



Linear Luminaire for Fluorescent Lamps

Series EXLUX 6401

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1 General Information

1.1 Manufacturer

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1.2 Information regarding the operating instructions

ID-No.: 239550 / 640160300010
Publication Code: 2021-12-15-BA00-III-en-05

The original instructions are the English 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

See certificates and EU Declaration of Conformity: r-stahl.com.

The device has IECEx approval. For certificate please refer to the IECEx homepage:
<http://iecex.iec.ch/>

Further national certificates can be downloaded via the following link:
<https://r-stahl.com/en/global/support/downloads/>.

2 Explanation of the symbols

2.1 Symbols in these operating instructions

Symbol	Meaning
	Tips and recommendations on the use of the device
	Danger due to explosive atmosphere
	Danger due to live components

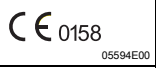

2.2 Warning notes

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
 0158 <small>05594E00</small>	CE marking according to the currently applicable directive.
 <small>02198E00</small>	According to marking, device approved for hazardous areas.

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

- for lighting areas, work spaces and objects
- can be used indoors and outdoors
- for stationary mounting
- for use in Zones 21, 2, 22 and in the safe area

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

Application range

The light fitting 6401 is equipment used for lighting areas, work equipment and objects. It can be used indoors and outdoors.

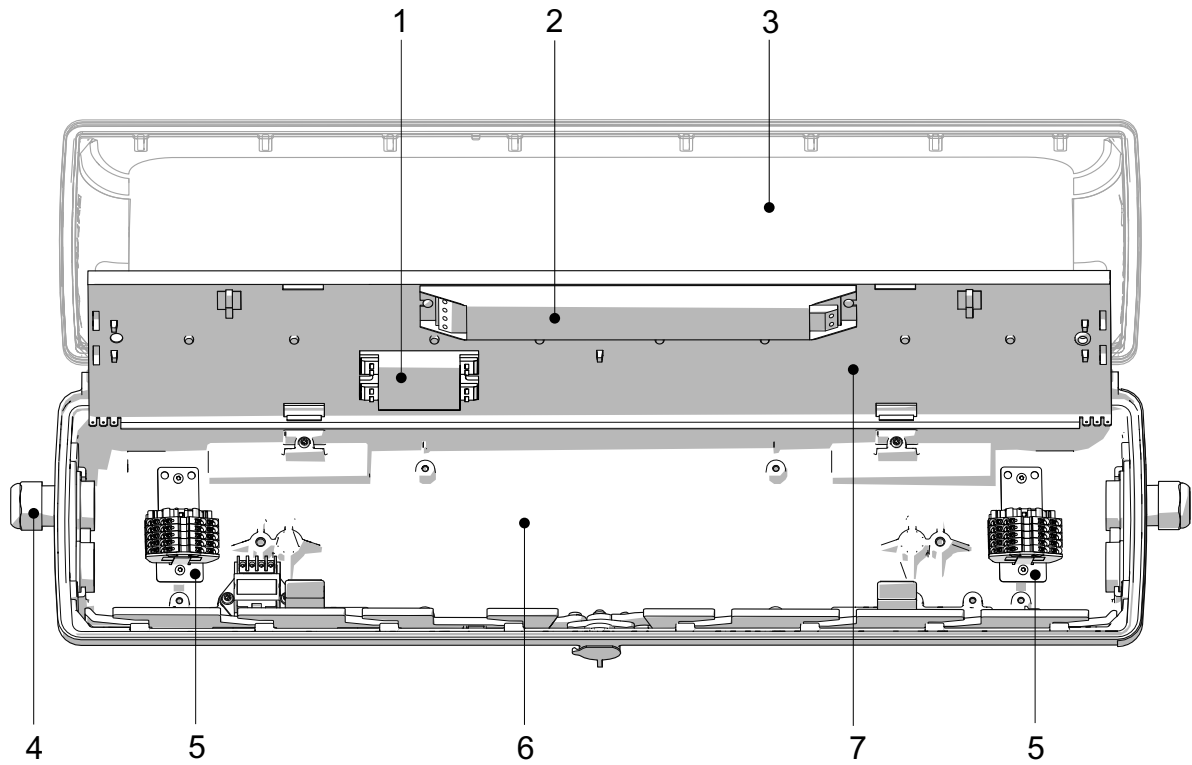
The luminaire is approved for use in hazardous areas of Zones 21, 2 and 22.

Mode of operation

When opened using a central lock, the luminaire switches off automatically (optional). An address module can be used for luminaire control and monitoring with a central battery unit from R. STAHL (optional).

4.2 Device design

EN



18809E00

- | | | | |
|---|---------------------------|---|---------------------|
| 1 | Address module (optional) | 5 | Connection terminal |
| 2 | Control gear | 6 | Luminaire enclosure |
| 3 | Translucent cover | 7 | Mounting plate |
| 4 | Cable entry | | |

5 Technical data

Explosion Protection

Global (IECEX)

Gas and dust

IECEX PTB 14.0035
 Ex ec IIC T4 Gc
 Ex db ec IIC T4 Gc ¹⁾
 Ex ec nC IIC T4 Gc ²⁾
 Ex db ec nC IIC T4 Gc ^{1) 2)}
 Ex tb IIIC T80 °C Db
 Ex tc IIIC T80 °C Dc

Europe (ATEX)

Dust

PTB 14 ATEX 2016
 ⓧ II 2 D Ex tb IIIC T80 °C Db

Gas and dust

PTB 14 ATEX 2017
 ⓧ II 3 G Ex ec IIC T4 Gc
 ⓧ II 3 G Ex db ec IIC T4 Gc ¹⁾
 ⓧ II 3 G Ex ec nC IIC T4 Gc ²⁾
 ⓧ II 3 G Ex db ec nC IIC T4 Gc ^{1) 2)}
 ⓧ II 3 D Ex tc IIIC T80 °C Dc

Note

¹⁾ db for light fittings with internal switch or with Zone 1 control gear
²⁾ nC for luminaires with address module

Certifications and certificates

Certificates

IECEX, ATEX, Indien (PESO)

Technical Data

Electrical data

Control gear

	6401/...-...8-...-... 6401/...-...1-...-...	6401/...-...0-...-...
Lamp start	Cold start	Cold start
Nominal voltage	220 to 240 V AC 220 to 230 V AC ^{ADR)} 196 to 240 V DC	220 to 240 V AC 220 to 230 V AC ^{ADR)} 196 to 240 V DC
Voltage range during operation	198 to 264 V AC 198 to 253 V AC ^{ADR)} 176 to 264 V DC	198 to 264 V AC 198 to 253 V AC ^{ADR)} 176 to 264 V DC
DC voltage in case of ignition	196 to 264 V DC	196 to 264 V DC
Frequency	0 / 50 to 60 Hz	0 / 50 to 60 Hz
Lamp operation DC	2-lamps	1-lamp
Lamp standard	IEC 60081	IEC 60081
Lamp power	18, 36, 58 W	18, 36, 58 W
Nominal current	1 x 18 W, 85 mA 2 x 18 W, 170 mA 1 x 36 W, 160 mA 2 x 36 W, 320 mA 1 x 58 W, 250 mA 2 x 58 W, 500 mA	1 x 18 W, 85 mA 2 x 18 W, 170 mA 1 x 36 W, 160 mA 2 x 36 W, 320 mA 1 x 58 W, 250 mA 2 x 58 W, 500 mA
	6401/...-...3-...-...	6401/...-...2-...-...
Lamp start	Cold start	Cold start
Nominal voltage	110 to 240 V AC 116 to 240 V DC	220 to 240 V AC 116 to 240 V DC
Voltage range during operation	99 to 264 V AC 104 to 264 V DC	99 to 264 V AC 104 to 264 V DC
DC voltage in case of ignition	104 to 264 V DC	104 to 264 V DC
Frequency	0 / 50 to 60 Hz	0 / 50 to 60 Hz
Lamp operation DC	2-lamps	1-lamp
Lamp standard	IEC 60081	IEC 60081
Lamp power	18, 36 W	18, 36 W
Nominal current	1 x 18 W, 85 to 175 mA 2 x 18 W, 170 to 345 mA 1 x 36 W, 155 to 330 mA 2 x 36 W, 310 to 660 mA	1 x 18 W, 85 to 175 mA 2 x 18 W, 170 to 345 mA 1 x 36 W, 155 to 330 mA 2 x 36 W, 310 to 660 mA
Power factor	ADR) Luminaires with address module cos $\varphi \geq 0.97$ capacitive; no additional compensation required	

Technical Data

Disconnection of the light

When opening the luminaire

Switch with safety lock; when opening the central lock all poles of the voltage supply to the control gear are disconnected; contacts of the switching element are positive opening, they can only be switched on again when the translucent cover and the central locking system are closed.

In case of a lamp failure, the control gear disconnects the defective lamp from the power supply. If the 2-channel control gear is used the channel of the defective lamp is switched off, but the channel using the intact lamp remains operational.

Protection class

I (with internal PE connection)

Luminous characteristics

Lamps

18 W	60081-IEC-2220	G13
36 W	60081-IEC-2420	G13
58 W	60081-IEC-2520	G13

Please use cold start lamps.

Ambient conditions

Operating temperature range


Luminaires without address module

Type	T _a min in °C	T _a max in °C				
		Through wiring				
		without	≤ 4 A	≤ 8 A	≤ 10 A	≤ 16 A
6401/52.-...0-...-...	-30	+60	+60	+55	+55	+50
6401/52.-...1-...-...						
6401/52.-...8-...-...	-30	+60	+60	+55	+50	+50
6401/52.-...2-...-...						
6401/52.-...3-...-...	-30	+45	+45	+45	+40	+40
6401/54.-...0-...-...						
6401/54.-...1-...-...	-30	+55	+55	+55	+55	+50
6401/54.-...8-...-...						
6401/54.-...2-...-...	-30	+45	+45	+45	+40	+40
6401/54.-...3-...-...						
6401/56.-...-...-...	-20	+55	+55	+55	+50	+50

Technical Data

		Luminaires with address module					
		Type	T _a min in °C	T _a max in °C			
				Through wiring			
			without	≤ 4 A	≤ 8 A	≤ 10 A	≤ 16 A
Storage	6401/52.-...0-.-...	-30	+50	+50	+50	+50	+45
	6401/52.-...1-.-...						
	6401/52.-...8-.-...	-30	+50	+50	+50	+50	+45
	6401/54.-...0-.-...	-30	+50	+50	+50	+50	+45
	6401/54.-...1-.-...						
	6401/54.-...8-.-...	-30	+50	+50	+50	+50	+45
	6401/56.-...-.-...	-20	+50	+45	+45	+40	+40
	-30 to +75 °C						
Mechanical data							
Degree of protection	IP66 (IEC 60598) Size 2 and size 4: IP66 / IP67 (IEC 60598)						
Impact strength (IK code)	IK10 (IEC 62262)						
Material							
Enclosure	Polyester resin, glass fibre-reinforced						
Enclosure colours	Grey colour, similar to RAL 7035						
Lamp cover	Polycarbonate						
Seal	Silicone foam gasket in the lamp cover						
Luminaire locking	Central locking which can be opened/closed using a socket key M8 / wrench size 13, hinged lamp cover						
Mounting / Installation							
Cable glands	Standard luminaire Plastic: 2 x M25 x 1.5 cable gland 8161 and 2 x M25 x 1.5 stopping plugs 8290 (enclosed) Metal: 2 x metal plates M20 x 1.5 connected by means of PE for metal cable entries Attention: cable entries must be ordered separately Special: max. 4 bores for M20, M25, NPSM ½" max. 2 bores for NPT ¾" Metal cable glands: M20 x 1.5, M25 x 1.5; earthing of the metal cable entries by means of metal plates						
Connection	Spring clamp terminals Standard: 5-pole: L1, L2, L3, N, PE with address module: 5-pole: L+, N-, PE, L', N' Clamping range: 1 x 1.5 to 6 mm ² (solid) 1 x 1.5 to 4 mm ² (finely stranded) 1 x 1.5 to 6 mm ² (finely stranded with core end sleeve) (2 free clamping units per pole available)						

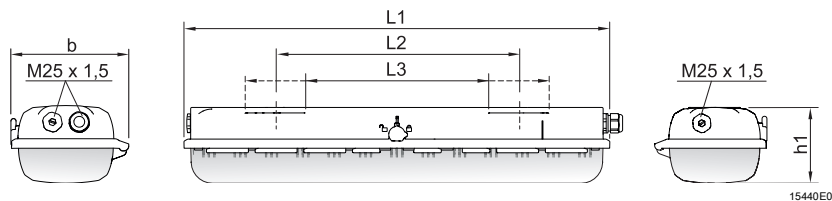
7 Mounting and installation

	DANGER
	<p>Explosion hazard due to incorrect installation of the device! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • 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.

NOTICE
<p>Malfunction or device damage caused by condensation. Non-compliance can result in material damage!</p> <ul style="list-style-type: none"> • operate the luminaire continuously or periodically over extended periods of time. • avoid thermal bridges.

7.1 Dimensions / fastening dimensions

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



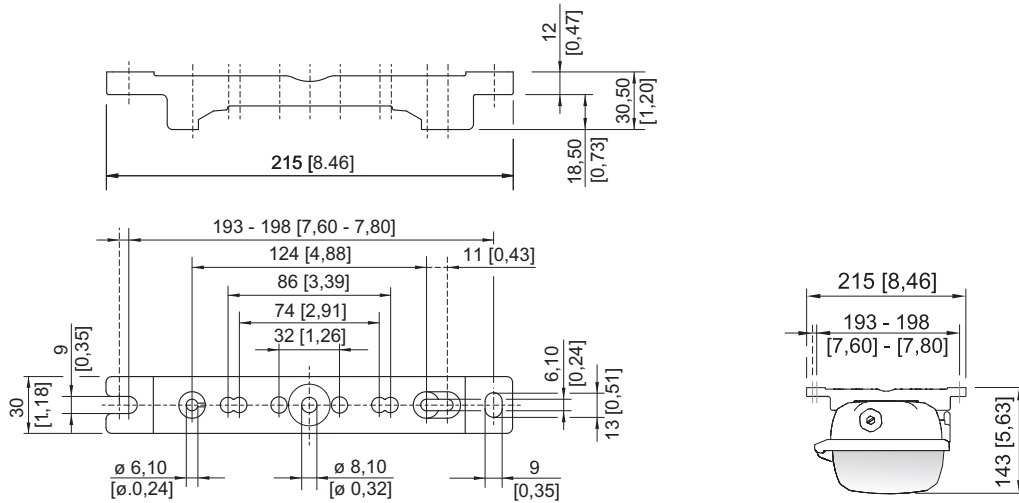
Dimensions	Light fitting		
	Size 2	Size 4	Size 6
L1	700 [27.56]	1310 [51.57]	1610 [63.39]
L2 ¹⁾	400 [15.75]	800 [31.50]	800 [31.50]
L3 ²⁾	320 to 480 [12.60 to 18.90]	670 to 930 [26.38 to 36.61]	670 to 930 [26.38 to 36.61]
b	184 [7.24]	184 [7.24]	184 [7.24]
h1	125 [4.92]	125 [4.92]	125 [4.92]

¹⁾ fixed mounting distance

²⁾ variable mounting distance

EXLUX 6401 Standard luminaire

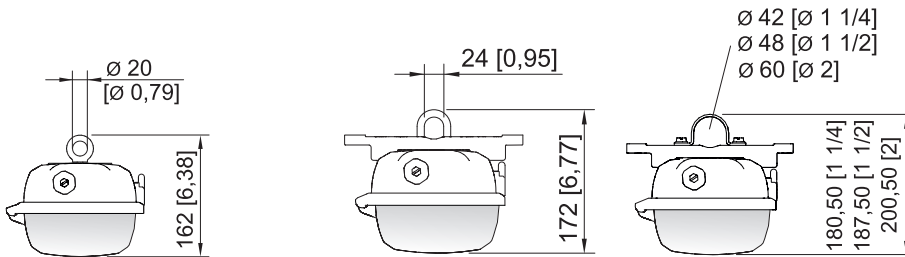
Dimensional drawings for assembly parts and accessories
(all dimensions in mm) – Subject to alterations



15778E00

15779E00

Mounting rail



15782E00

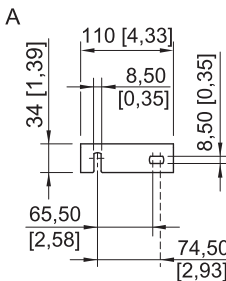
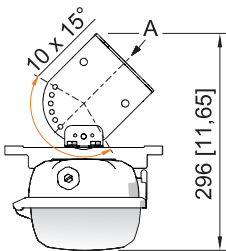
15781E00

15783E00

Ring bolt fitted in insert nut of the luminaire

Mounting bracket fitted in mounting rail

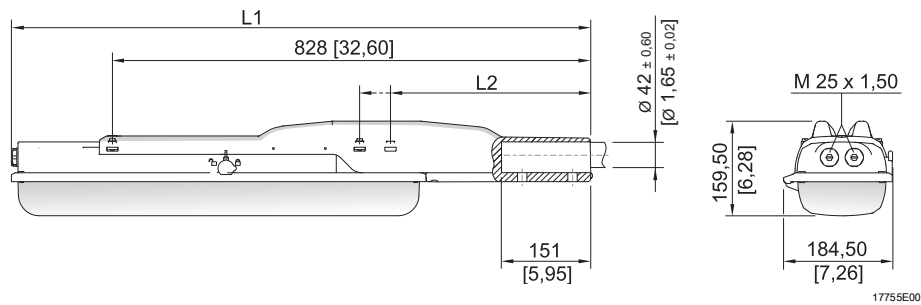
Pipe clamp fitted in mounting rail



15780E00

Wall mounting bracket fitted in mounting rail

Dimensional drawings for assembly parts and accessories
(all dimensions in mm) – Subject to alterations




Dimensions	Light fitting	
	Size 2	Size 4
L1	978 [38.50]	1587 [62.48]
L2	390 [15.35]	338 [13.31]

Linear luminaire EXLUX with pole mounting sleeve




7.2 Removing protective foil

As standard, the luminaire is generally delivered with protective foil on the translucent cover. However, in some cases, it can be delivered without protective foil.

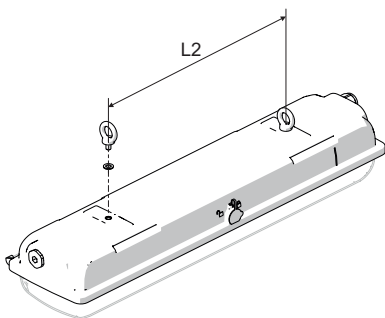
	DANGER
	<p>Explosion hazard due to electrostatic discharge! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only remove protective foil in safe areas.

- If protective foil is available:
Remove protective foil prior to commissioning.

7.3 Mounting / dismantling, operating position

	DANGER
	<p>Explosion hazard due to electrostatic discharge! Non-compliance results in severe or fatal injuries.</p> <p>Do not use the luminaire in strong charge generating environments!</p> <p>The following processes/activities should be avoided:</p> <ul style="list-style-type: none"> • accidental friction • particle currents
	DANGER
	<p>Explosion hazard due to inadmissible heating! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Avoid external heat sources and/or direct sunlight (risk of change of temperature class or change of maximum permissible surface temperature). • Do not exceed the maximum ambient temperature due to external heat sources (premature failure of equipment).
	<p>The luminaire is suitable for wall and ceiling mounting. In event of wall mounting in outdoor areas, avoid installation with central lock at top. The mounting position with upward light emission in outdoor areas is prohibited.</p>

Suspension at fixed mounting points

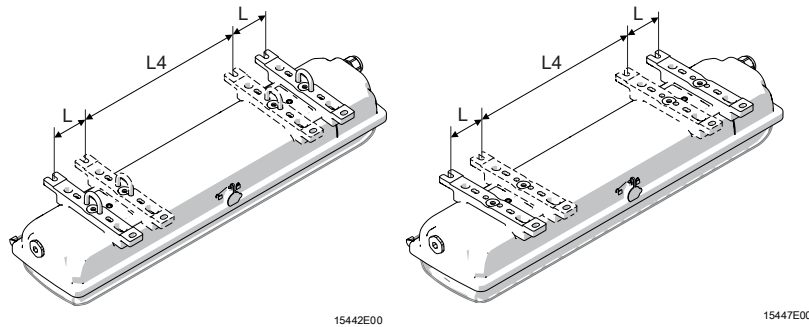


Size	L2 mm [inch]
2	400 [15.75]
4	800 [31.50]
6	800 [31.50]

max. screw-in depth 10 mm [0.39]

15446E00

Suspension at movable mounting parts

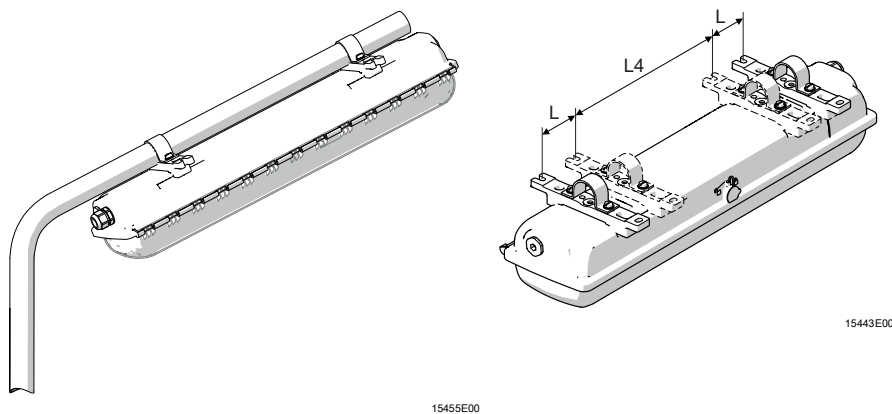


Mounting bracket	Top rail	
Size	L4 mm [inch]	L mm [inch]
2	320 [12.60]	80 [3.15]
4	670 [26.38]	130 [5.12]
6	670 [26.38]	130 [5.12]

Lateral mounting pockets for variable points of suspension.

i	<p>When mounting the luminaire using top rails, ensure that the mounting surface is flat. Otherwise, the enclosure might be mounted in a warped/ twisted way. The result is leakage of the luminaire and difficulties in replacing the translucent cover.</p>
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Pole suspension Pole mounting using pipe clamps

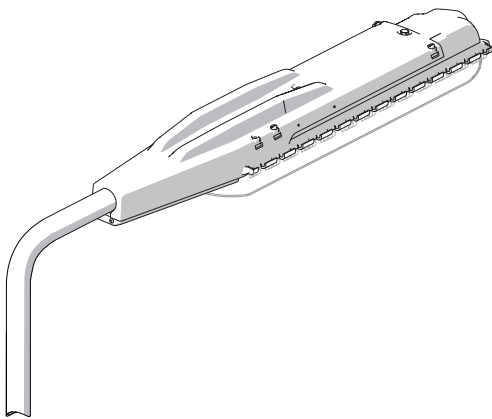


Size	L4 mm [inch]	L mm [inch]
2	320 [12.60]	80 [3.15]
4	670 [26.38]	130 [5.12]
6	670 [26.38]	130 [5.12]

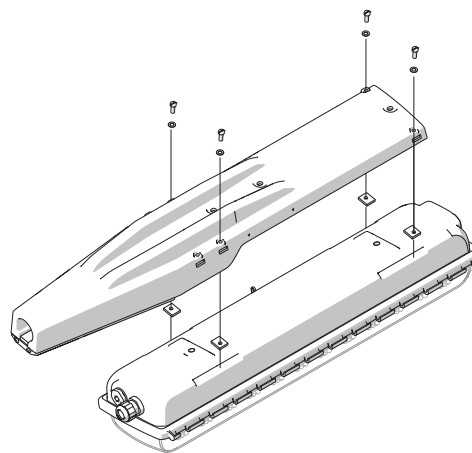
i For pipe clamp mounting, use the solution of R. STAHL Schaltgeräte GmbH with integrated mounting rail providing reliable and stable four-point fixing! In case of point suspension using pipe clamps, R. STAHL Schaltgeräte GmbH does not guarantee the strength and tightness of the luminaire!

Pole mounting using pole mounting sleeve

i Only for size 2 and size 4

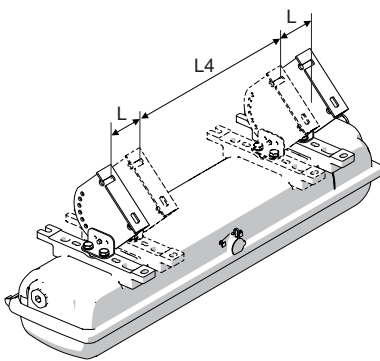


17761E00

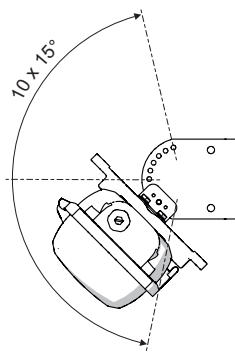


17762E00

Wall bracket mounting



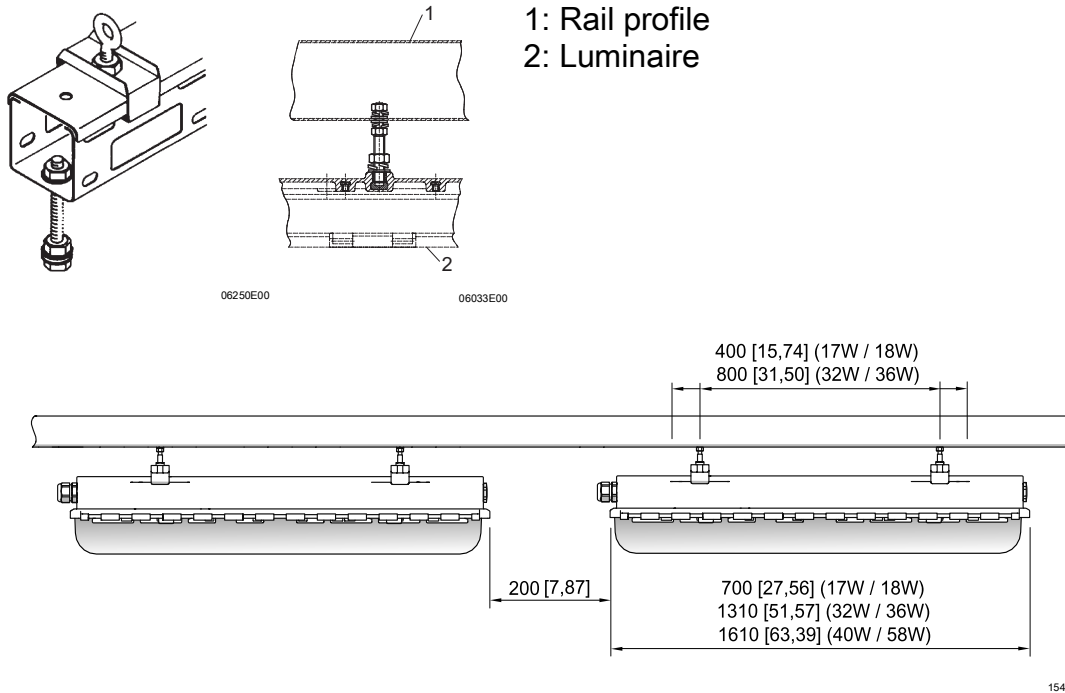
15515E00



15517E00

Size	L4 mm [inch]	L mm [inch]
2	320 [12.60]	80 [3.15]
4	670 [26.38]	130 [5.12]
6	670 [26.38]	130 [5.12]

Continuous row mounting



R. STAHL Schaltgeräte GmbH - rail profile for continuous row mounting of linear luminaires EXLUX



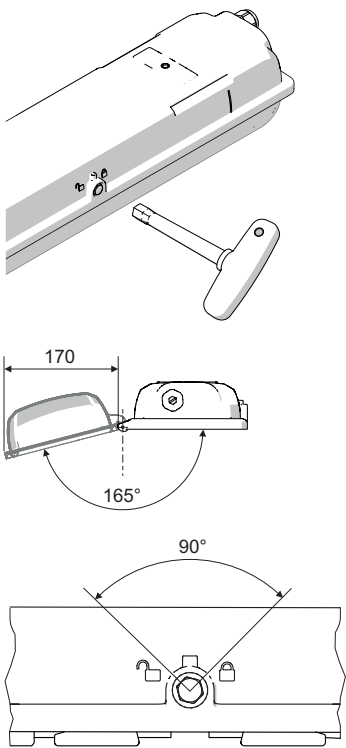
The rail profile facilitates row mounting and installation of the luminaires.

The rail profile can also be used as a cable duct.

Always use mounting rails to adjust the luminaires to the hole pattern of the rail profile.

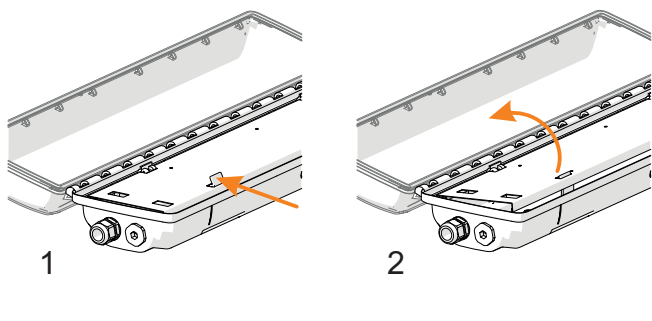
7.4 Installation

7.4.1 Opening and Closing of the Enclosure

	<p style="text-align: center;">DANGER</p> <p>Risk of electric shock due to improper opening! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Open luminaires without switch only in de-energized state (see information plate on the lock)!
	<p>Recommendation</p> <p>Opening and closing of the luminaire by using a socket wrench from R. STAHL Schaltgeräte GmbH.</p>
 <p style="text-align: right; font-size: small;">15448E00 15451E00 15436E00</p>	<ul style="list-style-type: none"> • Remove the closing cap of the central lock. • Turn the central lock using a box spanner M8, spanner size 13, by 90° to the left as far as it will go. • Swivel down the translucent cover. • Proceed in reverse order to close. • The seal of the translucent cover must lie correctly on the sealing edge. • Push the closing cap onto the central lock opening (protection against dirt).

i	<p>Observe the following during mounting and dismantling:</p> <ul style="list-style-type: none"> • Version without switch: Disconnect the luminaire from the power supply and secure it against being switched on again. • Do not use force when opening or closing the enclosure. <p>Central lock</p> <ul style="list-style-type: none"> • Version with switch: The luminaire is positively disconnected from the power supply by actuating the central lock. • In open end position and with translucent cover swivelled down, an anti-pumping device prevents the central lock from being actuated.
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Opening and closing the reflector plate

	<p>Opening:</p> <ul style="list-style-type: none"> • Open the reflector plate by pressing down on the safety latch (1). • Swivel down the reflector plate (2). <p>Closing:</p> <ul style="list-style-type: none"> • Flip up the reflector plate and snap it into place.
--	--

7.4.2 Electrical connections

Electrical connection

Observe the maximum clamping possibility of the connecting terminals (see chapter "Technical data").

For optional screw terminals, two conductors per clamping unit can be clamped (through wiring).

Observe the following when connecting to the main supply:

- Clamping must be carried out precisely!
- Do not clamp any part of the conductor insulation!
- Do not mix up the conductors!
- Observe the technical regulations when connecting the conductor!
- Clamp the conductor firmly.
- Do not remove the terminal cover of optional screw terminals to clamp the conductor!

Connection terminals

Clamping range:

1 x 1.5 to 6 mm² (solid)

1 x 1.5 to 4 mm² (finely stranded)

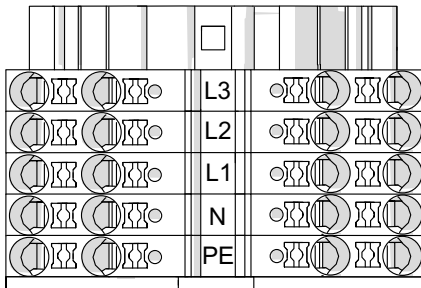
1 x 1.5 to 6 mm² (finely stranded with core end sleeves)

(2 free clamping units per pole available)

Stripping length:

10 to 12 mm

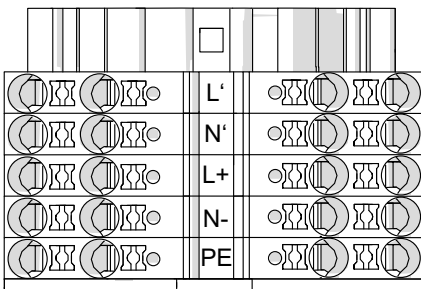
Standard:



L1, L2, L3 = phase
 N = neutral conductor
 PE = protective conductor

20219E00

with address module:




L', N' = control input
 L+, N- = final electrical circuit
 PE = protective conductor

20220E00

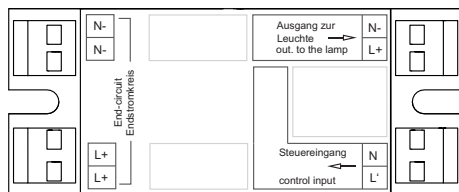
Through wiring of the mains supply connection

i	Through wiring with 2.5 mm ² cross section for max. 16 A.
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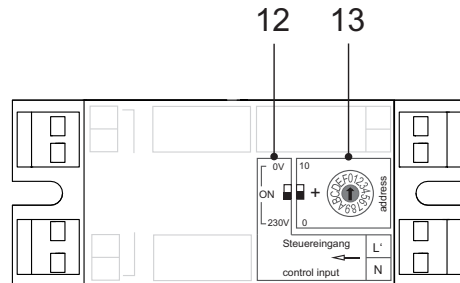
7.4.3 Luminaires with address module



Before operating an emergency lighting central battery system, luminaire addressing is to be performed by means of a 4 mm screwdriver for slotted screws.



18811E00



18812E00

- L+, N- Final circuit (factory wired)
- L+, N- Output to luminaire (factory wired)
- L', N Control input (factory wired)

- 12 Logic switch
- 13 Address switch

Address setting

Address switch (13):

Slide switch 0 / 10	Rotary switch 0 / F	Luminaire address
0	0	0 (invalid)
0	1	1
0	2	2
...
0	9	9
0	A	10
10	0	10
10	1	11
...
10	9	19
10	A	20
10	B to F	invalid

Control input (L', N'):

The address module provides the opportunity to connect a control line for switching the luminaire together with the general lighting.

Logic switch (12):

Slide switch 0 V / 230 V	Function
0 V	negative logic
230 V	positive logic

Switching options:

positive logic (230 V)	negative logic (0 V)
<p>switched light to switch on the luminaire together with other luminaires</p> <p style="text-align: right; font-size: small;">19025E00</p>	<p>switched light to switch on the luminaire in case of power failure</p> <p style="text-align: right; font-size: small;">19026E00</p>

L, N Power supply network
 FZB Battery system
 S General lighting switch

10 Control line
 14 Emergency lighting
 15 General lighting

7.4.4 Cable entries

The standard luminaire is delivered with 3 lead-in holes, 2 cable glands and 2 stopping plug.


Tightening torques for components from R. STAHL Schaltgeräte GmbH

Luminaires with installed cable entries and stopping plugs from

R. STAHL Schaltgeräte GmbH must be tightened using the following values:

		Tightening torque	
		Connection thread	Pressure screw
Cable entry 8161	M20 x 1.5	2.3 Nm	1.5 Nm
	M25 x 1.5	3.0 Nm	2.0 Nm
Stopping plugs 8290	M20 x 1.5	1.0 Nm	–
	M25 x 1.5	1.5 Nm	–


Luminaires with cable entries and stopping plugs which are not supplied by R. STAHL Schaltgeräte GmbH

	DANGER
	<p>Explosion hazard due to impermissible cable entries and stopping plugs! Non-compliance results in severe or fatal injuries.</p> <ul style="list-style-type: none"> • Only use separately certified cable glands and stopping plugs which have been tested and certified according to Directive 2014/34/EU (ATEX) or IECEx (CoC) and which comply with the standard version stated in the certificate of the luminaire.

Please observe the following:

- the required dust resistance!
- the required type of protection!
- the required temperature resistance!
- the IP degree of protection according to the rating plate!
- the operating instructions of the cable entries and stopping plugs!
- the required tightening torques!
- the range of the permissible cable diameter!
- Insert the metal cable entries and/or stopping plugs into the PE!

8 Commissioning

	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.
NOTICE	
<p>Malfunction or device damage caused by condensation. Non-compliance can result in material damage!</p> <ul style="list-style-type: none"> • operate the luminaire continuously or periodically over extended periods of time. • avoid thermal bridges. 	

Before commissioning, ensure the following:

- Check the mounting and installation.
- Inspect enclosure for damage.
- If necessary, remove foreign bodies.
- If necessary, clean the connection chamber.
- Check if the conductors have been inserted correctly.
- Check if all screws and nuts have been tightened firmly.
- Check if all drilled holes are closed.
- Check whether all the cable entries and stopping plugs have been tightened firmly.
- Check if all conductors have been clamped firmly.
- Check if the line voltage and the rated operational voltage are consistent.
- Check if the permissible conductor diameter for the corresponding cable entries have been used.
- Check if the device is closed according to regulations.
- Check that there is no protective foil on the translucent cover.

9 Operation

9.1 Troubleshooting

Observe the following troubleshooting plan for troubleshooting:

Cause of error

The lamp was incorrectly inserted.

The lamp is defective.

The control gear is defective.

The switch is defective.

The lamp reached its end of service life.

Troubleshooting

Insert the lamp correctly.

Replace the lamp.

Replace the control gear.

Replace the switch.

Replace the lamp.


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

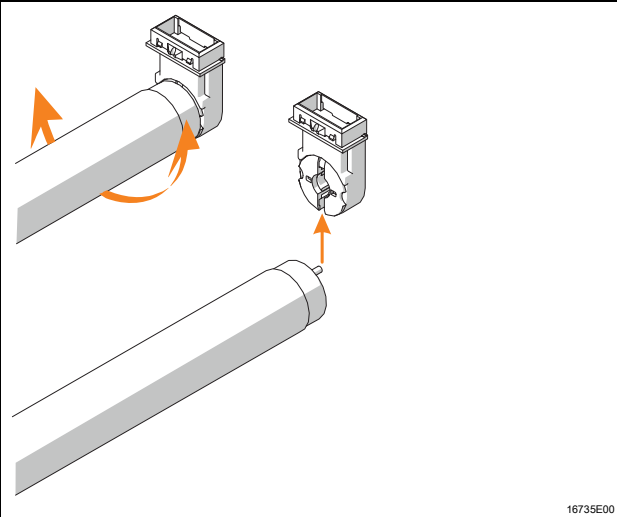
- Consult the relevant national regulations to determine the type and extent of inspections.
- Adapt inspection intervals to the operating conditions.
- Perform maintenance and repair work in accordance with IEC 60079-17 and IEC 60079-19.

	<p>Observe the relevant national regulations in the country of use.</p>
---	---

As a minimum, check the following points during maintenance work on the device:

- Whether the clamping screws holding the cables are securely seated
- Whether the device enclosure and/or protective enclosure have cracks or other visible signs of damage
- Whether the seal shows signs of ageing or damage (completely replace enclosure components with damaged foamed seal)
- Whether the device is clean inside and out
- Whether the permissible temperatures (in accordance with EN 60079) are complied with
- Whether the cable entry is intact and securely tightened
- Whether the cables and lines show signs of ageing and damage
- Intended use and function.

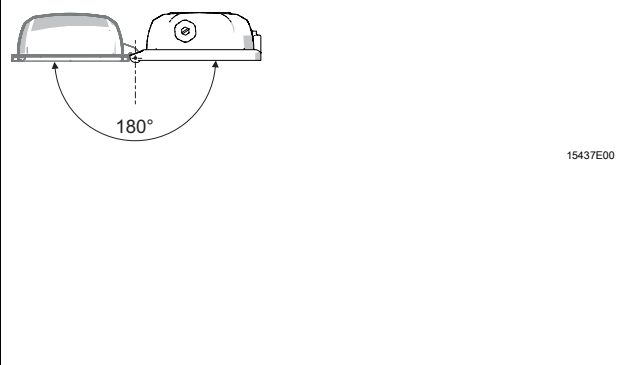
10.1.1 Replacement of lamps

i	Only use fluorescent lamps with pins made of brass.
	<ul style="list-style-type: none"> • Insert both lamp bases of the lamp into the holder slots as far as possible. • Turn the lamp clockwise or anticlockwise to bring it into the operating position. • Dismounting is carried out in reverse order.


When replacing the lamps, ensure the following:

- Undamaged lamp bases
- Fit of the lamp; a secure lamp fit after rotation
- Timely replacement of the lamps
- Service life of the device according to manufacturer's specifications
- EOL safety shutdown: The control gear switches off the lamp at the end of the service life.

10.1.2 Replacing the luminaire cover

	<ul style="list-style-type: none"> • Open the luminaire. • Swivel the translucent cover backwards by 180°. • Lift the translucent cover to detach it from the hinge. • Insert new translucent cover into the hinge. • All hinges must engage correctly. • Close the luminaire. • Observe safety notes!
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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

- To avoid electrostatic charging, the devices located in potentially explosive areas may only be cleaned using a damp cloth.
- When cleaning with a damp cloth, use water or mild, non-abrasive, non-scratching cleaning agents.
- Do not use aggressive detergents or solvents.
- Never clean the device with a strong water jet, e.g. using a high-pressure washer!

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.

13 Accessories and Spare parts

NOTICE

Malfunction or damage to the device due to the use of non-original components.
Non-compliance can result in material damage.

- Use only original accessories and spare parts from R. STAHL Schaltgeräte GmbH.



For accessories and spare parts, see data sheet on our homepage r-stahl.com.

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: **Langfeldleuchte**
that the product: *Linear Luminaire*
que le produit: *Luminaire Linéaire*

Typ(en), type(s), type(s): **6401/1...**
6401/5...

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	ATEX-Richtlinie	EN 60079-0:2012+A11:2013 EN 60079-31:2014
2014/34/EU	ATEX Directive	
2014/34/UE	Directive ATEX	

Kennzeichnung, marking, marquage:  **II 2 D Ex tb IIIC T 80°C Db** 

EU-Baumusterprüfbescheinigung: **PTB 14 ATEX 2016**
EU Type Examination Certificate: (Physikalisch-Technische Bundesanstalt,
Attestation d'examen UE de type: Bundesallee 100, 38116 Braunschweig, Germany)

Produktnormen nach Niederspannungsrichtlinie: EN 60598-1:2015/A1:2018
Product standards according to Low Voltage Directive: EN 60598-2-22:2014/AC:2015
Normes des produit pour la Directive Basse Tension: EN 62471:2008

2014/30/EU	EMV-Richtlinie	EN 61547:2009 EN 55015:2013 EN 61000-3-2:2014 EN 61000-3-3:2013
2014/30/EU	EMC Directive	
2014/30/UE	Directive CEM	

2011/65/EU	RoHS-Richtlinie	EN 50581:2012
2011/65/EU	RoHS Directive	
2011/65/UE	Directive RoHS	

Waldenburg, 2018-11-23

Ort und Datum
Place and date
Lieu et date

i.V.


Dr. A. Kaufmann
Leiter BU Leuchten & Signalgeräte
Head of BU Lightings & Signalling
Directeur BU Eclairage & Appareils de signalisation

i.V.


J. Freimüller
Leiter Qualitätsmanagement
Director Quality Management
Directeur Assurance de Qualité

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: **Langfeldleuchte**
that the product: Linear Luminaire
que le produit: Luminaire Linéaire

Typ(en), type(s), type(s): **6401/1...**
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mit den Anforderungen der folgenden Richtlinien und Normen übereinstimmt.
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2014/34/EU	ATEX-Richtlinie	EN 60079-0:2012+A11:2013
2014/34/EU	<i>ATEX Directive</i>	EN 60079-7:2015
2014/34/UE	<i>Directive ATEX</i>	EN 60079-31:2014

Kennzeichnung, marking, marquage: **II 3G Ex ec IIC T4 Gc**
II 3G Ex db ec IIC T4 Gc
 **II 3G Ex ec nC IIC T4 Gc**
II 3G Ex db ec nC IIC T4 Gc
II 3D Ex tc IIIC T80 °C Dc **CE**

Konformitätsaussage: **PTB 14 ATEX 2017**
Conformity Statement: (Physikalisch-Technische Bundesanstalt,
Déclaration de Conformité: Bundesallee 100, 38116 Braunschweig, Germany)

Produktnormen nach Niederspannungsrichtlinie:	EN 60598-1:2015/A1:2018
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		EN 61000-3-3:2013

2011/65/EU	RoHS-Richtlinie	EN 50581:2012
2011/65/EU	<i>RoHS Directive</i>	
2011/65/UE	<i>Directive RoHS</i>	

Waldenburg, 2018-11-23

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