connection line</p> <p>A2 PCB connection line</p> <p>B1 Charging contact connection line</p> <p>B2 Charging contact connection line</p>
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- Remove the screws (1) at the head.
- Remove lamp head from the enclosure.
- Pull the connection lines (A1, A2) off the charging contacts (B1, B2).
- Pull the connection lines (2) off the battery contacts.
- Remove the screws (3) from the retaining bracket.
- Insert the battery retaining bracket (4).
Ensure that only the unused battery retaining bracket included in the delivery is used.
- Remove battery (5) from the enclosure.
- Insert new battery into enclosure according to marking.
- Insert battery retaining bracket (4).
- Screw down the battery retaining bracket with the screws (3) (tightening torque 0.5 Nm).

NOTICE


Malfunction or damage to the device can be caused by incorrectly connecting the connection cables.

Non-compliance may lead to material damage!

- Ensure that the colours of the wires correspond to the battery contacts.
- Ensure that the correct wires are assigned to each charging contact.

- Connect the red connection line "+" (2) to the battery contact marked in red "+".
- Connect the blue connection line "-" (2) to the battery contact marked in blue "-".
- Connect the connection line (A1) to the charging contact (B1).
- Connect the connection line (A2) to the charging contact (B2).
- Place the lamp head on the enclosure.
- Fasten the lamp head to the enclosure with the screws (1) (tightening torque 0.5 Nm).
- Insert portable lamp briefly into charging unit.

10.2 Repair

	DANGER
	<p>Explosion hazard due to improper repair! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Repair work on the devices must be performed only by R. STAHL Schaltgeräte GmbH.

10.3 Returning the Device

- Only return or package the devices after consulting R. STAHL!
Contact the responsible representative from R. STAHL.

R. STAHL's customer service is available to handle returns if repair or service is required.

- Contact customer service personally.

or


- Go to the r-stahl.com website.
- Under "Support" > "RMA" > select "RMA-REQUEST".
- Fill out the form and send it.
You will automatically receive an RMA form via email. Please print this file off.
- Send the device along with the RMA form in the packaging to R. STAHL Schaltgeräte GmbH (refer to chapter 1.1 for the address).

11 Cleaning

- Clean the device only with a cloth, brush, vacuum cleaner or similar items.
- When cleaning with a damp cloth, use water or mild, non-abrasive, non-scratching cleaning agents.
- Do not use aggressive detergents or solvents.


12 Disposal

- Observe national and local regulations and statutory regulation regarding disposal.
- Separate materials when sending it for recycling.
- Ensure environmentally friendly disposal of all components according to the statutory regulations.


CAUTION	
	<p>Danger to people and the environment if the surrounding environment is contaminated.</p> <p>Non-compliance can result in minor injuries and environmental damage.</p> <p>Batteries</p> <ul style="list-style-type: none"> • collect them separately • dispose of them in controlled fashion • do not dispose of them in the domestic waste • return them to public collection points or to the supplier

13 Accessories and Spare Parts

NOTICE	
<p>Malfunction or damage to the device due to the use of non-original components. Non-compliance can result in material damage.</p> <ul style="list-style-type: none"> • Use only original accessories and spare parts from R. STAHL Schaltgeräte GmbH. 	

	Figure	Description	Art. no.	Weight kg
Battery		lead-fleece battery, maintenance-free, 6 V	308234	0.720

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	<p>For accessories and spare parts, see data sheet on our homepage r-stahl.com.</p>
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EU-Konformitätserklärung
EU Declaration of Conformity
Déclaration de Conformité UE





R. STAHL Schaltgeräte GmbH • Am Bahnhof 30 • 74638 Waldenburg, Germany
 erklärt in alleiniger Verantwortung, *declares in its sole responsibility, déclare sous sa seule responsabilité,*

dass das Produkt: **Handscheinwerfer**
that the product: Portable lamp
que le produit: Lampe torche

Typ(en), type(s), type(s): **6148/11..-...**

mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.
is in conformity with the requirements of the following directives and standards.
est conforme aux exigences des directives et des normes suivantes.

Richtlinie(n) / Directive(s) / Directive(s)		Norm(en) / Standard(s) / Norme(s)
2014/34/EU 2014/34/EU 2014/34/UE	ATEX-Richtlinie ATEX Directive Directive ATEX	EN IEC 60079-0:2018 EN 60079-11:2012 EN 60079-31:2014
Kennzeichnung, marking, marquage:		 II 2 G Ex ib IIC T4 Gb II 2 D Ex tb IIIC T 75 °C Db 
EU-Baumusterprüfbescheinigung: <i>EU Type Examination Certificate:</i> <i>Attestation d'examen UE de type:</i>		IBExU 11 ATEX 1066 (IBExU Institut für Sicherheitstechnik GmbH, Fuchsmühlenweg 7, 09599 Freiberg, Germany)
Produktnormen nach Niederspannungsrichtlinie: <i>Product standards according to Low Voltage Directive:</i> <i>Normes des produit pour la Directive Basse Tension:</i>		EN 60598-1:2015 + A1:2018 EN 62471:2008
2014/30/EU 2014/30/EU 2014/30/UE	EMV-Richtlinie EMC Directive Directive CEM	EN IEC 55015:2019 + A11:2020 EN 61547:2009
2011/65/EU 2011/65/EU 2011/65/UE	RoHS-Richtlinie RoHS Directive Directive RoHS	EN IEC 63000:2018

Waldenburg, 2021-09-16

Ort und Datum
Place and date
Lieu et date

i.V.

Dr. C. Chevalier
Vice President BU Lighting & Signalling
Vice-Président BU Eclairage & Appareils de signalisation

i.V.

J. Freimüller
Vice President global Quality Management
Vice-Président globale Gestion de Qualité

UK Declaration of Conformity
UK-Konformitätserklärung



R. STAHL Schaltgeräte GmbH • Am Bahnhof 30 • 74638 Waldenburg, Germany

represented locally by, *lokal vertreten durch*

R. STAHL LTD. • 2nd Floor, Bromwich Court, Gorse Lane, Coleshill • Birmingham B46 1JU, UK
 declares in its sole responsibility, *erklärt in alleiniger Verantwortung,*

that the product: **Portable lamp**
dass das Produkt: Handscheinwerfer

Type(s), *Typ(en)*: **6148/11...-...**

is in conformity with the requirements of the following regulations and standards.
mit den Anforderungen der folgenden Verordnungen und Normen übereinstimmt.

Regulation(s) / <i>Verordnung(en)</i>	Standard(s) / <i>Norm(en)</i>
S.I. 2016/1107 Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Regulations <i>S.I. 2016/1107 Verordnung für Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen</i>	EN IEC 60079-0:2018 EN 60079-11:2012 EN 60079-31:2014

Marking, *Kennzeichnung*: **II 2 G Ex ib IIC T4 Gb** **UK**
II 2 D Ex tb IIIC T75 °C Db **CA 8505**

UK Type Examination Certificate: **CML 21UKEX21301**
UK-Baumusterprüfbescheinigung: (Eurofins E&E CML Limited, Newport Business Park, New Port Road, Ellesmere Port, Cheshire, CH65 4LZ, UK, AB2503)

Product standards according to S.I. 2016/1101 Electrical Equipment (Safety) Regulation <i>Produktnormen nach S.I. 2016/1101 (Sicherheits-) Verordnung für elektronische Geräte</i>	EN 60598-1:2015 + A1:2018 EN 62471:2008
S.I. 2016/1091 EMC Regulations <i>S.I. 2016/1091 EMV-Verordnung</i>	EN 61547:2009 EN IEC 55015:2019 + A11:2020
S.I. 2012/3032 RoHS Regulations <i>S.I. 2012/3032 RoHS-Verordnung</i>	EN IEC 63000:2018

Waldenburg, 2023-08-01

Place and date
Ort und Datum

i.V.


S. Holtz
 Head of R&D - BU Lighting & Signalling
Leiter Entwicklung Leuchten und Signalgerät

i.V.


D. Groth
 Director Quality Management Systems
Leiter Qualitätsmanagementsysteme