3.2

Ex-escape sign luminaires

EXIT for Zone 1 and Zone 21 / Exit 2 for Zone 2 and Zone 22

Moulded plastic version with LED-technique

Leading the way in hazardous areas

The EXIT series of explosion-protected escape sign luminaires fulfils the requirements of ATEX Directive 2014/34/EU and EN 60598, Section 2.22 for emergency lighting luminaires. The luminaires are suited for marking escape routes and exits in hazardous areas.

Only white, high-efficiency LEDs are used as illuminants for these luminaires. This guarantees maintenance free operation, as the illuminants do not need replacing throughout the complete service life of the luminaire.

The supply electronics is also laid out for this service life; the LED circuits are intrinsically safe.

The wide input voltage range allows international use. The housing of these luminaires is made of high-grade polycarbonate: the escape signs comply with the latest standards.

Thanks to the robust design and high degree of protection, these luminaires are suited for both indoor and outdoor use.

As an emergency lighting luminaire with self-contained battery system for maintained operation, the EXIT N and the EXIT 2 N features an NC battery and automatic function monitoring with operating time test.

With the optional built-in V-CG-S monitoring module with coding switch for max. 20 addresses, this luminaire can also be used as an individually monitored emergency lighting luminaire that is connected to a CEAG emergency lighting supply system. With this, the operator can programme the switching mode according to the respective requirements. Thus, as many as 20 luminaires with different switching modes can be connected to one end circuit.

Pictogram accord. to ISO 7010

Pictogram accord. to DIN 4844

Features

- All-plastic polycarbonate housing
- Power-saving LED technology, maintenance-free throughout service life
- High degree of protection IP66
- Luminaire with self-contained battery unit and automatic function monitoring
- Connection and monitoring with CEAG emergency lighting supply systems possible

ГАЗ - НЕ ВХОДИТЬ

EXIT مخرج

STOP

For all types of application

The escape sign luminaires of the „EXIT" series are available as mains luminaires "EXIT" and „EXIT 2", e.g. for specially safeguarded industrial networks in production plants, as "EXIT V-CG-S" and „EXIT 2 V-CG-S" emergency lighting luminaires with individual function monitoring for use in CEAG emergency lighting supply systems, as well as "EXIT-N" and „EXIT 2 N" emergency lighting luminaires with self-contained battery systems and automatic function and operating time tests.

Green light for all zones

On account of the robust, all-plastic polycarbonate housing in the high degree of protection IP66, the **EXIT** luminaire can be installed almost anywhere, both indoors and out. The luminaire is designed in the type of protection Ex e m ib IIC up to T6 as well as Ex tb IIIC T80 °C and, in accordance with the ATEX Directive. It can be used in hazardous areas with explosive gas atmospheres (Zones 1 and 2) and explosive dust atmospheres (Zones 21 and 22). The **EXIT 2** series can be used in hazardous areas with explosive gas atmospheres (Zones 2) and explosive dust atmospheres (Zones 22).

Conformity to standards

The EXIT explosion-protected escape sign luminaire series fulfils the requirements of ATEX Directive 2014/34/EU and EN 60598, Part 2.22 for emergency lighting luminaires. It is suited for marking escape routes and exits in potentially explosive atmospheres. The housing of this luminaire is made of high-grade polycarbonate and it goes without saying that the escape signs comply with the latest standards.

Maintenance-free operation

The white LED technology used as the light source allows maintenance-free operation without replacement of the illuminant. The lighting values required for the escape sign are maintained throughout the complete service life of the LEDs, namely approx. 50,000 hours. It goes without saying that the supply electronics are also designed for this extremely long operating time. This reduces operating costs and increases the operating safety considerably, in particular in locations that are difficult to access.

For international use

The LED escape sign luminaire of the EXIT series was designed to meet the requirements of a large number of different safety concepts. Thanks to the wide input voltage range from 110 V to 277 V AC and up to 250 V DC, this luminaire can be used internationally, whereby the supply circuits of the LED circuits are intrinsically safe.

The internationally valid certificate „IECEx" enhances the scope of this light fitting.

The luminaire has a visibility range of 25 metres and it is available with a wide variety of pictograms, where country-specific solutions can be created without any problems.

Double safety

Whenever the operational safety of explosion- protected safety and escape sign luminaires is involved, there is no room for compromises, as only a luminaire that is fully functional at all times can save human lives. The new series of explosion-protected LED escape sign luminaires not only fulfils the extremely high explosion protection requirements, but it also fulfils the legal requirements for emergency and safety lighting installations. The new EXIT is capable of safely showing the right way to go at all times, even in complex and often badly laid out industrial installations with hazardous areas.

pluggable connection for an easy replacement of components

Ex luminaires with V-CG-S module and
coding switch for max.
20 luminaires per circuit

Hazardous Area

Connection for mains-/
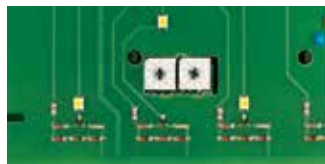emergency power supply

CEAG emergency lighting supply unit
(non-hazardous area)

Central emergency lighting supply via system luminaires with V-CG-S module

A central emergency lighting supply using CEAG group supply and central battery systems is used wherever a large number of emergency lighting luminaires can be combined and operated as system luminaires. These battery systems are generally installed outside the hazardous areas and, therefore, they are not subjected to the ambient conditions of the luminaires in the field. As a result, the operating life of the battery is relatively long and the amount of maintenance required is minimal. The mains and emergency lighting supplies of these luminaires are fed via separate circuits from the emergency lighting power supply installation to the escape sign luminaire in the hazardous area. Various luminaires with V-CG-S function can be operated in these circuits.

Address switch of EXIT V-CG-S

Better safe than sorry

In addition to the EXIT/EXIT 2 for use as a mains luminaire, e.g. for specially safeguarded industrial networks in production plants, there is also the EXIT V-CG-S/EXIT 2 V-CG-S version with easy function monitoring. In conjunction with the V-CG-S monitoring module with coding switch up to 20 addresses, this luminaire can be operated as emergency lighting luminaire with individual monitoring. The operator can programme the switching mode according to his individual requirements, thus allowing the operation of up to 20 luminaires with different switching modes in one end circuit.

No additional installation work is required. The central control unit monitors all the functions of the luminaire, checks the feed line for shorts or open circuits and indicates any incidents clearly on the display. Thus, even with highly complex installations, troubleshooting and eliminating faults are not a problem. Another considerable advantage: all the function and operating time tests are carried out automatically and recorded by the central control unit. This saves lots of time and money. During this function test, the correct functioning of the luminaire is monitored by the built-in V-CG-S module and any faults are reported to the central control unit. Thus, for example, the failure of LED groups is indicated automatically.

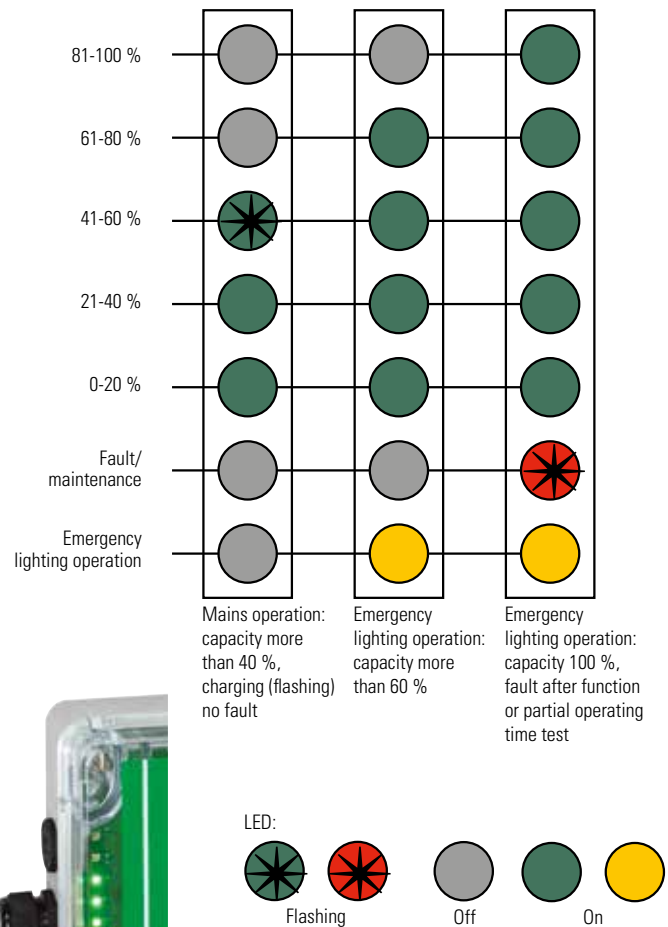## Emergency lighting luminaires with self-contained battery systems

Emergency lighting luminaires with self-contained battery systems provide the required emergency lighting from a decentralized source, independent of central systems. These luminaires are particularly economical when used in extensive plants. Until now, compared to centrally operated and monitored installations, the disadvantage of the emergency lighting luminaires with self-contained battery systems was that they did not provide any information on the state of the luminaire. However, this monitoring function has been incorporated in the EXIT N/EXIT 2 N escape sign luminaire. Five green LEDs supply constant information on the charge status and available battery capacity. A yellow LED indicates the emergency lighting operation mode and an additional red LED indicates any faults.

Monitoring functions

The extended self-monitoring with automatic function and partial duty cycle test is also new. The five green LEDs behind the protective cover provide continuous indication of

the charge status and the current battery capacity. Charging is signalized by a flashing green LED. The charged capacity is indicated in 20% stages. The yellow LED indicates emergency lighting operation. An automatic function test lasting 5 minutes is carried out on a weekly basis. For this, the luminaire is switched electronically from mains to battery operation. The emergency lighting function is tested and any faults are indicated by the flashing red LED.

After approx. 3 months a partial operating time test (35 mins.) is initiated automatically. If a minimum emergency lighting operating time of 30 minutes is not reached, it is signalized by the flashing red LED. After the cause of the fault has been eliminated, e.g. by charging or replacing the battery, the fault indication is reset during the next emergency lighting operation (manual or automatic) when the minimum operating time of > 30 minutes has been reached.

Ordering details / Dimension drawing
EXIT / EXIT 24 V / EXIT N / EXIT V-CG-S for Zone 1/21

Ordering details

Type	Scope of delivery	Plastic cable glands M20	Screw plug M20	Metal thread M20	Standard pictogram ISO 7010 Order No.	optional pictogram according to DIN 4844 Order No.
EXIT	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2191 000 021	1 2191 000 001
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2191 000 022	1 2191 000 002
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2191 000 023	1 2191 000 003
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2191 000 121	1 2191 000 101
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2191 000 122	1 2191 000 102
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2191 000 123	1 2191 000 103
EXIT 24 V	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2191 024 021	1 2191 024 001
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2191 024 022	1 2191 024 002
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2191 024 023	1 2191 024 003
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2191 024 121	1 2191 024 101
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2191 024 122	1 2191 024 102
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2191 024 123	1 2191 024 103
EXIT N	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2191 030 021	1 2191 030 001
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2191 030 022	1 2191 030 002
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2191 030 023	1 2191 030 003
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2191 030 121	1 2191 030 101
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2191 030 122	1 2191 030 102
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2191 030 123	1 2191 030 103
EXIT V-CG-S	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2191 020 021	1 2191 020 001
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2191 020 022	1 2191 020 002
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2191 020 023	1 2191 020 003
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2191 020 121	1 2191 020 101
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2191 020 122	1 2191 020 102
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2191 020 123	1 2191 020 103
EXIT	including cover, clear, without pictogram	1 x M20	1 x M20		1 2191 000 004	
	including cover, clear, without pictogram			2 x M20	1 2191 000 104	
EXIT 24 V	including cover, clear, without pictogram	1 x M20	1 x M20		1 2191 024 004	
	including cover, clear, without pictogram			2 x M20	1 2191 024 104	
EXIT N	including cover, clear, without pictogram	1 x M20	1 x M20		1 2191 030 004	
	including cover, clear, without pictogram			2 x M20	1 2191 030 104	
EXIT V-CG-S	including cover, clear, without pictogram	1 x M20	1 x M20		1 2191 020 004	
	including cover, clear, without pictogram			2 x M20	1 2191 020 104	

Other silk-screen pictograms or inscriptions available on request

A wide selection of cable glands can be found at www.crouse-hinds.de/products or in the catalogue Part 2, Section 3
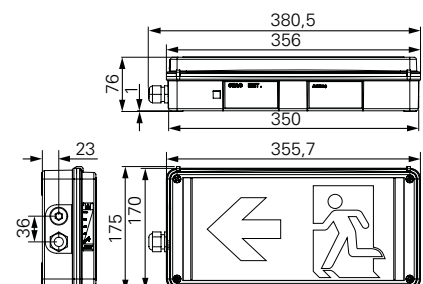
arrow 3h

arrow 9 h

arrow 6 h

EXIT / EXIT V-CG-S / EXIT N

380,5
356
76
350
23
355,7
36
175
170

Dimensions in mm

Ordering details

Type	Scope of delivery	Plastic cable glands M20	Screw plug M20	Metal thread M20	Standard pictogram ISO 7010 Order No.
EXIT 2	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2193 000 021
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2193 000 022
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2193 000 023
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2193 000 121
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2193 000 122
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2193 000 123
EXIT 2 24 V	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2193 024 021
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2193 024 022
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2193 024 023
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2193 024 121
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2193 024 122
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2193 024 123
EXIT 2 N	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2193 030 021
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2193 030 022
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2193 030 023
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2193 030 121
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2193 030 122
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2193 030 123
EXIT 2 V-CG-S	including cover with silk-screen pictogram (arrow 3h)	1 x M20	1 x M20		1 2193 020 021
	including cover with silk-screen pictogram (arrow 9h)	1 x M20	1 x M20		1 2193 020 022
	including cover with silk-screen pictogram (arrow 6h)	1 x M20	1 x M20		1 2193 020 023
	including cover with silk-screen pictogram (arrow 3h)			2 x M20	1 2193 020 121
	including cover with silk-screen pictogram (arrow 9h)			2 x M20	1 2193 020 122
	including cover with silk-screen pictogram (arrow 6h)			2 x M20	1 2193 020 123
EXIT 2	including cover, clear, without pictogram	1 x M20	1 x M20		1 2193 000 004
	including cover, clear, without pictogram			2 x M20	1 2193 000 104
EXIT 2 24 V	including cover, clear, without pictogram	1 x M20	1 x M20		1 2193 024 004
	including cover, clear, without pictogram			2 x M20	1 2193 024 104
EXIT 2 N	including cover, clear, without pictogram	1 x M20	1 x M20		1 2193 030 004
	including cover, clear, without pictogram			2 x M20	1 2193 030 104
EXIT 2 V-CG-S	including cover, clear, without pictogram	1 x M20	1 x M20		1 2193 020 004
	including cover, clear, without pictogram			2 x M20	1 2193 020 104

Other silk-screen pictograms or inscriptions available on request

A wide selection of cable glands can be found at www.crouse-hinds.de/products or in the catalogue Part 2, Section 3
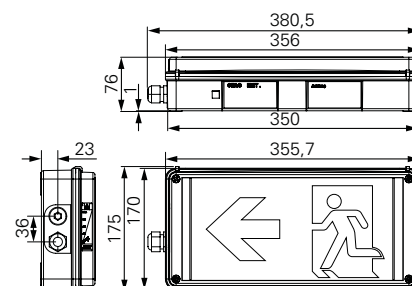
arrow 3h

arrow 9 h

arrow 6 h

EXIT 2 / EXIT 2 V-CG-S / EXIT 2 N

380,5
356
76
350
355,7
23
36
175
170

Dimensions in mm

3

Technical data

	EXIT / EXIT 24 V	EXIT N	EXIT V-CG-S
EC-Type Examination Certificate	BVS 09 ATEX E 029	BVS 09 ATEX E 029	BVS 09 ATEX E 029
IECEx Certificate of Conformity	IECEx BVS 13.0017	IECEx BVS 13.0017	IECEx BVS 13.0017
Marking accd. to 2014/34/EU	⟨Ex⟩ II 2 G Ex e ib mb IIC T6/T5 Gb ⟨Ex⟩ II 2 D Ex tb IIIC T80°C Db	⟨Ex⟩ II 2 G Ex e ib mb IIC T5/T4 Gb ⟨Ex⟩ II 2 D Ex tb IIIC T80°C Db"	⟨Ex⟩ II 2 G Ex e ib mb IIC T4 Gb ⟨Ex⟩ II 2 D Ex tb IIIC T80°C Db
Marking accd. to IECEx	Ex e ib mb IIC T6/T5 Gb Ex tb IIIC T80°C Db	Ex e ib mb IIC T5/T4 Gb Ex tb IIIC T80°C Db	Ex e ib mb IIC T6/T5 Gb Ex tb IIIC T80°C Db
Permissible ambient temperature specified data	-20 °C up to +40°C (T6) -20 °C up to +50°C (T5)	-20 °C up to +40°C (T5) -20 °C up to +50°C (T4) +5 °C up to +35 °C	-20 °C up to +40°C (T6) -20 °C up to +50°C (T5)
Battery		12 V/800 mAh NC-Accu	
Rated power consumption	approx. 6 VA	approx. 10 VA	approx. 6 VA
Rated voltage	110 V - 277 V AC 110 V - 250 V DC	110 V - 277 V AC 110 V - 250 V DC	220 V - 254 V AC 195 V - 250 V DC
Rated voltage EXIT 24 V	12 - 24 V DC (-15 % / + 20 %)		
Rated current AC/DC	220 V = 20 mA, 110 V = 40 mA	230 V ≃ 50 mA, 110 V ≃ 100 mA	220 V = 20 mA, 110 V = 40 mA
Frequency	DC and 50 - 60 Hz (AC)	DC and 50 - 60 Hz (AC)	DC and 50 - 60 Hz (AC)
Charging duration for capacity > 90 %		24 h	
Power factor cos φ	≥ 0.95	≃ 0.5	≥ 0.95
Circuit	electronic power supply	electronic power supply	electronic power supply
Protection class	I	I	I
Viewing distance	25 m	25 m	25 m
Lamp / Illuminant	high output-LEDs, white	high output-LEDs, white	high output-LEDs, white
Rated emergency lighting duration		approx. 3 h	
Dimensions (L x W x H)	356 x 175 x 76 mm	356 x 175 x 76 mm	356 x 175 x 76 mm
Connecting terminals	3 x loop terminal 2.5 mm² [1]	3 x loop terminal 2.5 mm² [1]	3 x loop terminal 2.5 mm² [1]
Enclosure colour	grey, RAL 7035	grey, RAL 7035	grey, RAL 7035
Enclosure material	Polycarbonate	Polycarbonate	Polycarbonate
Weight	2 kg	2.5 kg	2.2 kg
Cable glands / gland plates / enclosure drilling	1 x Ex-e cable glands M20 x 1.5 (plastic) / 1 x Ex-e-screw plug M20 or 2 x M20 x1.5 metal thread, 1 x screw plug M20	1 x Ex-e cable glands M20 x 1.5 (plastic) / 1 x Ex-e-screw plug M20 or 2 x M20 x1.5 metal thread, 1 x screw plug M20	1 x Ex-e cable glands M20 x 1.5 (plastic) / 1 x Ex-e-screw plug M20 or 2 x M20 x1.5 metal thread, 1 x screw plug M20
Type of mounting	wall mounting	wall mounting	wall mounting
Degree of protection accd. to EN 60529	IP66	IP66	IP66
Protective cover / protective bowl	Polycarbonate	Polycarbonate	Polycarbonate

[1] Option: 3 x 4 mm² screw terminals

Technical data

	EXIT 2/ EXIT 2 24 V	EXIT 2 N	EXIT 2 V-CG-S
Type Examination Certificate	BVS 15 ATEX E 074	BVS 15 ATEX E 074	BVS 15 ATEX E 074
IECEx Certificate of Conformity	IECEx BVS 15.0065	IECEx BVS 15.0065	IECEx BVS 15.0065
Marking accd. to 2014/34/EU	⟨Ex⟩ II 3 G Ex e ic mc IIC T6/T5 Gc ⟨Ex⟩ II 3 D Ex tc IIIC T80°C Dc	⟨Ex⟩ II 3 G Ex e ic mc IIC T5/T4 Gc ⟨Ex⟩ II 3 D Ex tc IIIC T80°C Dc	⟨Ex⟩ II 3 G Ex e ic mc IIC T4 Gc ⟨Ex⟩ II 3 D Ex tc IIIC T80°C Dc
Marking accd. to IECEx	Ex e ic mc IIC T6/T5 Gc Ex tc IIIC T80°C Dc	Ex e ic mc IIC T6/T5 Gc Ex tc IIIC T80°C Dc	Ex e ic mc IIC T6/T5 Gc Ex tc IIIC T80°C Dc
Permissible ambient temperature specified data	-20 °C up to +40°C (T6) -20 °C up to +50°C (T5)	-20 °C up to +40°C (T5) -20 °C up to +50°C (T4) +5 °C up to +35 °C	-20 °C up to +40°C (T6) -20 °C up to +50°C (T5)
Battery		12 V/800 mAh NC-Accu	
Rated power consumption	approx. 6 VA	approx. 10 VA	approx. 6 VA
Rated voltage	110 V - 277 V AC 110 V - 250 V DC	110 V - 277 V AC 110 V - 250 V DC	220 V - 254 V AC 195 V - 250 V DC
Rated voltage EXIT 24 V	12 - 24 V DC (-15 % / + 20 %)		
Rated current AC/DC	220 V = 20 mA, 110 V = 40 mA	230 V ≃ 50 mA, 110 V ≃ 100 mA	220 V = 20 mA, 110 V = 40 mA
Frequency	DC and 50 - 60 Hz (AC)	DC and 50 - 60 Hz (AC)	DC and 50 - 60 Hz (AC)
Charging duration for capacity > 90 %		24 h	
Power factor cos φ	≥ 0.95	≃ 0.5	≥ 0.95
Circuit	electronic power supply	electronic power supply	electronic power supply
Protection class	I	I	I
Viewing distance	25 m	25 m	25 m
Lamp / Illuminant	high output-LEDs, white	high output-LEDs, white	high output-LEDs, white
Rated emergency lighting duration		approx. 3 h	
Dimensions (L x W x H)	356 x 175 x 76 mm	356 x 175 x 76 mm	356 x 175 x 76 mm
Connecting terminals	3 x loop terminal 2 x 2.5 mm² [1]	3 x loop terminal 2 x 2.5 mm² [1]	3 x loop terminal 2 x2.5 mm² [1]
Enclosure colour	grey, RAL 7035	grey, RAL 7035	grey, RAL 7035
Enclosure material	Polycarbonate	Polycarbonate	Polycarbonate
Weight	2 kg	2.5 kg	2.2 kg
Cable glands / gland plates / enclosure drilling	1 x Ex-e cable glands M20 x 1.5 (plastic) / 1 x Ex-e-screw plug M20 or 2 x M20 x1.5 metal thread, 1 x screw plug M20	1 x Ex-e cable glands M20 x 1.5 (plastic) / 1 x Ex-e-screw plug M20 or 2 x M20 x1.5 metal thread, 1 x screw plug M20	1 x Ex-e cable glands M20 x 1.5 (plastic) / 1 x Ex-e-screw plug M20 or 2 x M20 x1.5 metal thread, 1 x screw plug M20
Type of mounting	wall mounting	wall mounting	wall mounting
Degree of protection accd. to EN 60529	IP66	IP66	IP66
Protective cover / protective bowl	Polycarbonate	Polycarbonate	Polycarbonate

[1] Option: 3 x 4 mm² screw terminals