



SOLUTIONS IN SAFETY + LIGHTING

EMERGENCY LIGHTING AND SAFETY POWER SUPPLY SYSTEMS 2020

MADE IN GERMANY





FIVE TIMES CERTIFIED. PROVEN A MILLION TIMES OVER.

Safety – made in Germany

Design and functionality, ease of use and energy efficiency, reliability and durability – products from RP-Technik must meet a wide range of requirements. We develop and manufacture our emergency and safety luminaires and our power supply systems exclusively in Germany. The performance and quality of our products have top priority – for the safety of people and plants.

In our ultra-modern light laboratory with photogoniometer, audited by TÜV Rheinland according to DIN EN 60598-2-22, the light output of individual LED lights is measured and documented. We provide photometric data of our safety luminaires for the planning of projects. Each product complies with the current standards and regulations and passes a strict quality control before delivery.



PATENTS AND CERTIFICATES – DOCUMENTED INNOVATIVE STRENGTH

We are owners of 20 patents in the field of emergency lighting. Our internal quality assurance system and various certifications ensure that our products meet the highest standards of reliability and safety.

RP-Technik GmbH is successfully certified or recertified according to the following standards:

- Recertification ISO 9001:2015 for company processes
- BS OHSAS 18001 for occupational health and safety
- ISO 14001:2015 for environmental management system
- ISO 50001:2011 for energy management

In addition, a large number of our products are type approved by TÜV Rheinland.

Our systems production in Saalfeld is also subject to strict quality controls and has been certified by TÜV SÜD. Already during production, we test the individual components of the power supply systems. As well, each system is subjected to a 24-hour endurance test before delivery.

Furthermore, we consistently use energy-saving technologies in the development of our products and environmentally friendly, recyclable materials in production.

DESIGN AND FUNCTIONALITY – AN EXCELLENT COMBINATION

Our internal product design ensures functional aesthetics, for which RP-Technik has already received several awards. In 2016, the OLED escape sign luminaire was awarded the renowned German Design Award and the reddot design award, and in 2018 the new A-series from RP-Technik received the German Design Award in the category „Excellent Product Design, Lighting“.



OLED luminaire



reddot award 2016 winner



A-series





OUR PRODUCT TRAINING COURSES – COMPACT, CONSTRUCTIVE, CUSTOMIZED

Future-oriented emergency lighting requires competent further training: Our training courses are tailored to the needs of our customers and a clear recommendation for every professional. They consist of teaching important theoretical knowledge combined with a high percentage of hands-on training. We offer the following topics:

- General questions on the installation and set-up of emergency lighting systems in accordance with applicable national and European standards and regulations
- Operation and function of our portfolio of emergency lighting products
- Operation, function and programming of our power supply systems and modules
- Maintenance and service according to applicable regulations
- Troubleshooting



PLANNING TOOL

The participants of the planner events carried out together with our premium partners will receive our exclusive and comprehensive guide to the planning of emergency and safety lighting: The Planning Tool.

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Order key

The cases shown on the following pages are empty casings, the order numbers which are composed of the casing description and the method of mounting. Colour options for the casings are available at additional cost.

Order key according to mounting technique

- W = Wall mounting
- D = Ceiling/Outrigger mounting
(wall bracket must be ordered separately)
- U = Universal mounting wall / ceiling
- E = Recessed mounting
- C = recessed ceiling mounting
- R = recessed wall mounting

Lenses

- F = focused lens for corridors
- R = radiate lens
- H = high bay lens
- S = spot lens

Monitoring options

- ML = MLED monitoring / luminaire monitoring
- SC = Self-Control monitoring
- WL = Wireless Professional monitoring
- WB = Wireless Basic® monitoring

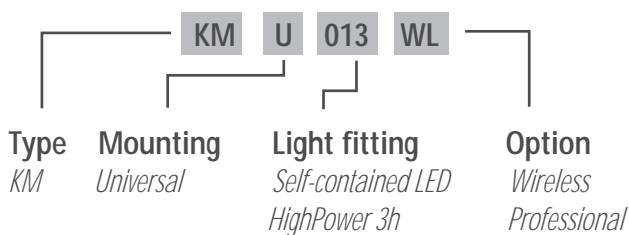
The order numbers of casings with light fittings are composed of the order number of the case type, the order number of the chosen fitting and if necessary the number of the monitoring module. The order numbers for the fittings can be found in the respective type tables.

Light-fittings order key

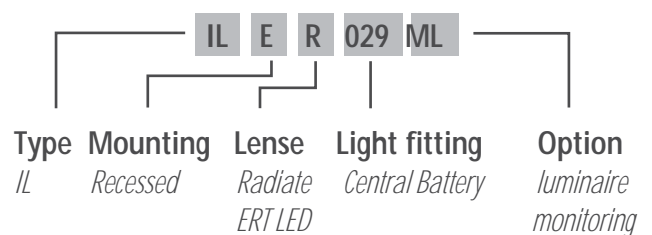
- | | | |
|-----|-----------------|-------------------------------------|
| 001 | self-contained | LED LowPower 1h |
| 003 | self-contained | LED LowPower 3h |
| 008 | self-contained | LED LowPower 8h |
| 011 | self-contained | LED HighPower 1h |
| 013 | self-contained | LED HighPower 3h |
| 018 | self-contained | LED HighPower 8h |
| 023 | self-contained | ERT (Escape Route Type) LED 1W / 3h |
| 028 | self-contained | ERT (Escape Route Type) LED / 8h |
| 009 | central battery | LED LowPower |
| 019 | central battery | LED HighPower |
| 029 | central battery | ERT (Escape Route Type) LED 1-3W |
| 039 | central battery | ERT (Escape Route Type) LED > 3W |



Order number



Order number



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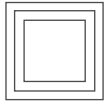
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Legend



Insulation class I;
PE conductor connection required



Insulation class II;
luminaire is insulated



ENEC certified luminaire



Recognition distance in meters



Universal mounting on wall or ceiling possible.



Complete set of pictographs included
(left / right/ up / down)



IK-Shock resistance level



Luminaire suitable for use in explosive dust
atmospheres



Light planning data of the luminaire are
available.



Protection class



5 years warranty on electronics, LED and battery

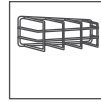


Type Approved
Safety
Regular Production
Surveillance

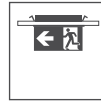
www.tuv.com
ID 1111214944



Food safe



Ball protection available



Recessed mounting frame available



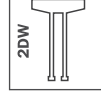
Concrete plaster box available



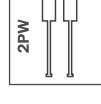
Wall bracket available



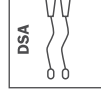
Ballproof luminaire



Optional accessory design pendant fitting



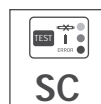
Optional accessory standard double pendant
fitting white (2DW) or silver (2PV).



Optional accessory cord suspension (standard
length 0.5m).



Luminaire may be monitored with central battery
systems.



Self-contained luminaire with integrated auto-
mated self testing module - Self-Control.



Luminaire is available with radio module for
connection to the Wireless Professional system.



Luminaire is switchable with the Wireless
Professional system.



Luminaire is available with radio module for
connection to the Wireless Basic system.



Version



Emergency operating time of the luminaire (CBS = Central battery system)



Battery data



Colour options



max. power consumption



Luminous flux in emergency mode



Square cover / luminaire



Round cover / luminaire



Ceiling mounting



Recessed ceiling mounting



Ceiling mounting with cord suspension



Universal mounting



Wall mounting



Recessed wall mounting

Note: „max. consumption“ refers to the maximum power consumption (for example, including battery charge) of the luminaire.

International protection classes

ACCORDING TO DIN EN 60529

Code letters
International
Protection

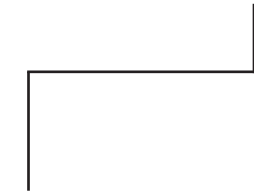
First index
Contact protection

Second index
Protection against water

IP

6

5



Digit

Protection

Digit

Protection

















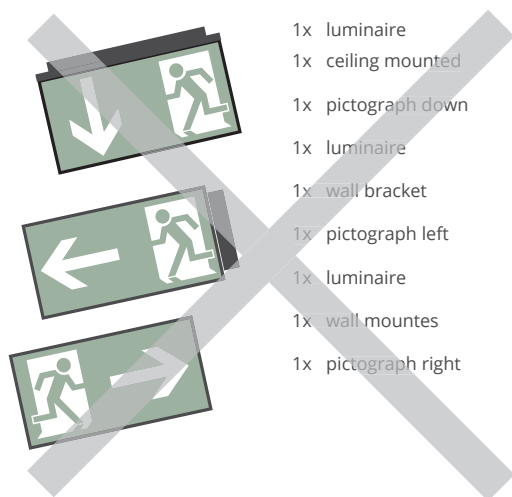
Digit	Protection	Digit	Protection
0	 No protection against accidental contact, no protection against solid foreign bodies	0	 No protection against water
1	 Protection against contact with any large area by hand and against solid foreign bodies with $\varnothing > 50$ mm	1	 Protection against vertical water drips
2	 Protection against contact with the fingers, protection against solid foreign bodies with $\varnothing > 12$ mm	2	 Protection against water drips (up to a 15° angle)
3	 Protection against tools, wires or similar objects with $\varnothing > 2,5$ mm, protection against solid foreign bodies with $\varnothing > 2,5$ mm	3	 Protection against water drips (up to a 60° angle)
4	 As 3, however $\varnothing > 1$ mm	4	 Protection against splashed water from all directions
5	 Full protection against contact, protection against interior dust deposits	5	 Protection against water (out of a nozzle) from all directions
6	 Total protection against contact, protection against penetration of dust	6	 Protection against powerful water jets
		7	 Protection against temporary immersion
		8	 Protection against water pressure

diagram in accordance with
DIN EN 60529 (VDE 0470-1):2014-09
EN 60529:1991 + A1:2000 + A2:2013

One Luminaire that fits all needs

Former order method



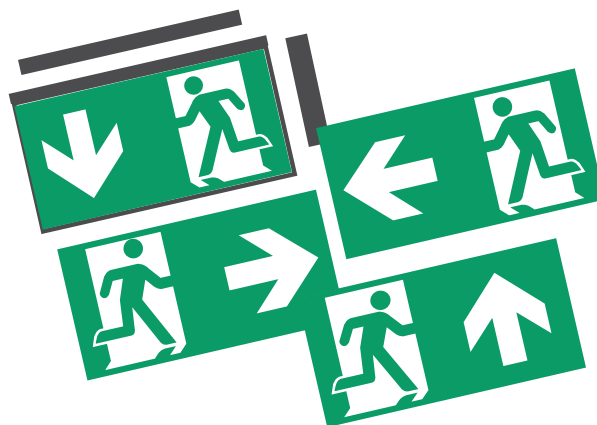
- 1x luminaire
- 1x ceiling mounted
- 1x pictograph down
- 1x luminaire
- 1x wall bracket
- 1x pictograph left
- 1x luminaire
- 1x wall mountes
- 1x pictograph right

Our products feature the latest technology. Many of our luminaires can be mounted universally and are delivered with a complete set of pictographs. This saves you time and prevents inconvenient planning. You just have to order the needed number of luminaires - no extra orders for pictographs or mounting equipment.



Pay attention to these symbols for luminaires which feature universal mounting and / or are delivered with a complete set of pictographs.

Our order method



3x luminaire, universal mounting
incl. complete set of pictographs

Benefits for planners

- Only one order needed for all mounting types and pictographs

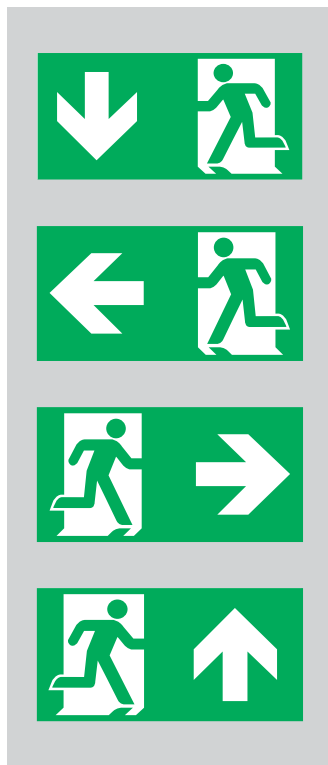
Benefits for distributors

- Less storage space required
- Only one type in stock
- Less administration costs

Benefits for installers

- Flexible handling - even while mounting the device

Pictographs



01 MTU
escape route straight

02 MTL
escape route left

03 MTR
escape route right

15 MTO
escape route straight on



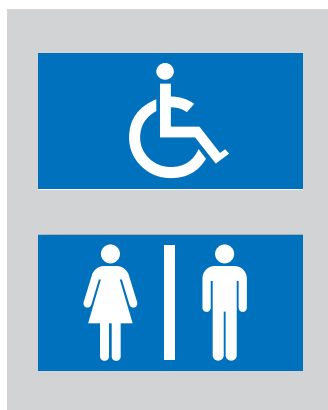
05 TLO *
upstairs left

06 TLU *
downstairs left

07 TRO *
upstairs right

08 TRU *
downstairs right

Examples: special labeling based on customer preference *

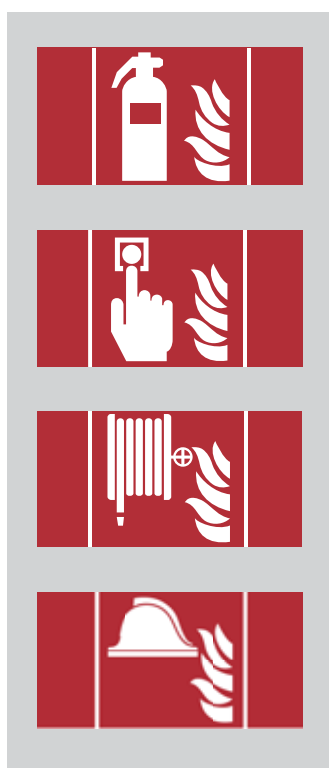


Pictographs according to DIN 4844-2 T1+2 DIN EN 7010, DIN ISO 3864-1 and new BGV A8 as well as NFPA/LifeSafetyCode.

If you would like to order pictographs individually, please indicate the luminaire type.

Non-standard pictographs are available at additional charge, though delivery times might be longer.





Fire extinguisher *
special pictograph, silk-screen
print or cutted foil

Fire alarm *
special pictograph, silk-screen
print or cutted foil

Fire hose *
special pictograph, silk-screen
print or cutted foil

Fire fighting Equipment *
special pictograph, silk-screen
print or cutted foil

Also available as a pictograph set for midsized edge luminaires



Defibrillator *
special pictograph, silk-screen
print or cutted foil

First Aid *
special pictograph, silk-screen
print or cutted foil

Collection point *
special pictograph, silk-screen
print or cutted foil

Emergency exit with escape ladder
*
special pictograph, silk-screen
print or cutted foil

Also available as a pictograph set for the KSC luminaire

Basically all kinds of labeling are possible, also multicolored.

Please send object drawings in vector format, otherwise the post-processing must be cleared by time.

Material for use: acrylic glass (standard), glass and float-glass.

* = Special pictographs (additional price)

IN DEVELOPMENT

The articles presented here are still in the development and are not yet available at the time of printing this catalog. Please ask your sales representative about possible availability.



AIW

Surface mounted version of the AI exit sign

- 15m viewing distance
- Zinc die-cast housing in white, anthracite or stainless steel look
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)



PM

The smaller version of the well-proven KCW luminaire is particularly suitable for use in underground car parks due to its low installation height. The mounting frame can be used with either a flat or a high hood.

- IP 65
- 20m Viewing distance
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)



KWI

In this further development of the KW luminaire series, the focus was on screw fastening of the hood and a circumferential seal that is unaffected by this. At the same time, the size that has proven itself in practice has been retained. In addition, the mounting holes are located at the same points, which allows a KW light that has already been installed to be replaced one-to-one without having to drill and repair again.

- Viewing distance 16m
- IP 65
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)

>> More details on page 145

ASME

The new ASME recessed luminaire corresponds in size and design to the ASMU luminaire and is now equipped with a mounting frame whose cut-out dimensions match the established KM/ KS mounting frame.

>> More details on page 25



WH

This further development of the cube luminaire at a ratio of 2 to 1 ratio is designed for industrial use. The luminaires are characterised by their high protection class and chain mounting with the corresponding strain relief. Optionally, it is possible to illuminate escape and rescue routes with an additional LED in DUO technology.

- Exit sign luminaire with 30m (M) or 50m (X) viewing distance
- IP 54
- DUO-Technology for additional illumination of the rescue route
- Strain relief
- Bayonet
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)

>> More details on page 159



KMMU

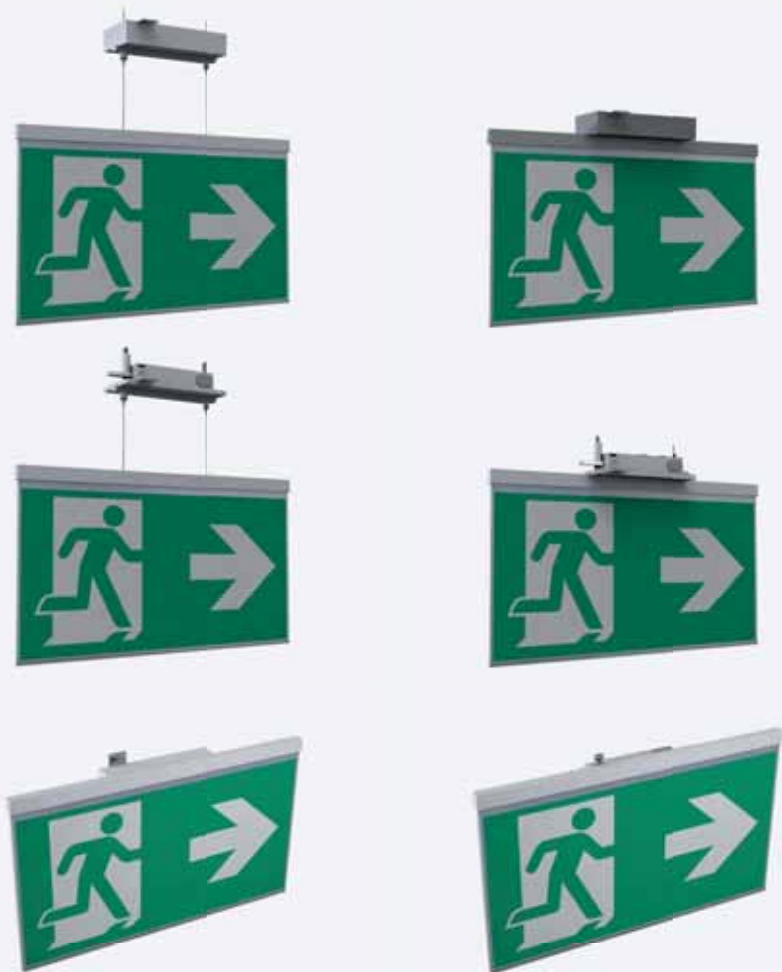
The update of the popular KM plastic escape sign luminaire features a clear, closed hood for the new internal pictogram system.

- 24m viewing distance
- All electronic versions for KM:
 - Self-Contained
 - Self-Contained with SelfControl module
 - Self-Contained with Wireless Professional module
 - Central battery with monitoring module

>> More details on page 87



IN DEVELOPMENT

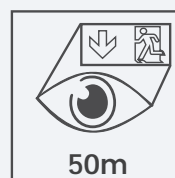


AG

This new luminaire is an addition to the A-series in a larger version and increases the **viewing distance to 50 metres**. Despite the significantly enlarged pictogram, the luminaire fits seamlessly into the concept and design of the A series.

- As ceiling surface or recessed mounted luminaire – optional with cord suspension
- As wall surface or recessed mounted luminaire.
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)

>> More details on page 29





UEMR

This frameless recessed escape sign luminaire for wall level is both functional and design-oriented: a simple appearance combined with user-friendly levelling and mounting.

- Mtl mounting frame for installation in concrete walls
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)

>> More details on page 163



ASMU maritime

The new luminaire for use in the maritime sector is trendsetting for passengers and crew on cruise ships, for example.

The innovative LED disc luminaire made of aluminium is suitable for universal mounting and is based on the multifunctional luminaire body of the ASMU series.



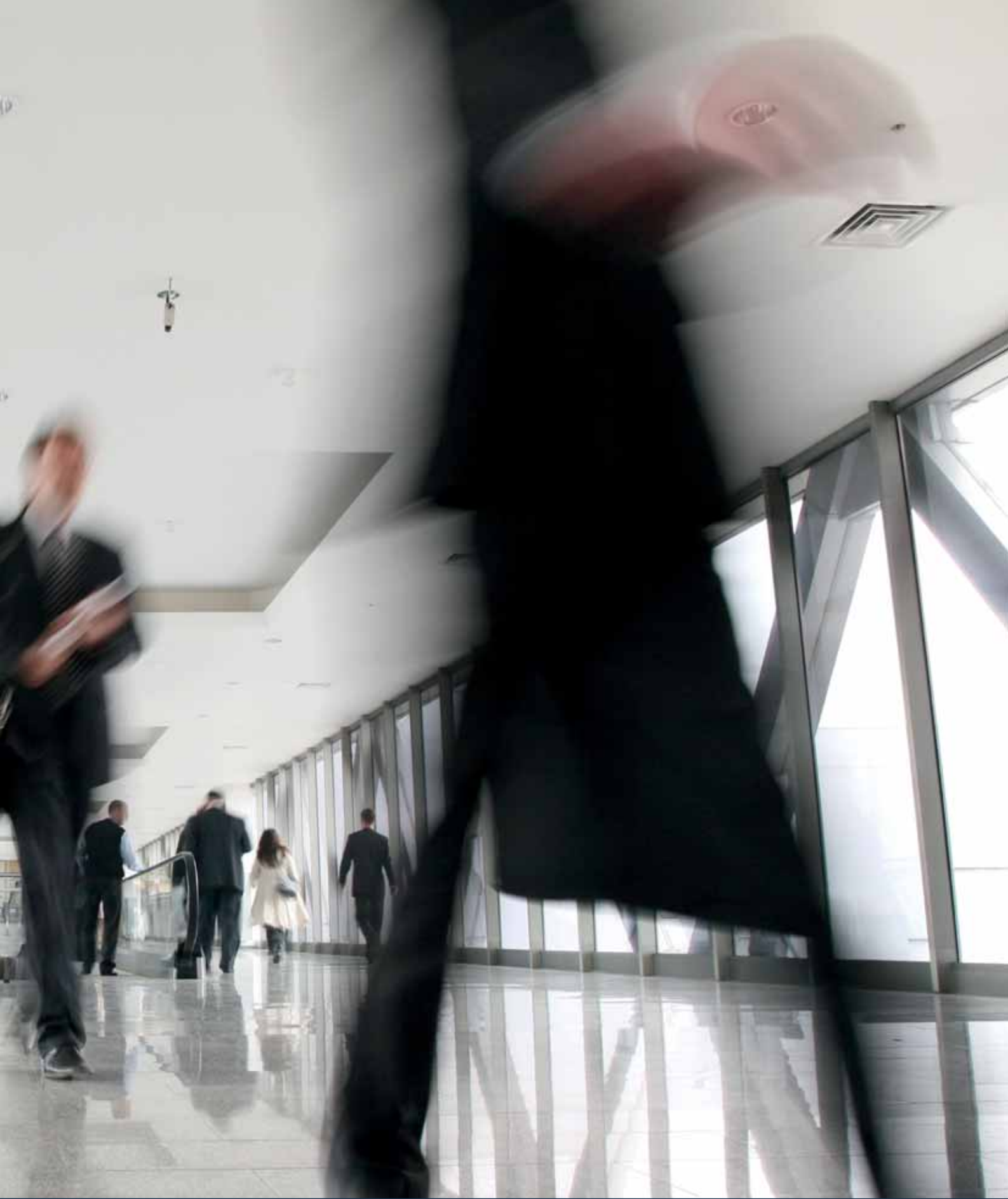
WLZENT 01

The Wireless Professional control centre developed for industrial use is based on a Linux Embedded PC. The functional, service-friendly wall-mounted housing with touch screen can be installed directly at a permanently manned location. Thus, all functions and system information of your Wireless Professional installation are available at your fingertips.

>> More details on page 189



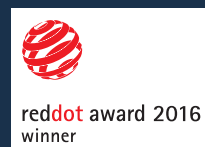
DESIGN LUMINAIRES





OLED

DESIGN LUMINAIRES



FACTS

- Aluminized plastic
- 20m Viewing distance
- Complete set of pictographs (ISO 7010)
- IP20
- OLED Illuminant
- Ceiling, recessed ceiling or recessed wall mounting
- -5° to +35°C











Design luminaire for all purposes where elegance plays an important role. It uses as a light source a full-area organic LED or OLED. Thus a 100% homogeneous illumination of the pictogram is achieved.

The housing surface is aluminized in a process as it is already used in the automotive industry. The variably useable and tollessly

changeable pictograms of the OLED provide planning security on site. LED escape route luminaire in accordance with DIN EN 60598-1, EN 60598-2-22, EN 7010 and DIN EN 1838.



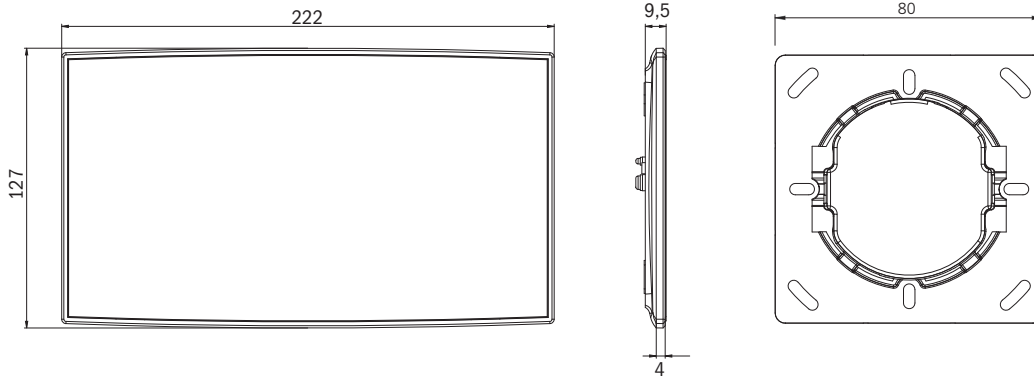


						
Luminaires for central battery systems AC/DC incl. monitoring module						
OLED - Single sided			OMRS009ML	CBS	3,7 W	
OLED - Single sided	OMDS009ML-AZ *	OMCS009ML		CBS	4 W	
OLED - Double sided	OMDD009ML-AZ *	OMCD009ML		CBS	6,3 W	

* -AZ: with ceiling mounted housing in anthracite

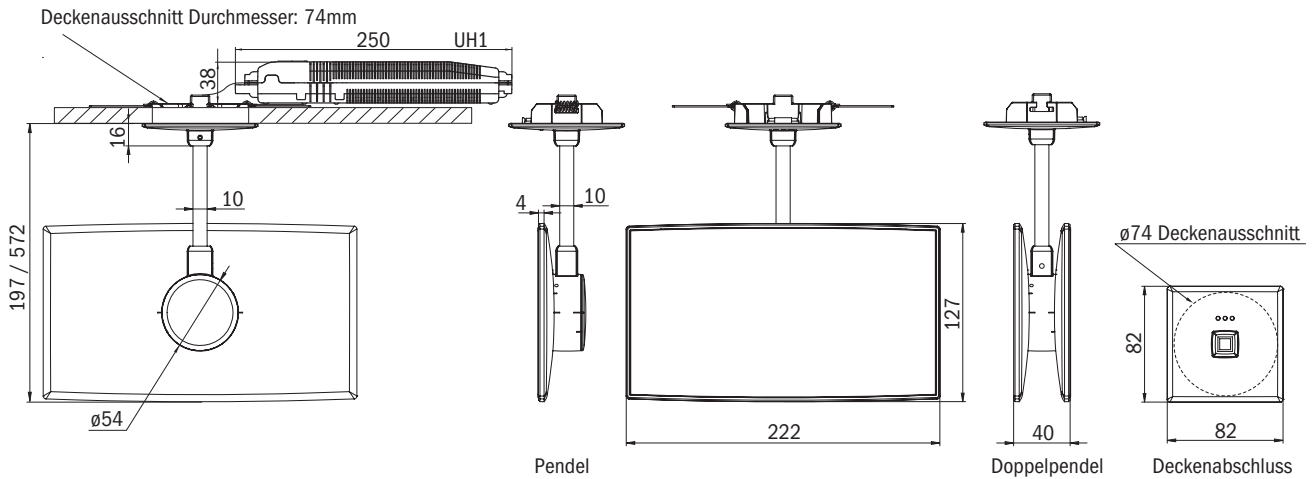
Recessed ceiling mounting

Dimensions OLED recessed ceiling mounting



Recessed wall mounting

Dimensions OLED recessed wall mounting



For concrete installation, we recommend the recessed boxes HaloX-0 + HaloX-40 from Kaiser.

Accessories



OM1PA pendulum 500mm reducible



ASMU

ALUMINIUM PROFILED EDGE LUMINAIRE



FACTS

- Aluminium profiled housing, silver or white
- 22m Viewing distance
- Complete set of pictographs (ISO 7010)
- IP40
- LED Illuminant
- Universal mounting
- -5° to +40°C

Innovative aluminum multifunctional edge LED luminaire for universal mounting (wall/ ceiling). Applicable for maintained or nonmaintained operation mode. Improved reliability through easy to install universal use of pictograms.

Pictogram set (left, right, straight up and down) included. Signs according to EN 60598-1, EN 60598-2-22 and EN 1838 norms.



ASMU-W
















AVAILABLE SOON:

ASME

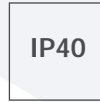
The new ASME recessed luminaire corresponds in size and design to the ASMU luminaire and is now equipped with a mounting frame whose cut-out dimensions match the established KM/ KS mounting frame.



ALUMINIUM PROFILED EDGE LUMINAIRE

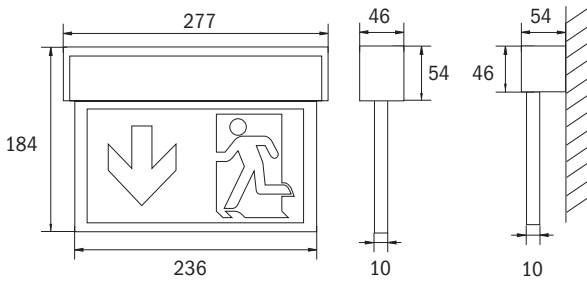
	 universal				
Self-Contained luminaires					
LED, 3h, 230V AC	ASMU003 *	3 h	3,1 W	4,8V / 0,5Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	ASMU011SC *	1 h	4,6 W	3,2V / 0,57Ah LiFePO4	
LED, 3h, 230V AC	ASMU003SC *	3 h	3,1 W	4,8V / 0,5Ah NiMH	
LED, 3h, 230V AC	ASMU013SC *	3 h	4,6 W	3,2V / 0,57Ah LiFePO4	
LED, 8h, 230V AC	ASMU018SC *	8 h	4,6 W	3,2V / 3,0 Ah LiFePO4	
Self-Contained luminaires with Wireless Basic module					
LED, 3h, 230V AC	ASMU013WB *	3 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
Self-Contained luminaires with Wireless Professional module (switchable)					
LED, 1h, 230V AC	ASMU001WL *	1 h	3,6 W	4,8V / 0,5Ah NiMH	
LED, 1h, 230V AC	ASMU011WL *	1 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
LED, 3h, 230V AC	ASMU013WL *	3 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
LED, 8h, 230V AC	ASMU018WL *	8 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	ASMU019ML *	CBS	3,2 W		

*) Standard: silver | -WS: white

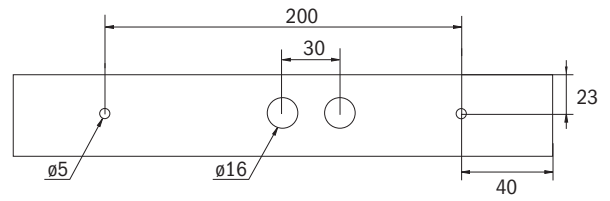


Universal mounting

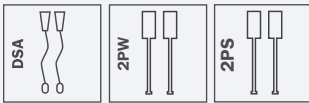
Dimensions ASMU



Drilling distances ASMU



Accessories





A-Serie

METAL EDGE LUMINAIRES



GERMAN
DESIGN
AWARD
WINNER
2018

FACTS

- Zinc die-cast housing
Standard white, anthracite (-AZ) or stainless steel look (-E)
- 15m (AI), 22m (AM) or 30m (AX)
Viewing distance
- Complete set of pictographs
(ISO 7010)
- IP20 (recessed) or IP40 (surface)
- LED Illuminant
- Wall or ceiling mounting
- -5° to +40°C

The A-series is a complete product line of high quality exit signs with metal housing for surface or recessed mounting. The entire series has been designed in the same style and can be perfectly integrated into any environment.

The A-series is characterized by sober, clear lines and is only noticeable when it comes to the worst.

The installation of the Zinc die-cast luminaires is simple. All clamps and screw connections are easily accessible at all times. No screw connections are visible from the outside on mounted luminaires.

All luminaires of the A series are available in 2 sizes. The AM offers a detection range of 22m, while the larger AX has a detection range of 30m.

The uniform illumination of the pictogram is ensured by a dot matrix grid printed on the screen.

The type of mounting of the luminaire is indicated by the 3rd and, if appropriate, the fourth letter of the order number.

The luminaires with duo technology offer a light output downwards by means of an additional LED on the electronics housing. These luminaires are therefore perfect for illuminating the area of doors and passages. In normal operation, the pictogram is illuminated using conventional high power LEDs. In emergency operation, an automatic switchover to the integrated ERT LED is performed to illuminate the escape route and the pictogram.

All A-series luminaires are available as standard in white or in anthracite and with stainless-steel look.

The LED exit signs are built according to DIN EN 60598-1, DIN EN 60598-2-22, DIN EN 7010 and DIN EN 1838.

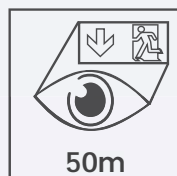


AVAILABLE SOON:

AG

This new luminaire is an addition to the A-series in a larger version and increases the **viewing distance to 50 metres**. Despite the significantly enlarged pictogram, the luminaire fits seamlessly into the concept and design of the A series.

- As ceiling surface or recessed mounted luminaire – optional with cord suspension
- As wall surface or recessed mounted luminaire.
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)

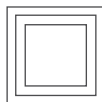


RECESSED CEILING MOUNTING - CIRCULAR CUT-OUT



AI – Viewing distance 15m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AIE001SC	AIE001SC-AZ	AIE001SC-E	1 h	3,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AIE003SC	AIE003SC-AZ	AIE003SC-E	3 h	3,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AIE008SC	AIE008SC-AZ	AIE008SC-E	8 h	3,7 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AIE009ML	AIE009ML-AZ	AIE009ML-E	CBS	2,25 W		



RECESSED CEILING MOUNTING WITH PENDULUM - CIRCULAR CUT-OUT



AI – Viewing distance 15m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AIEP001SC	AIEP001SC-AZ	AIEP001SC-E	1 h	3,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AIEP003SC	AIEP003SC-AZ	AIEP003SC-E	3 h	3,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AIEP008SC	AIEP008SC-AZ	AIEP008SC-E	8 h	3,7 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AIEP009ML	AIEP009ML-AZ	AIEP009ML-E	CBS	2,25 W		

RECESSED WALL MOUNTING - CIRCULAR CUT-OUT



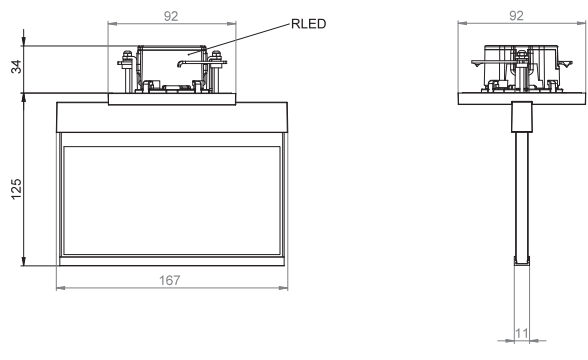
AI – Viewing distance 15m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AIR001SC	AIR001SC-AZ	AIR001SC-E	1 h	3,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AIR003SC	AIR003SC-AZ	AIR003SC-E	3 h	3,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AIR008SC	AIR008SC-AZ	AIR008SC-E	8 h	3,7 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AIR009ML	AIR009ML-AZ	AIR009ML-E	CBS	2,25 W		

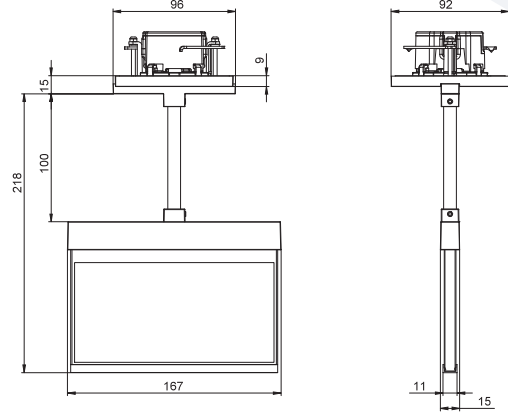


Recessed ceiling mounting

Dimensions AI recessed ceiling mounting AIE

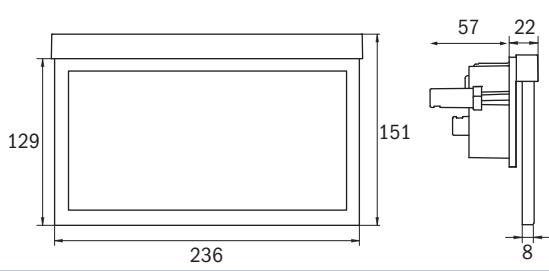


Dimensions AI recessed ceiling mounting AIEP

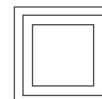


Recessed wall mounting

Dimensions AI recessed wall mounting AIR



AM / AX W



WALL MOUNTING

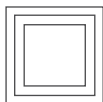


AM – Viewing distance 22m

	White	Black	Grey				
Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMW001SC	AMW001SC-AZ	AMW001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMW003SC	AMW003SC-AZ	AMW003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMW008SC	AMW008SC-AZ	AMW008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMW009	AMW009-AZ	AMW009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMW009ML	AMW009ML-AZ	AMW009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

	White	Black	Grey				
Self-Contained luminaires with SelfControl module							
LED, 230V AC/DC	AXW001SC	AXW001SC-AZ	AXW001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXW003SC	AXW003SC-AZ	AXW003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXW008SC	AXW008SC-AZ	AXW008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXW009	AXW009-AZ	AXW009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXW009ML	AXW009ML-AZ	AXW009ML-E	CBS	4,5 W		



AM / AX WT

WALL MOUNTED EXIT SIGN WITH ADDITIONAL SAFETY LIGHT



GENERAL INFORMATION

DESIGN LUMINAIRES

DYNAMIC LUMINAIRES

UNIVERSAL LUMINAIRES

INDUSTRIAL LUMINAIRES

GENERAL LIGHTING WITH EMERGENCY LIGHT

WIRELESS MONITORING

ACCESSORIES

MODULES

AM – Viewing distance 22m

Luminaire for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AMWT009ML	AMWT009ML-AZ	AMWT009ML-E	CBS	3,5 W	

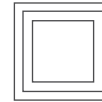
AX – Viewing distance 30m

Luminaire for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AXWT009ML	AXWT009ML-AZ	AXWT009ML-E	CBS	4,5 W	

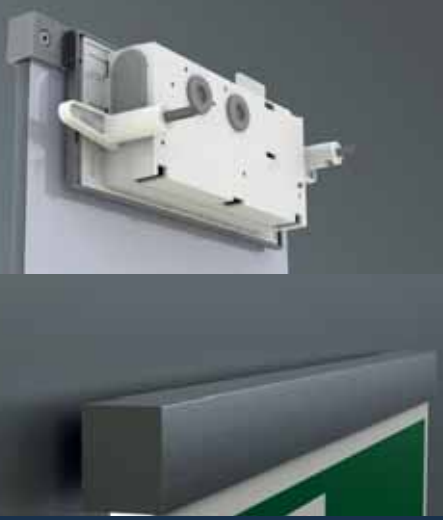
Distance table AMWT / AXWT for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.50	0.89	3.34	3.37	5.28	2.19
3.00	1.05	3.72	3.74	5.73	2.37
3.50	1.19	4.03	4.04	6.15	2.50
4.00	1.33	4.25	4.26	6.50	2.61

AM / AX R



RECESSED WALL MOUNTING

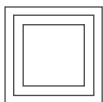


AM – Viewing distance 22m

	White	Black	Grey				
Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMR001SC	AMR001SC-AZ	AMR001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMR003SC	AMR003SC-AZ	AMR003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMR008SC	AMR008SC-AZ	AMR008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMR009	AMR009-AZ	AMR009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMR009ML	AMR009ML-AZ	AMR009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

	White	Black	Grey				
Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXR001SC	AXR001SC-AZ	AXR001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXR003SC	AXR003SC-AZ	AXR003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXR008SC	AXR008SC-AZ	AXR008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXR009	AXR009-AZ	AXR009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXR009ML	AXR009ML-AZ	AXR009ML-E	CBS	4,5 W		



AM / AX D

CEILING MOUNTING

GENERAL INFORMATION

DESIGN LUMINAIRES

DYNAMIC LUMINAIRES

UNIVERSAL LUMINAIRES

INDUSTRIAL LUMINAIRES

GENERAL LIGHTING WITH EMERGENCY LIGHT

WIRELESS MONITORING

ACCESSORIES

MODULES



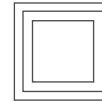
AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMD001SC	AMD001SC-AZ	AMD001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMD003SC	AMD003SC-AZ	AMD003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMD008SC	AMD008SC-AZ	AMD008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMD009	AMD009-AZ	AMD009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMD009ML	AMD009ML-AZ	AMD009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXD001SC	AXD001SC-AZ	AXD001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXD003SC	AXD003SC-AZ	AXD003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXD008SC	AXD008SC-AZ	AXD008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXD009	AXD009-AZ	AXD009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXD009ML	AXD009ML-AZ	AXD009ML-E	CBS	4,5 W		

AM / AX C



RECESSED CEILING MOUNTING

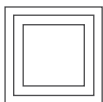


AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMC001SC	AMC001SC-AZ	AMC001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMC003SC	AMC003SC-AZ	AMC003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMC008SC	AMC008SC-AZ	AMC008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMC009	AMC009-AZ	AMC009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMC009ML	AMC009ML-AZ	AMC009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXC001SC	AXC001SC-AZ	AXC001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXC003SC	AXC003SC-AZ	AXC003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXC008SC	AXC008SC-AZ	AXC008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXC009	AXC009-AZ	AXC009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXC009ML	AXC009ML-AZ	AXC009ML-E	CBS	4,5 W		



AM / AX CC

RECESSED CEILING MOUNTING WITH CORD SUSPENSION



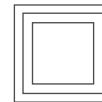
AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AMCC001SC	AMCC001SC-AZ	AMCC001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AMCC003SC	AMCC003SC-AZ	AMCC003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AMCC008SC	AMCC008SC-AZ	AMCC008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AMCC009	AMCC009-AZ	AMCC009-E	CBS	2,4 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AMCC009ML	AMCC009ML-AZ	AMCC009ML-E	CBS	3,5 W	

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AXCC001SC	AXCC001SC-AZ	AXCC001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AXCC003SC	AXCC003SC-AZ	AXCC003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AXCC008SC	AXCC008SC-AZ	AXCC008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AXCC009	AXCC009-AZ	AXCC009-E	CBS	3,3 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AXCC009ML	AXCC009ML-AZ	AXCC009ML-E	CBS	4,5 W	

AM / AX DC



CEILING MOUNTING WITH CORD SUSPENSION

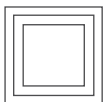


AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMDC001SC	AMDC001SC-AZ	AMDC001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMDC003SC	AMDC003SC-AZ	AMDC003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMDC008SC	AMDC008SC-AZ	AMDC008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMDC009	AMDC009-AZ	AMDC009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMDC009ML	AMDC009ML-AZ	AMDC009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXDC001SC	AXDC001SC-AZ	AXDC001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXDC003SC	AXDC003SC-AZ	AXDC003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXDC008SC	AXDC008SC-AZ	AXDC008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXDC009	AXDC009-AZ	AXDC009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXDC009ML	AXDC009ML-AZ	AXDC009ML-E	CBS	4,5 W		



AM / AX CP

RECESSED CEILING MOUNTING WITH PENDULUM



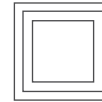
AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AMCP001SC	AMCP001SC-AZ	AMCP001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AMCP003SC	AMCP003SC-AZ	AMCP003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AMCP008SC	AMCP008SC-AZ	AMCP008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AMCP009	AMCP009-AZ	AMCP009-E	CBS	2,4 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AMCP009ML	AMCP009ML-AZ	AMCP009ML-E	CBS	3,5 W	

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AXCP001SC	AXCP001SC-AZ	AXCP001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AXCP003SC	AXCP003SC-AZ	AXCP003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AXCP008SC	AXCP008SC-AZ	AXCP008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AXCP009	AXCP009-AZ	AXCP009-E	CBS	3,3 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AXCP009ML	AXCP009ML-AZ	AXCP009ML-E	CBS	4,5 W	

AM / AX DP



CEILING MOUNTING WITH PENDULUM

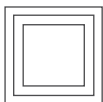


AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMDP001SC	AMDP001SC-AZ	AMDP001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMDP003SC	AMDP003SC-AZ	AMDP003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMDP008SC	AMDP008SC-AZ	AMDP008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMDP009	AMDP009-AZ	AMDP009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMDP009ML	AMDP009ML-AZ	AMDP009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXDP001SC	AXDP001SC-AZ	AXDP001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXDP003SC	AXDP003SC-AZ	AXDP003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXDP008SC	AXDP008SC-AZ	AXDP008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXDP009	AXDP009-AZ	AXDP009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXDP009ML	AXDP009ML-AZ	AXDP009ML-E	CBS	4,5 W		



AM / AX RA

RECESSED WALL MOUNTING WITH WALL BRACKET



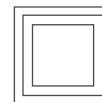
AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AMRA001SC	AMRA001SC-AZ	AMRA001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AMRA003SC	AMRA003SC-AZ	AMRA003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AMRA008SC	AMRA008SC-AZ	AMRA008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AMRA009	AMRA009-AZ	AMRA009-E	CBS	2,4 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AMRA009ML	AMRA009ML-AZ	AMRA009ML-E	CBS	3,5 W	

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AXRA001SC	AXRA001SC-AZ	AXRA001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AXRA003SC	AXRA003SC-AZ	AXRA003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AXRA008SC	AXRA008SC-AZ	AXRA008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AXRA009	AXRA009-AZ	AXRA009-E	CBS	3,3 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AXRA009ML	AXRA009ML-AZ	AXRA009ML-E	CBS	4,5 W	

AM / AX WA



WALL MOUNTING WITH WALL BRACKET

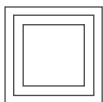


AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMWA001SC	AMWA001SC-AZ	AMWA001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMWA003SC	AMWA003SC-AZ	AMWA003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMWA008SC	AMWA008SC-AZ	AMWA008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMWA009	AMWA009-AZ	AMWA009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMWA009ML	AMWA009ML-AZ	AMWA009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXWA001SC	AXWA001SC-AZ	AXWA001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXWA003SC	AXWA003SC-AZ	AXWA003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXWA008SC	AXWA008SC-AZ	AXWA008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXWA009	AXWA009-AZ	AXWA009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXWA009ML	AXWA009ML-AZ	AXWA009ML-E	CBS	4,5 W		



AM / AX E

RECESSED CEILING MOUNTING - CIRCULAR CUT-OUT



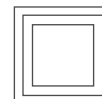
AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AME001SC	AME001SC-AZ	AME001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AME003SC	AME003SC-AZ	AME003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AME008SC	AME008SC-AZ	AME008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AME009	AME009-AZ	AME009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AME009ML	AME009ML-AZ	AME009ML-E	CBS	3,2 W		

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXE001SC	AXE001SC-AZ	AXE001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXE003SC	AXE003SC-AZ	AXE003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXE008SC	AXE008SC-AZ	AXE008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXE009	AXE009-AZ	AXE009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXE009ML	AXE009ML-AZ	AXE009ML-E	CBS	4,5 W		

AM / AX EC



RECESSED CEILING MOUNTING WITH CORD SUSPENSION - CIRCULAR CUT-OUT

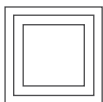


AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AMEC001SC	AMEC001SC-AZ	AMEC001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AMEC003SC	AMEC003SC-AZ	AMEC003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AMEC008SC	AMEC008SC-AZ	AMEC008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AMEC009	AMEC009-AZ	AMEC009-E	CBS	2,4 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AMEC009ML	AMEC009ML-AZ	AMEC009ML-E	CBS	3,5 W		

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module							
LED, 1h, 230V AC	AXEC001SC	AXEC001SC-AZ	AXEC001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	AXEC003SC	AXEC003SC-AZ	AXEC003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	AXEC008SC	AXEC008SC-AZ	AXEC008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems							
LED, 230V AC/DC	AXEC009	AXEC009-AZ	AXEC009-E	CBS	3,3 W		
Luminaires for central battery systems AC/DC incl. monitoring module							
LED, 230V AC/DC	AXEC009ML	AXEC009ML-AZ	AXEC009ML-E	CBS	4,5 W		



AM / AX EP

RECESSED CEILING MOUNTING WITH PENDULUM - CIRCULAR CUT-OUT



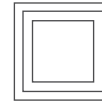
AM – Viewing distance 22m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AMEP001SC	AMEP001SC-AZ	AMEP001SC-E	1 h	4,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AMEP003SC	AMEP003SC-AZ	AMEP003SC-E	3 h	4,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AMEP008SC	AMEP008SC-AZ	AMEP008SC-E	8 h	4,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AMEP009	AMEP009-AZ	AMEP009-E	CBS	2,4 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AMEP009ML	AMEP009ML-AZ	AMEP009ML-E	CBS	3,5 W	

AX – Viewing distance 30m

Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	AXEP001SC	AXEP001SC-AZ	AXEP001SC-E	1 h	5,7 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	AXEP003SC	AXEP003SC-AZ	AXEP003SC-E	3 h	5,7 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	AXEP008SC	AXEP008SC-AZ	AXEP008SC-E	8 h	5,6 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems						
LED, 230V AC/DC	AXEP009	AXEP009-AZ	AXEP009-E	CBS	3,3 W	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	AXEP009ML	AXEP009ML-AZ	AXEP009ML-E	CBS	4,5 W	

AM / AX DT



CEILING MOUNTED EXIT SIGN WITH SAFETY LIGHT



AM – Viewing distance 22m

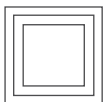
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	AMDT009ML AMDT009ML-AZ AMDT009ML-E	CBS	3,5 W	

AX – Viewing distance 30m

Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	AXDT009ML AXDT009ML-AZ AXDT009ML-E	CBS	4,5 W	

Distance table AMDT / AXDT for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.50	3.45	10.49	6.98	3.81	1.60
3.00	0.00	7.44	3.04	4.16	1.69
3.50	0.00	6.72	2.43	3.94	0.76
4.00	0.00	0.95	0.95	0.95	0.43



AM / AX CT

RECESSED CEILING MOUNTED EXIT SIGN WITH SAFETY LIGHT



AM – Viewing distance 22m

LED, 230V AC/DC	AMCT009ML AMCT009ML-AZ AMCT009ML-E	CBS	3,5 W	

AX – Viewing distance 30m

LED, 230V AC/DC	AXCT009ML AXCT009ML-AZ AXCT009ML-E	CBS	4,5 W	

Distance table AMCT / AXCT for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.50	3.45	10.49	6.98	3.81	1.60
3.00	0.00	7.44	3.04	4.16	1.69
3.50	0.00	6.72	2.43	3.94	0.76
4.00	0.00	0.95	0.95	0.95	0.43

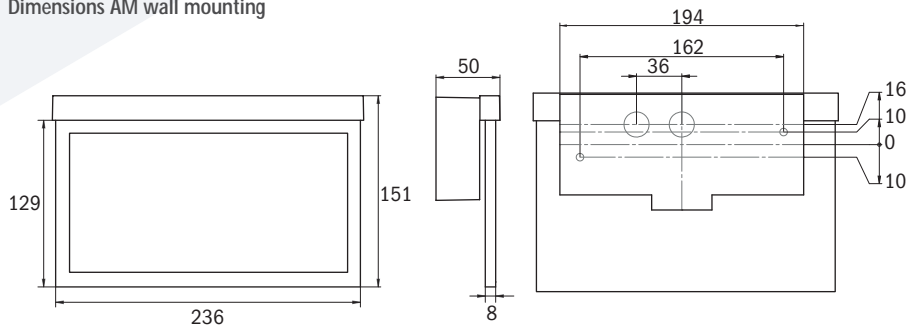
AM / AX

DIMENSIONS

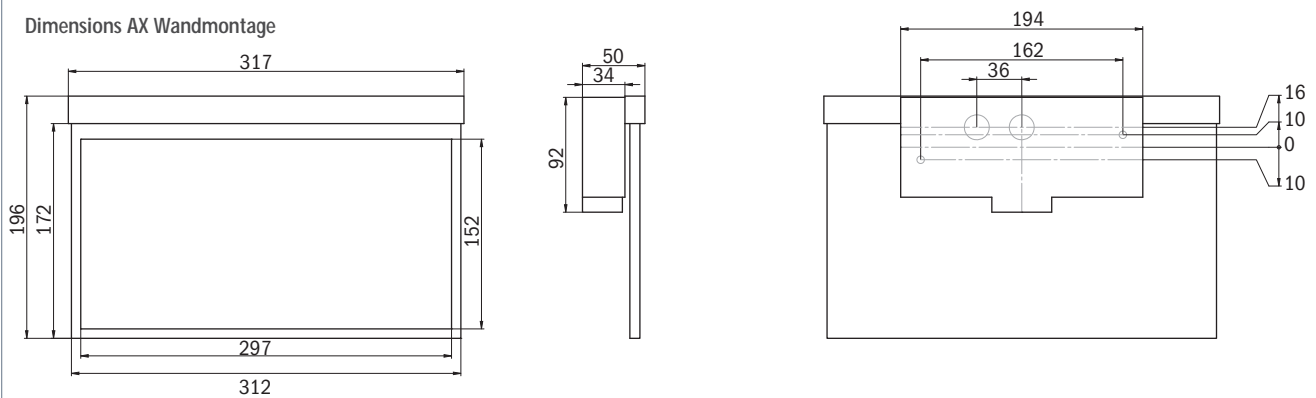


Wall mounting

Dimensions AM wall mounting

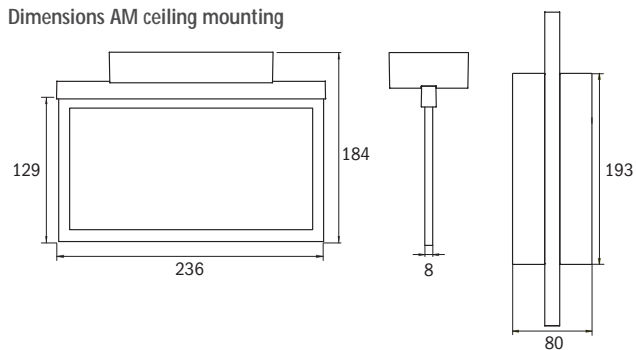


Dimensions AX Wandmontage

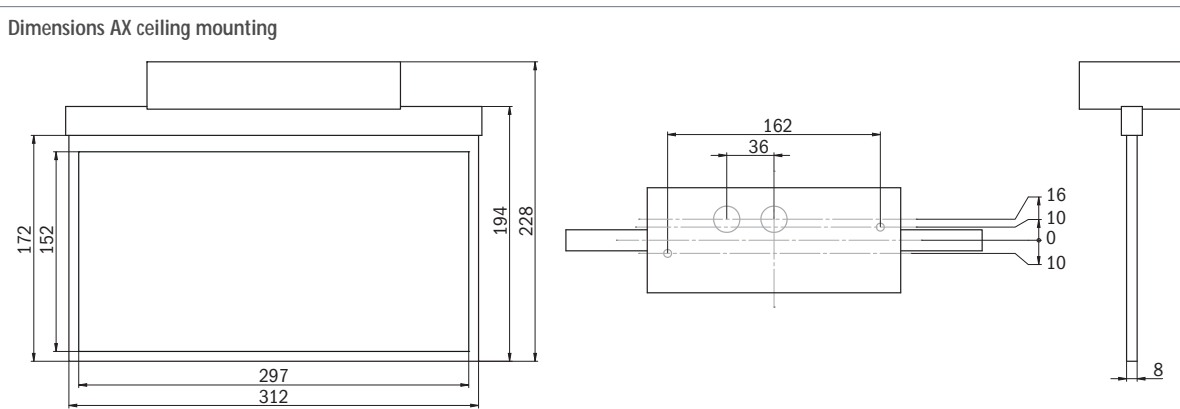


Ceiling mounting

Dimensions AM ceiling mounting



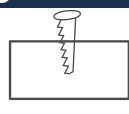
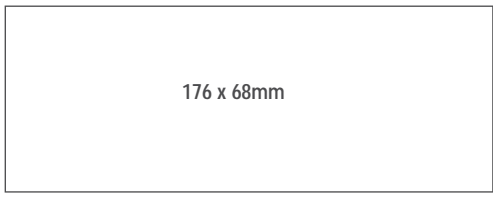
Dimensions AX ceiling mounting



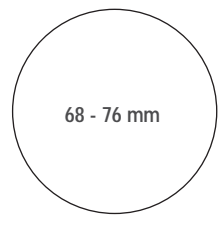


Recessed mounting

Cut-out for recessed mounting AMC/AXC

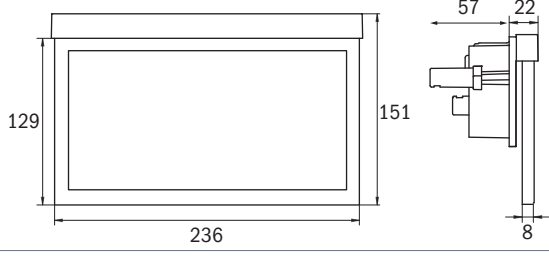


Cut-out for recessed mounting AME/AXE

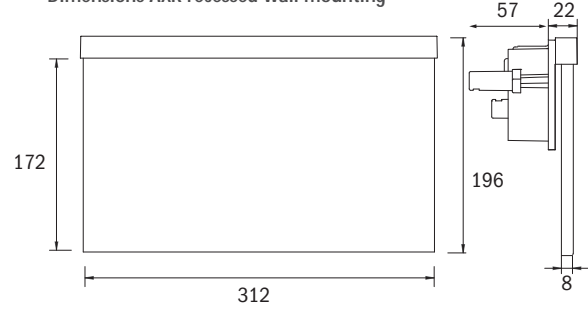


Recessed wall mounting

Dimensions AMR recessed wall mounting

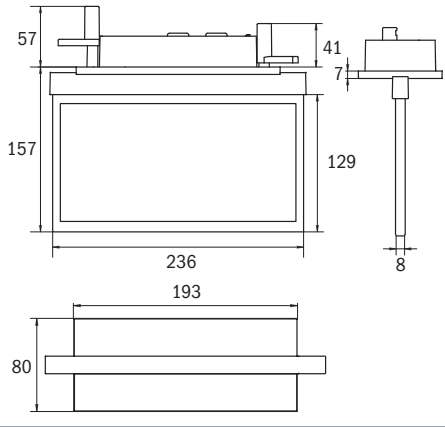


Dimensions AXR recessed wall mounting

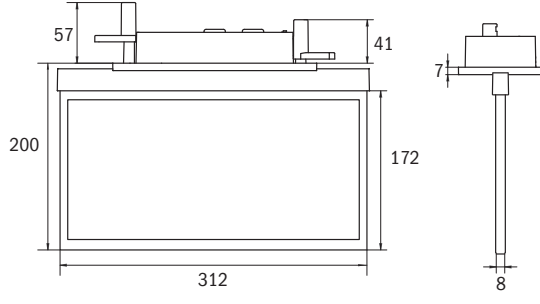


Recessed ceiling mounting

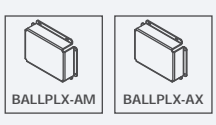
Dimensions AM recessed ceiling mounting AMC



Dimensions AX recessed ceiling mounting AXC



Accessories



Cord suspension:
Standard length 1500mm (reducible)

Pendulum:
Standard length 500mm (reducible)



Pendulum ball joint
AM-X-PKG-WS (white),
AM-X-PKG-AZ (anthracite),
AM-X-PKG-E (stainless steel look)



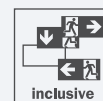
Surface mounting adapter for lateral cable feed
AM-X-APA (white),
AM-X-APA-AZ (anthracite),
AM-X-APA-E (stainless steel look)

All dimensions in mm



MMW / MMD

METAL HOUSING LUMINAIRES



FACTS

- Zinc die-cast housing
- 22m Viewing distance
- Additional safety light as option (DUO-LED)
- Complete set of pictographs (ISO 7010)
- IP40
- LED Illuminant
- Wall or ceiling mounting
- -5° to +40°C



The advantages of the LED combined with a compact shape come together to a modern design. The high quality slim body is made from zinc-aluminium die-cast. You get planning security with variable use of pictographs who are changeable without tools on site.
















LED escape route luminaire in accordance with DIN EN 60598-1, EN 60598-2-22, EN ISO 7010 and DIN EN 1838.

Optional with DUO-LED for additional light output downwards.



MMW / MMD

METAL HOUSING LUMINAIRES WITH OPTIONAL DUO-TECHNOLOGY

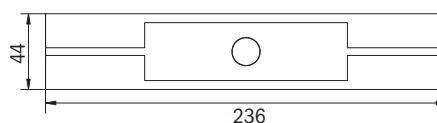
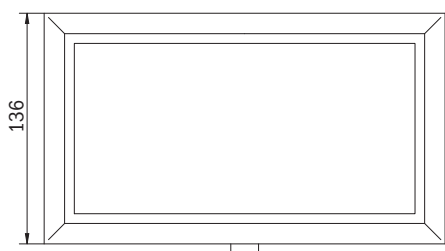
						
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	MMD001SC *		1 h	7,4 W	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC		MMW001SC *	1 h	4,2 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC		MMW003SC *	3 h	4,2 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	MMD003SC *		3 h	7,4 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC		MMW008SC *	8 h	4,2 W	4,8V/2,0Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	MMD009 *		CBS	3,5 W		
LED, 230V AC/DC		MMW009 *	CBS	2,5 W		
Luminaires for central battery systems AC/DC incl. monitoring module						
DUO-LED, 230V AC/DC	MMDT009ML *		CBS	5,5 W		
DUO-LED, 230V AC/DC		MMWT009ML *	CBS	4,5 W		
LED, 230V AC/DC		MMW009ML *	CBS	3,4 W		
LED, 230V AC/DC	MMD009ML *		CBS	5,15 W		

*) Standard: white | -AZ: anthracite



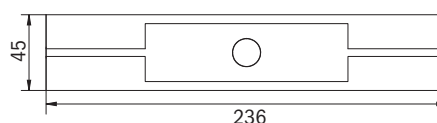
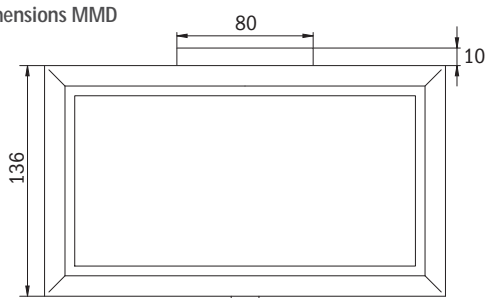
Wall mounting

Dimensions MMW



Ceiling mounting

Dimensions MMD



All dimensions in mm



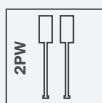
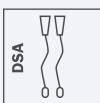
Distance table MMDT 009ML (with lens for corridor lighting) for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	4.01	9.02	6.27	3.28	1.41
2.50	4.56	10.52	6.99	3.75	1.56
3.00	3.26	10.12	5.91	4.11	1.61
3.50	3.48	10.93	6.40	4.41	1.48
4.00	3.61	8.99	6.78	4.55	1.24

Distance table MMWT 009ML (with circular beam lens) for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	1.96	4.87	4.80	4.73	1.91
2.50	2.16	5.31	5.23	5.14	2.09
3.00	2.32	5.72	5.64	5.56	2.26
3.50	2.44	6.08	5.99	5.89	2.37
4.00	2.52	6.42	6.34	6.25	2.47

Accessories



When mounting with cord suspension or pendulum the protection class is reduced to IP20.

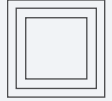
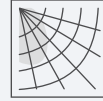




E-Serie

EMERGENCY ROUTE LIGHTING

IP20



GENERAL
INFORMATIONS

FACTS

- Zinc die-cast housing
- IP20
- LED Illuminant
- Ceiling or recessed mounting
- -5° to +40°C

The discreet downlight meets DIN EN 60598-1, DIN EN 60598-22 and DIN EN 1838. Made of zinc die-cast it fits unobtrusively on the ceiling. Besides normal recessed ceiling mounting it can also be mounted in conventional fire protection boxes. The status LED integrated within the lens does not interrupt the harmony of the decent housing. Optimal light distribution and lighting of escape and rescue routes is achieved by use of cluster lenses and powerful ERT LED technology. The EE emergency light is available with round (EERx) or square (EEQx) cover.

The fourth letter marks the type of lense used in the luminaire:

EERR / EEQR

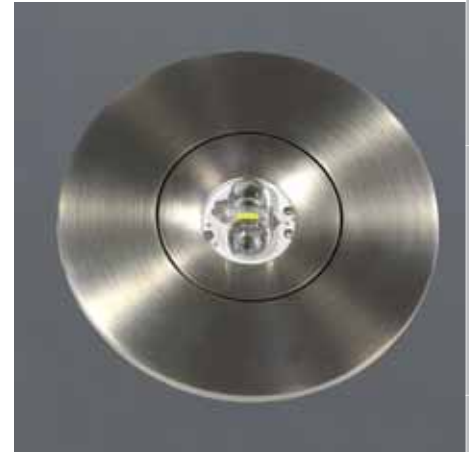
The radiate beam of the EERR / EEQR illuminates the escape and rescue route for ceiling heights up to 4m most effective at intersections of two corridors.

EERF / EEQF

The EERF / EEQF has a lens to focus the light into two main directions. This corridor lights is particularly effective for normal ceiling heights up to 4m and enables luminaire spacing of about 18m in the escape route.

EERS / EEQS

The spot lens of the EERS / EEQS ensures an even distribution of light in all directions, even with ceiling heights over 4m.



DESIGN LUMINAIRES

DYNAMIC LUMINAIRES

UNIVERSAL LUMINAIRES

INDUSTRIAL LUMINAIRES

GENERAL LIGHTING WITH EMERGENCY LIGHT

WIRELESS MONITORING

























ACCESSORIES

MODULES



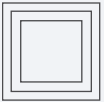
E-Serie

EMERGENCY ROUTE LIGHTING

						
Self-Contained luminaires with SelfControl module						
Corridor lighting	EEQF021SC *	EERF021SC **	1 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Circular beam	EEQR021SC *	EERR021SC **	1 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Spot	EEQS021SC *	EERS021SC **	1 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Corridor lighting	EEQF023SC *	EERF023SC **	3 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Circular beam	EEQR023SC *	EERR023SC **	3 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Spot	EEQS023SC *	EERS023SC **	3 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Corridor lighting	EEQF028SC *	EERF028SC **	8 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Spot	EEQS028SC *	EERS028SC **	8 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (switchable)						
Corridor lighting	EEQF021WL *	EERF021WL **	1 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH	
Circular beam	EEQR021WL *	EERR021WL **	1 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH	
Spot	EEQS021WL *	EERS021WL **	1 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH	
Corridor lighting	EEQF023WL *	EERF023WL **	3 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH	
Circular beam	EEQR023WL *	EERR023WL **	3 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH	
Spot	EEQS023WL *	EERS023WL **	3 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH	
Luminaires for central battery systems AC/DC incl. monitoring module						
Corridor lighting	EEQF029ML *	EERF029ML **	CBS	2,1 W - 140 lm		
Circular beam	EEQR029ML *	EERR029ML **	CBS	2,1 W - 140 lm		
Spot	EEQS029ML *	EERS029ML **	CBS	2,1 W - 140 lm		
Corridor lighting	EEQF039ML *	EERF039ML **	CBS	5 W - 470 lm		

*) Standard: white | -AZ: anthracite

**) Standard: white | -AZ: anthracite | -E: stainless steel look (EER only)



Distance table EExF 029 und EExF 023, 028 for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.50	1.75	5.08	13.32	17.44	6.19
3.00	1.60	5.13	12.00	18.17	5.41
3.50	1.34	5.05	10.53	18.19	4.48
4.00	1.00	4.81	8.72	16.75	3.13

Distance table EExS 029, EExS 023 und EExS 028 for plane emergency routes (additional distance tables on our website)

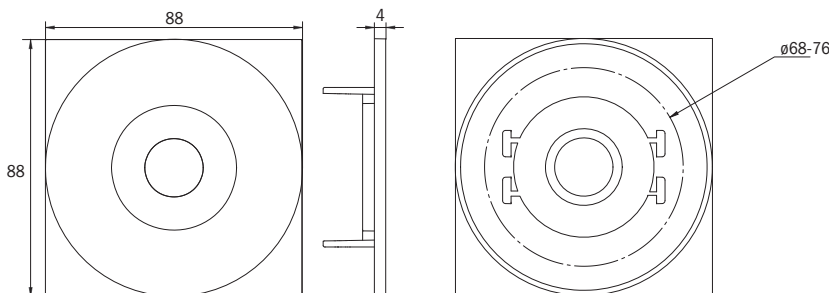
Mounting height (m)					
2.50	2.25	5.37	5.43	5.48	2.33
3.00	2.43	5.89	5.94	5.99	2.52
3.50	2.64	6.44	6.52	6.59	2.73
4.00	2.80	6.88	6.99	7.09	3.12
5.00	3.00	7.74	7.86	7.96	3.12
6.00	3.20	8.38	8.50	8.64	3.32
7.00	3.12	8.80	8.98	9.14	3.26
8.00	2.92	9.02	9.22	9.42	3.08
9.00	2.40	9.03	9.27	9.48	2.58
10.50	1.47	8.67	8.91	9.15	1.65

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

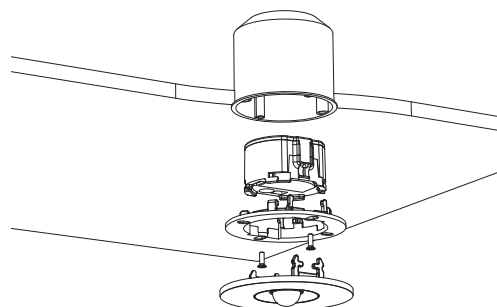
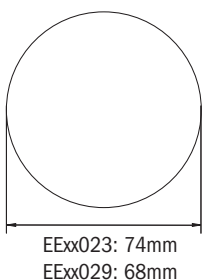
route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

Recessed ceiling mounting

Dimensions EER / EEQ

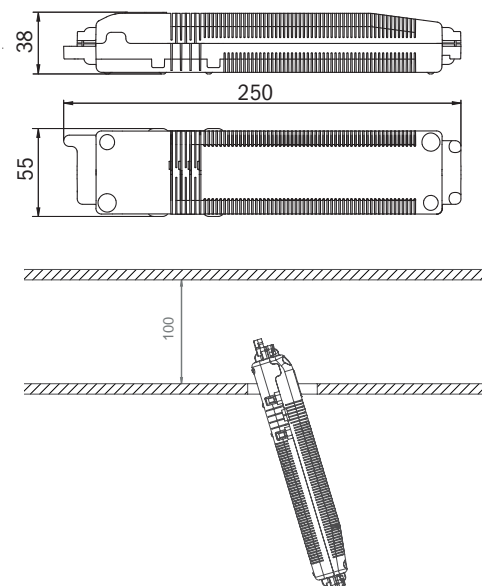


Cut-out EER / EEQ



EEx029: Mounting jack necessary (not included in delivery)

SelfContained electronics box (UH-1)

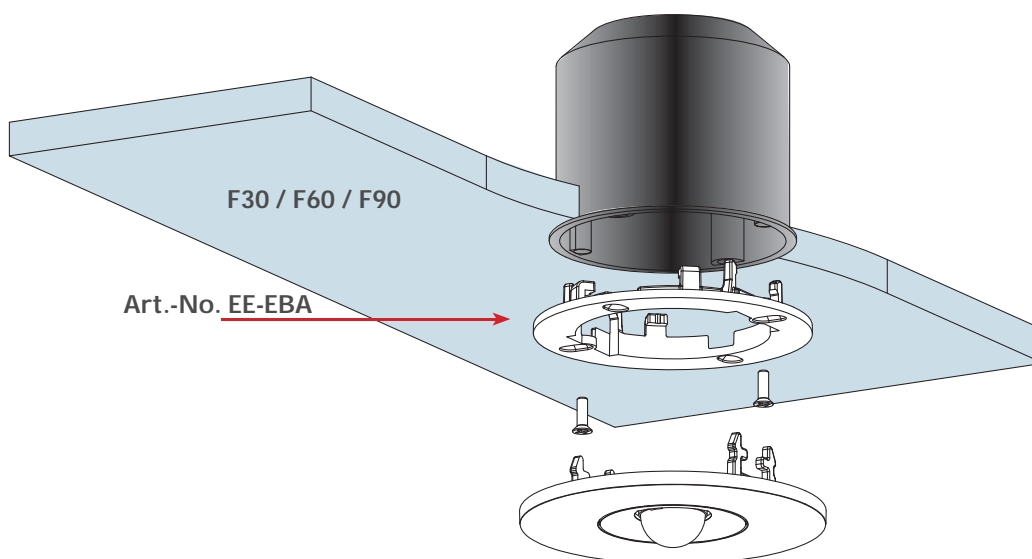


E-Serie

SOCKET MOUNTING WITH FUNCTION ENDURANCE

Luminaires of the EEx-series fit due to its very compact design also in a standard connection jack or fire resistant jack, such as Kaiser HWD 30. This allows EEx-luminaires to be installed in fire resistant ceilings of classes F30, F60 and F90 according to DIN 4102-4 or DIN 4102-2 as well. No reworking with fire protection silicone and no additional fire protection housing necessary.

To mount the central battery luminaire in a jack, the lateral ceiling clamps have to be removed and the included adapter ring must be applied (art.-no. EE-EBA).





MODULES

ACCESSORIES

WIRELESS MONITORING

GENERAL LIGHTING
WITH EMERGENCY LIGHT

INDUSTRIAL
LUMINAIRES

UNIVERSAL
LUMINAIRES

DYNAMIC
LUMINAIRES

DESIGN LUMINAIRES

GENERAL
INFORMATIONS

EMERGENCY ROUTE LIGHTING

FACTS

- Zinc die-cast housing
- IP40
- LED Illuminant
- ceiling mounting
- -5° to +40°C

Universal, discreet Zinc die-cast ceiling-mounting cover for the lights ILDR, ILDF and ILDS. For easier installation, the housing can be assembled later.

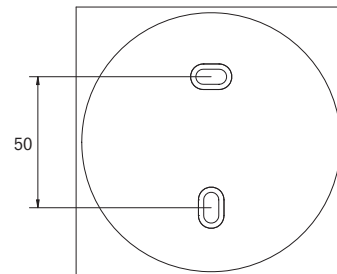
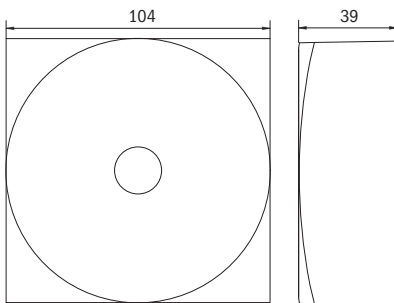
By using the light IL as a base, you have the advantage of compact storage.

Version	Order numbers
Covers	
Round cover	
... - white	EAR
... - anthracite	EAR-AZ
Square cover	
... - white	EAQ
... - anthracite	EAQ-AZ



Ceiling mounting

Dimensions and drilling distances EAR / EAQ



All dimensions in mm



EAR



EAQ-AZ



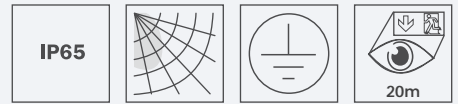
Self-Contained luminaires with SelfControl module						
Corridor lighting	EAQF021SC *	EARF021SC *	1 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	EAQR021SC *	EARR021SC *	1 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	EAQS021SC *	EARS021SC *	1 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	EAQF023SC *	EARF023SC *	3 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	EAQR023SC *	EARR023SC *	3 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	EAQS023SC *	EARS023SC *	3 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	EAQF028SC *	EARF028SC *	8 h	3,7 W - 110 lm	4,8V/2,0Ah NiMH	
Spot	EAQS028SC *	EARS028SC *	8 h	3,7 W - 110 lm	4,8V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Basic module						
Corridor lighting	EAQF023WB *	EARF023WB *	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	EAQR023WB *	EARR023WB *	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	EAQS023WB *	EARS023WB *	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module						
Corridor lighting	EAQF021WL *	EARF021WL *	1 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	EAQR021WL *	EARR021WL *	1 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	EAQS021WL *	EARS021WL *	1 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	EAQF023WL *	EARF023WL *	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	EAQR023WL *	EARR023WL *	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	EAQS023WL *	EARS023WL *	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	EAQF028WL *	EARF028WL *	8 h	4 W - 110 lm	4,8V/2,0Ah NiMH	
Spot	EAQS028WL *	EARS028WL *	8 h	4 W - 110 lm	4,8V/2,0Ah NiMH	
Luminaires for central battery systems AC/DC incl. monitoring module						
Corridor lighting	EAQF029ML *	EARF029ML *	CBS	4,6 W - 360 lm		
Circular beam	EAQR029ML *	EARR029ML *	CBS	4,6 W - 360 lm		
Spot	EAQS029ML *	EARS029ML *	CBS	4,6 W - 360 lm		

*) Standard: white | -AZ: anthracite



FMW

ZINC DIE-CAST EXIT SIGN



FACTS

- Zinc die-cast housing, white or anthracite
- IP65
- LED Illuminant
- wall mounting
- -5° to +40°C

Robust wall-mounted Zinc die-cast luminaire for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 605982-22 and EN 1838. Appealing design with concealed screws.

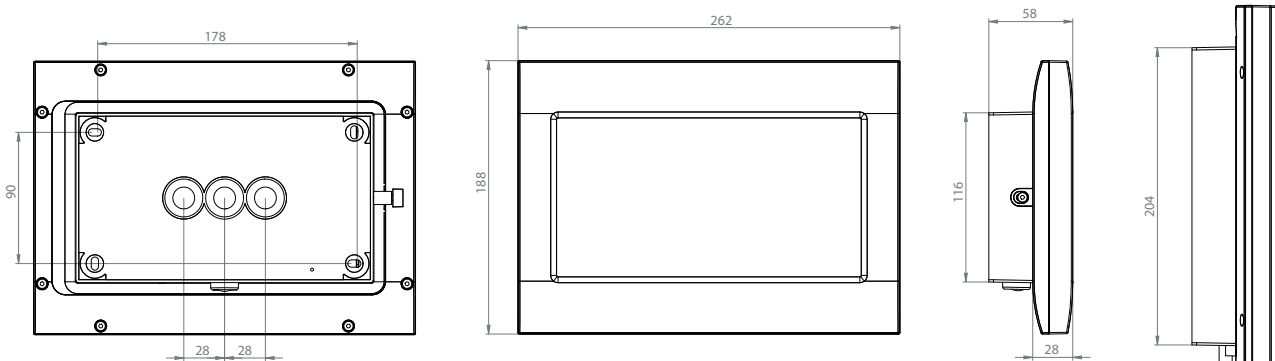
Available for central power systems or as LED self-contained emergency luminaire.



Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC	FMW001SC FMW001SC-AZ	1 h	4,2 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	FMW003SC FMW003SC-AZ	3 h	4,2 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	FMW008SC FMW008SC-AZ	8 h	4,2 W	4,8V/2,0Ah NiMH
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	FMW009ML FMW009ML-AZ	CBS	3,4 W	

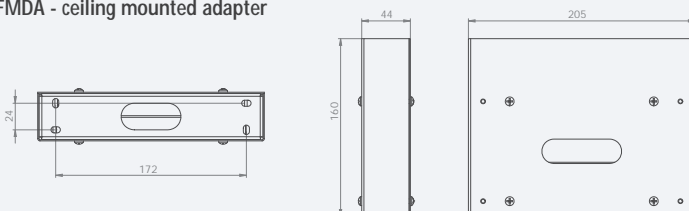
Wall mounting

Dimensions and drilling distances



Accessories

FMDA - ceiling mounted adapter



FMDA001 – single side mounting
FMDA001-AZ – anthracite, single side mounting

FMDA002 – double sided mounting
FMDA002 – anthracite, double sided mounting

All dimensions in mm



FMDS

ZINC DIE-CAST EMERGENCY LUMINAIRE



FACTS

- Zinc die-cast housing, white or anthracite
- IP65
- LED Illuminant
- ceiling mounting
- -5° to +40°C

Robust ceiling-mounted Zinc die-cast luminaire for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and EN 1838. Appealing design with concealed screws.

Available for central power systems or as LED self-contained emergency luminaire. Ball protected according to DIN 18032.



Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC	FMDS021SC FMDS021SC-AZ	1 h	6 W - 520 lm	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	FMDS023SC FMDS023SC-AZ	3 h	6 W - 520 lm	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	FMDS028SC FMDS028SC-AZ	8 h	7,1 W - 200 lm	9,6V/2,0Ah NiMH
Luminaires for central battery systems				
LED, 230V AC/DC	FMDS029 FMDS029-AZ	CBS	4,6 W - 520 lm	
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	FMDS029ML FMDS029ML-AZ	CBS	5,2 W - 520 lm	

Distance table FMDS029(ML) for plane emergency routes

Mounting height (m)					
2.00	4.29	9.63	8.77	6.96	2.86
2.50	4.91	11.50	10.47	8.15	3.20
3.00	5.41	12.74	11.61	8.64	3.33
3.50	5.82	13.99	12.61	9.09	3.50
4.00	6.40	15.13	13.55	9.45	3.60
5.00	7.14	17.12	15.28	10.10	3.76
6.00	7.96	19.04	16.72	10.62	3.90
7.00	8.34	20.68	17.90	11.00	3.88
8.00	8.88	22.10	18.84	11.24	3.90
9.00	9.00	23.34	19.29	11.40	3.81
10.50	8.49	24.87	19.35	11.40	3.42
12.00	7.80	25.47	18.75	11.16	3.00

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m



WEF

EMERGENCY ROUTE LIGHTING



FACTS

- Zinc die-cast, white, anthracite or stainless steel look
- IP20
- LED Illuminant
- Recessed wall mounting
- -10° to +40°C

LED emergency luminaire for wall installation and for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 605982-22 and DIN EN 1838.

This recessed luminaire is designed for installation in conventional installation jacks. The mounting frame can be aligned with the jacks.

The zinc die-cast cover is locked without externally visible fastening. Through the status LED which is incorporated in the lens the harmony of the housing is not interrupted.

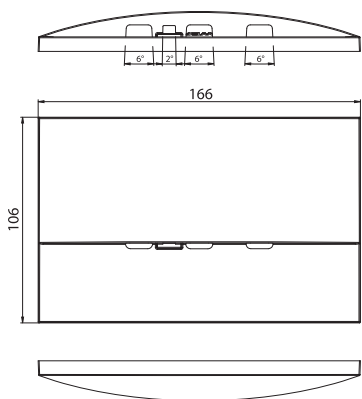
Self-Contained luminaires with SelfControl module		Luminaires for central battery systems		Luminaires for central battery systems AC/DC incl. monitoring module	
LED, 1h, 230V AC	WEF021SC * WEF021SC-AZ * WEF021SC-E *	LED, 230V AC/DC	WEF029 WEF029-AZ WEF029-E	LED, 230V AC/DC	WEF029ML WEF029ML-AZ WEF029ML-E
1 h		CBS		CBS	
5 W - 290 lm		3,9 W - 420 lm		4,3 W - 420 lm	
4,8V/2,0Ah NiMH					
SC					ML
LED, 3h, 230V AC	WEF023SC * WEF023SC-AZ * WEF023SC-E *				
3 h					
5 W - 290 lm					
4,8V/2,0Ah NiMH					
SC					
LED, 8h, 230V AC	WEF028SC * WEF028SC-AZ * WEF028SC-E *				
8 h					
5,9 W - 270 lm					
9,6V/2,0Ah NiMH					
SC					

*) Delivered with 1 UH-housing. Content may exceed the volume of the installation socket.

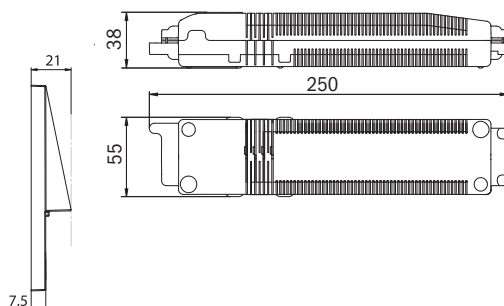


Recessed wall mounting

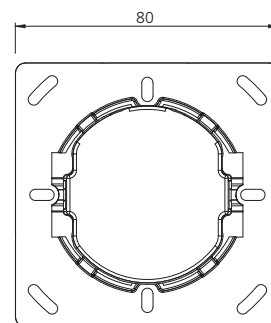
WEF Dimensions



SelfContained electronics box

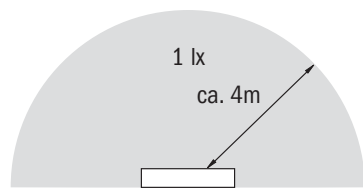


WEF 029(ML) installation socket

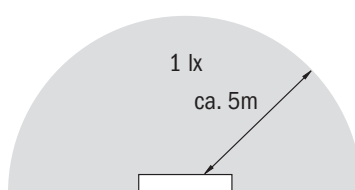


All dimensions in mm

WEF Illumination



Mounting height 0,5m



Mounting height 2,2m



WER

EMERGENCY ROUTE LIGHTING



FACTS

- Zinc die-cast, white, anthracite or stainless steel look
- IP20
- LED Illuminant
- Recessed wall mounting
- -10° to +40°C

LED emergency luminaire for wall installation for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 605982-22 and DIN EN 1838.

The discreet recessed luminaire is designed for installation in conventional jacks. The mounting frame can be aligned with the jack.

The zinc die-cast cover is locked without externally visible fastening. Through the status LED incorporated in the lens the harmony of the housing is not interrupted.

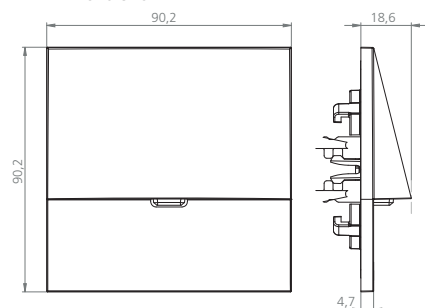
Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC	WER021SC * WER021SC-AZ * WER021SC-E *	1 h	3,1 W - 140 lm	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	WER023SC * WER023SC-AZ * WER023SC-E *	3 h	3,1 W - 140 lm	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	WER028SC * WER028SC-AZ * WER028SC-E *	8 h	3,1 W - 140 lm	4,8V/2,0Ah NiMH
Self-Contained luminaires with Wireless Professional module (switchable)				
LED, 1h, 230V AC	WER021WL * WER021WL-AZ * WER021WL-E *	1 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	WER023WL * WER023WL-AZ * WER023WL-E *	3 h	5,6 W - 140 lm	4,8V/2,0Ah NiMH
Luminaires for central battery systems				
LED, 230V AC/DC	WER029 WER029-AZ WER029-E	CBS	1,9 W - 140 lm	
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	WER029ML WER029ML-AZ WER029ML-E	CBS	2,1 W - 140 lm	

*) Delivered with 1 UH-housing. Content may exceed the volume of the installation socket..

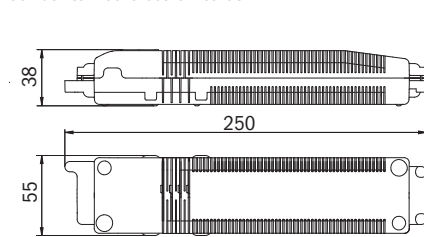


Recessed wall mounting

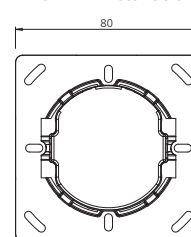
WER Dimensions



SelfContained electronics box

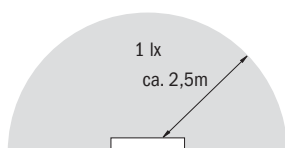


WER 029ML installation socket

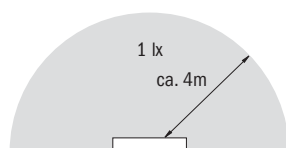


All dimensions in mm

WER Illumination



Mounting height 0,5m



Mounting height 2m



WAF

EMERGENCY ROUTE LIGHTING



FACTS

- Zinc die-cast, white, anthracite or stainless steel look
- IP20
- LED Illuminant
- wall mounting
- -10° to +40°C

LED emergency luminaire for surface wall mounting and for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and DIN EN 1838.

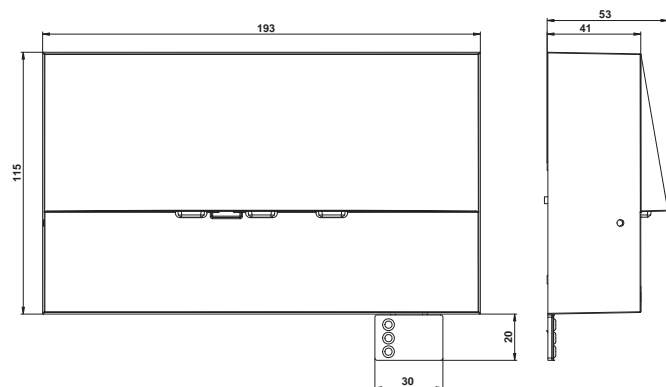
This luminaire is the perfect solution if a recessed mounting of a WEF or WER luminaire is not possible.

Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC	WAF021SC WAF021SC-AZ WAF021SC-E	1 h	5 W - 290 lm	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	WAF023SC WAF023SC-AZ WAF023SC-E	3 h	5 W - 290 lm	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	WAF028SC WAF028SC-AZ WAF028SC-E	8 h	5 W - 140 lm	4,8V/2,0Ah NiMH
Luminaires for central battery systems				
LED, 230V AC/DC	WAF029 WAF029-AZ WAF029-E	CBS	3,9 W - 420 lm	
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	WAF029ML WAF029ML-AZ WAF029ML-E	CBS	4,5 W - 420 lm	

Wall mounting

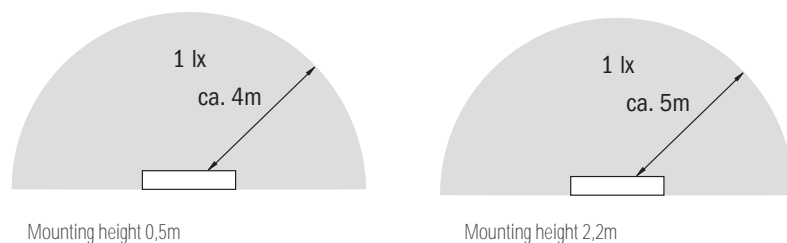


WAF Dimensions



All dimensions in mm

WAF Illumination





ZAW

EMERGENCY ROUTE LIGHTING



FACTS
















- Zinc die-cast housing, white or anthracite
- IP65
- LED Illuminant
- wall mounting
- Permissible temperatures:
ZAW 019ML: -25°C to +40°C *
- ZAW 013SC/018SC: -5° to +40°C
- ZAW 013SC/018SC-COOL:
-25°C to +40°C 10° to +40°C

Robust wall-mounted Zinc die-cast luminaire for the lighting of escape and rescue routes in exit areas according to DIN EN 60598-1, DIN EN 60598-2-22 and EN 1838. Appealing design with concealed screws.

Available for central power systems or as a LED self-contained emergency luminaire.








EMERGENCY ROUTE LIGHTING

						
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	ZAW011SC ZAW011SC-AZ	1 h		4,6 W - 170 lm	3,2V / 3,0 Ah LiFePO4	
LED, 3h, 230V AC	ZAW013SC ZAW013SC-AZ	3 h		4,6 W - 170 lm	3,2V / 0,57Ah LiFePO4	
LED, 8h, 230V AC	ZAW018SC ZAW018SC-AZ	8 h		4,6 W - 76 lm	3,2V / 3,0 Ah LiFePO4	
Self-Contained luminaires with Wireless Basic module						
LED, 3h, 230V AC	ZAW013WB * ZAW013WB-AZ *	3 h		5,3 W - 170 lm	3,2V / 3,0 Ah LiFePO4	
Self-Contained luminaires with Wireless Professional module (switchable)						
LED, 1h, 230V AC	ZAW011WL * ZAW011WL-AZ *	1 h			5,3 W - 170 lm	3,2V / 3,0 Ah LiFePO4
LED, 3h, 230V AC	ZAW013WL * ZAW013WL-AZ *	3 h	5,3 W - 170 lm		3,2V / 3,0 Ah LiFePO4	
LED, 8h, 230V AC	ZAW018WL * ZAW018WL-AZ *	8 h	5,3 W - 76 lm		3,2V / 3,0 Ah LiFePO4	
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	ZAW019ML ZAW019ML-AZ	CBS		3,2 W - 200 lm		

All versions also available as COOL-luminaires with external battery housing for mounting within the building. The luminaire may be mounted outside or in cool stores

Distance table ZAW011SC, ZAW013SC (-COOL) for plane emergency routes

Mounting height (m)					
2.00	2.18	4.38	7.96	6.51	0.00
2.50	2.35	4.70	8.76	6.88	0.00
3.00	2.45	4.91	9.44	7.13	0.00
3.50	2.49	4.99	8.52	7.40	0.00
4.00	2.45	4.91	7.70	7.48	0.00

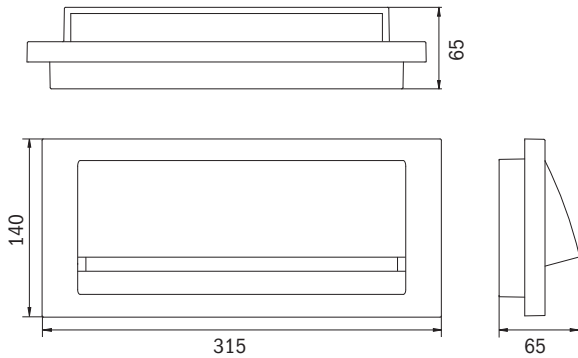
The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

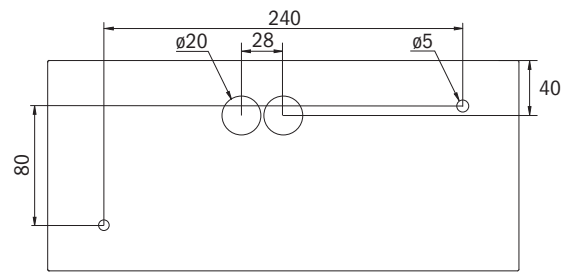


Wall mounting

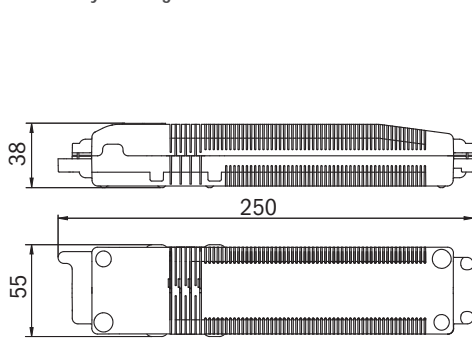
Dimensions ZAW



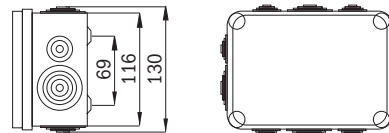
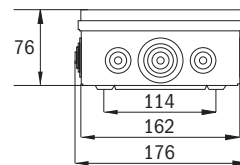
Drilling distances ZAW



External battery housing -COOL



IP20



IP54

All dimensions in mm

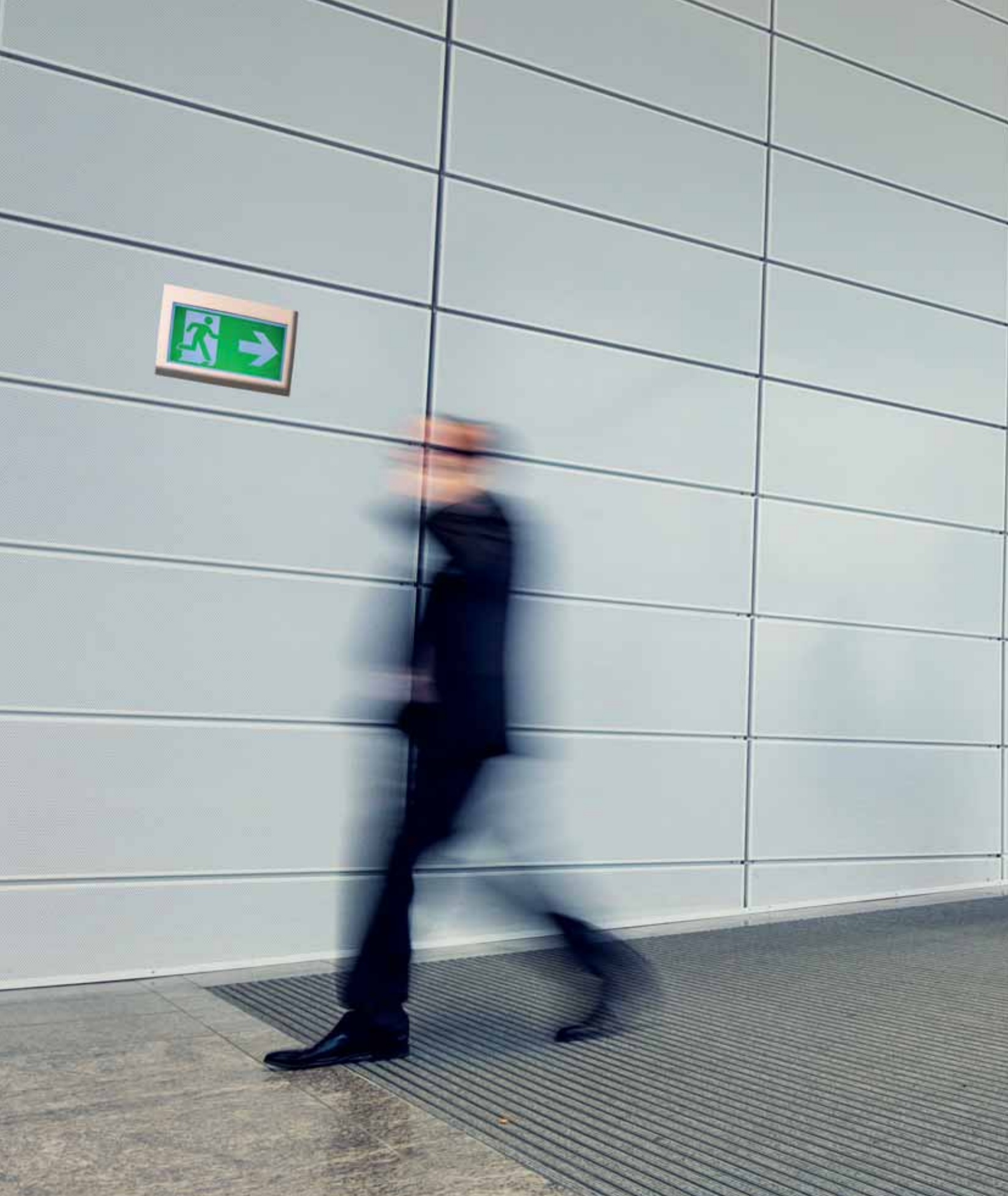
Distance table ZAW019ML for plane emergency routes

Mounting height (m)					
2.00	2.30	4.61	8.34	7.66	0.00
2.50	2.48	4.97	9.18	7.91	0.00
3.00	2.61	5.24	9.93	7.97	0.00
3.50	2.69	5.38	10.50	8.17	0.00
4.00	2.70	5.40	8.63	8.31	0.00

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

*) For luminaires with metal housing the wireless range may be reduced by 20%

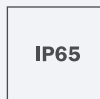


DYNAMIC LUMINAIRES





FLEXWAY
DYNAMIC EXIT SIGN



FACTS

- Zinc die-cast housing, white
- IP65
- LCD Display for flexible display of 10 different pictographs
- Wall mounting
- Potential free contact for control of the display



The Flexway exit sign is an emergency luminaire for wall mounting which is used to control rescue routes dynamically, so that hazards can be avoided. The pictographs shown can be changed by the control information of a sensor. The Flexway luminaire can present 10 different pictographs.

The luminaire is part of an emergency lighting system according to EN 50171 and meets the requirements of EN 60598-2-22. It is designed for connection to central battery systems.







Flexible display

The Flexway exit sign provides 10 display options. Two operating states are preselectable via rotary coding switches. The different operating states are activated by the dry contact of a smoke detector or fire alarm system. The Flexway features a power limited and monitored output voltage. It is selectable which pictograph appears on the electronics with applied voltage or missing voltage.



FLEXWAY

DYNAMIC EXIT SIGN

				
Luminaires for central battery systems AC/DC incl. monitoring module				
LCD, 230V AC/DC	FMWD009ML	FMWD009ML-AZ	CBS	5,4 W
				

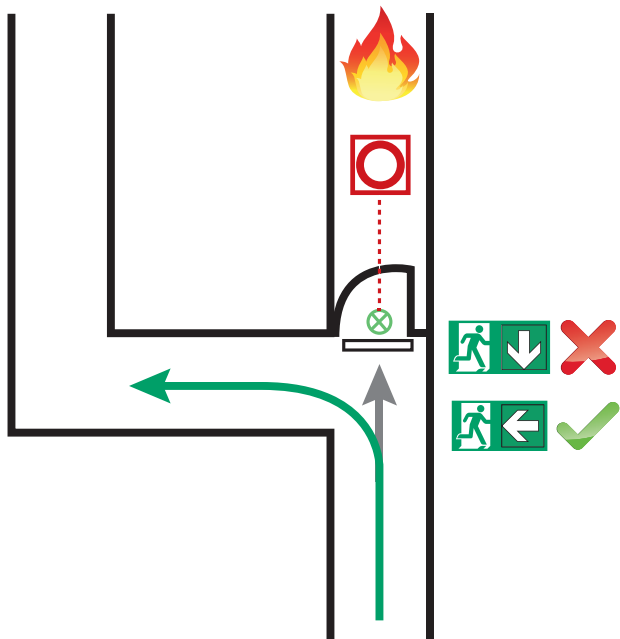
Technical specifications

Connecting voltage	230V AC/DC
Operating voltage LCD Panel	12V DC (7V ... 12V DC) SELV
Consumption	2,4W
perm. ambient temperature	-5°C - +40°C

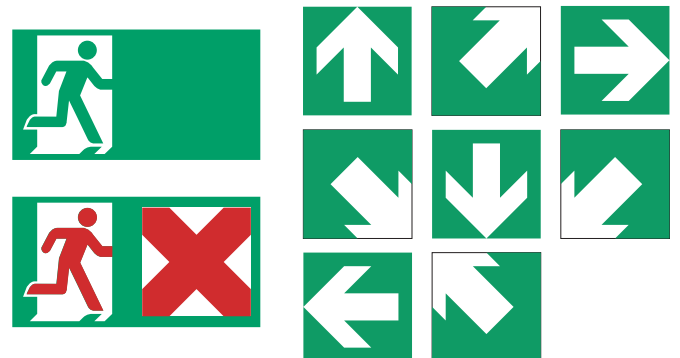
LCD	
Arrow directions	8
Blocking symbol	1
Others	non-maintained mode
Brightness in white	180cd/m2

Sensor Connection	
Output	3,3V DC 20mA
Input	3,3V DC
Connection cross-section	1,5mm ²

In case of an emergency



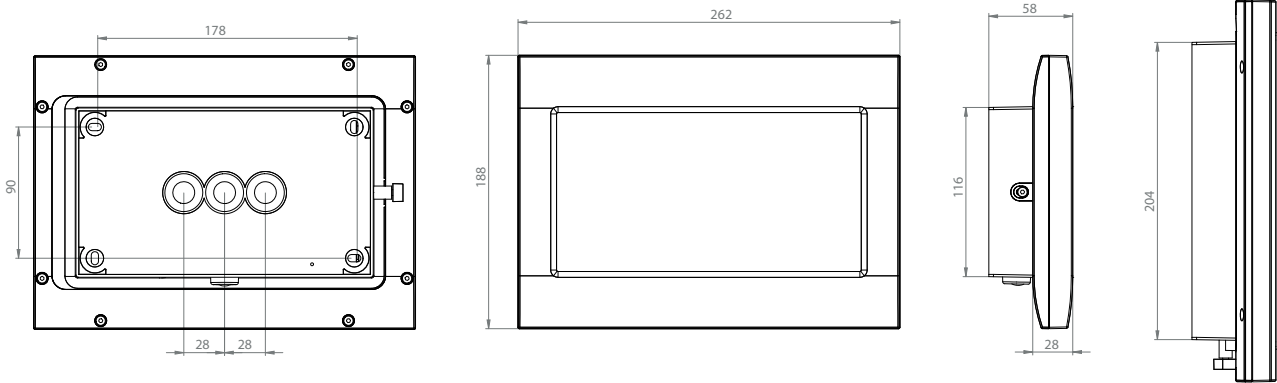
Displayable pictographs





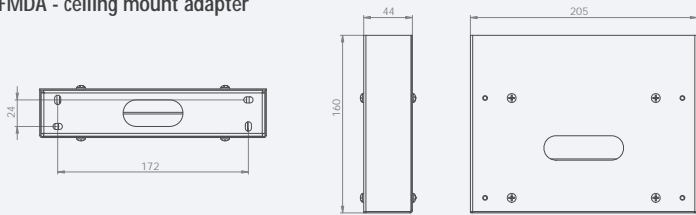
Wall mounting

Dimensions and drilling distances



Accessories

FMDA - ceiling mount adapter



- FMDA001 – single side mounting
- FMDA001-AZ – anthracite, single side mounting
- FMDA002 – double sided mounting
- FMDA002 – anthracite, double sided mounting

All dimensions in mm



UNIVERSAL LUMINAIRES





KM

UNIVERSAL PLASTIC LUMINAIRE

FACTS

- Plastic, white
- Complete set of pictographs (ISO 7010)
- IP43
- Universal mounting
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°C

Emergency sign luminaire in accordance to DIN EN 60598-1, DIN EN 60598-2-22 and DIN EN 1838.

Slim, elegant, convex, synthetic luminaire tilted towards the viewer, continuously symmetrically tapered towards the bottom. For universal mounting (wall/ceiling surface mount/integrated ceiling mount/brackets). For mounting convenience, the luminaire consists of only 3 parts.

Toolfree mountable on the quick assembly integrated ceiling mounting or wall mounting system. The luminaire has zero potential when dismantled.

Suitable for continuous mode or stand-by mode. Reliable planning due to a toolfree and variable, on-site use of the pictograms. Set of pictographs (left, right, down, up) is included in the scope of delivery.



AVAILABLE SOON:






















KMMU

The update of the popular KM plastic escape sign luminaire features a clear, closed hood for the new internal pictogram system.

- 24m viewing distance
- All electronic versions for KM:
 - Self-Contained
 - Self-Contained with SelfControl module
 - Self-Contained with Wireless Professional module
 - Central battery with monitoring module



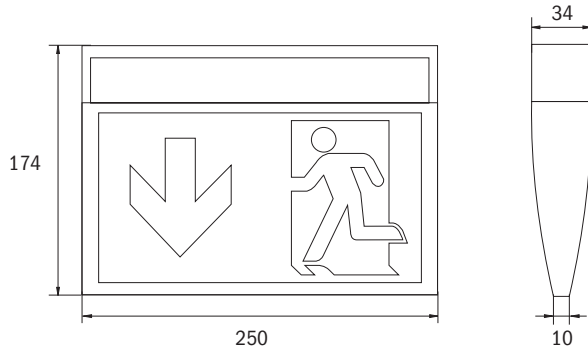
UNIVERSAL PLASTIC LUMINAIRE

	 universal				
Self-Contained luminaires					
LED, 3h, 230V AC	KMU003	3 h	3,1 W	4,8V / 0,5Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	KMU011SC	 1 h	4,6 W	3,2V / 0,57Ah LiFePO4	
LED, 3h, 230V AC	KMU003SC	3 h	3,1 W	4,8V / 0,5Ah NiMH	
LED, 3h, 230V AC	KMU013SC	 3 h	4,6 W	3,2V / 0,57Ah LiFePO4	
LED, 8h, 230V AC	KMU018SC	 8 h	4,6 W	3,2V / 3,0 Ah LiFePO4	
Self-Contained luminaires with Wireless Basic module					
LED, 3h, 230V AC	KMU013WB	 3 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
Self-Contained luminaires with Wireless Professional module (switchable)					
LED, 1h, 230V AC	KMU001WL	1 h	3,6 W	4,8V / 0,5Ah NiMH	
LED, 1h, 230V AC	KMU011WL	 1 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
LED, 3h, 230V AC	KMU013WL	 3 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
LED, 8h, 230V AC	KMU018WL	 8 h	5,3 W	3,2V / 3,0 Ah LiFePO4	
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	KMU019ML	CBS	3,2 W		

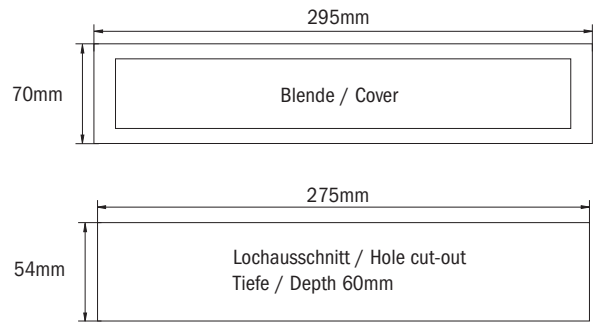


Universal mounting

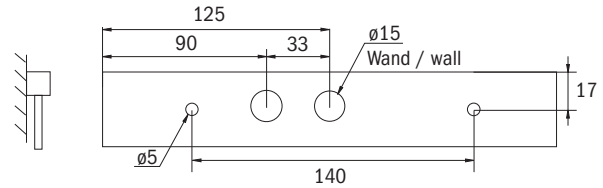
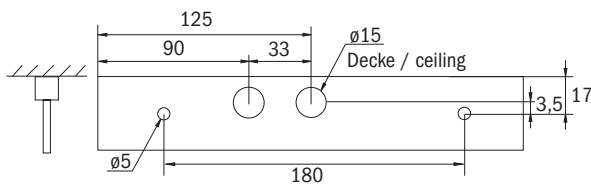
Dimensions KM



KME recessed mounting frame / cut-out

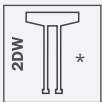
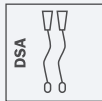
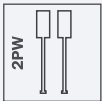


Drilling distances KM ceiling/wall



All dimensions in mm

Accessories

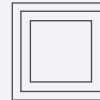
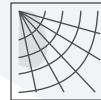


* (not for KMU013)



KSU

UNIVERSAL PLASTIC EDGE LUMINAIRE



FACTS

- Plastic, white
- Complete set of pictographs (ISO 7010)
- IP54
- Universal mounting
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Innovative plastic edge LED luminaire for universal mounting . This luminaire has a simple installation using only 3 parts.

Applicable for maintained or non-maintained operation mode. Improved reliability through easy to install universal use of pictograms. Universal pictogram set (left, right, up, down) included.

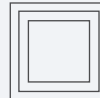
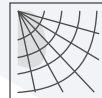
Exit sign according to EN 60598-1, EN 605982-22 and EN 1838 norms.





KSC

UNIVERSAL PLASTIC EDGE LUMINAIRE



FACTS

- Plastic, white
- Complete set of pictographs (ISO 7010)
- IP54
- Universal mounting
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Innovative high-grade LED exit sign and emergency luminaire for universal mounting. This luminaire has a simple installation using only 3 parts. Applicable for maintained or non-maintained operation mode. Improved reliability through easy to install and universal use of pictograms. Universal pictogram set (left, right, up, down) included.























The KSC luminaire is also designed for illumination of fire fighting and first aid facilities with at least 5 lux on the equipment according to EN 1838.

Signs according to EN 60598-1, EN 60598-2-22 and EN 1838 norms.























UNIVERSAL PLASTIC EDGE LUMINAIRE

KSU with white Cover

				
Self-Contained luminaires				
LED, 3h, 230V AC	KSU003	3 h	3,1 W	4,8V / 0,5Ah NiMH
Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC	KSU011SC	 1 h	4,6 W	3,2V / 0,57Ah LiFePO4 
LED, 3h, 230V AC	KSU003SC	3 h	3,1 W	4,8V / 0,5Ah NiMH 
LED, 3h, 230V AC	KSU013SC	 3 h	4,6 W	3,2V / 0,57Ah LiFePO4 
LED, 8h, 230V AC	KSU018SC	 8 h	4,6 W	3,2V / 3,0 Ah LiFePO4 
Self-Contained luminaires with Wireless Basic module				
LED, 3h, 230V AC	KSU013WB	 3 h	5,3 W	3,2V / 3,0 Ah LiFePO4 
Self-Contained luminaires with Wireless Professional module (switchable)				
LED, 1h, 230V AC	KSU001WL	1 h	3,6 W	4,8V / 0,5Ah NiMH 
LED, 1h, 230V AC	KSU011WL	 1 h	5,3 W	3,2V / 3,0 Ah LiFePO4 
LED, 3h, 230V AC	KSU013WL	 3 h	5,3 W	3,2V / 3,0 Ah LiFePO4 
LED, 8h, 230V AC	KSU018WL	 8 h	5,3 W	3,2V / 3,0 Ah LiFePO4 
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	KSU019ML	CBS	3,2 W	

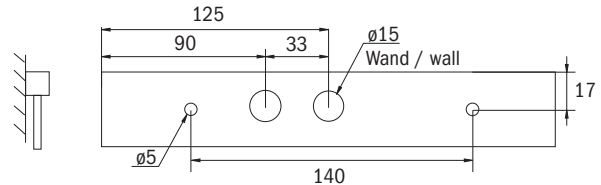
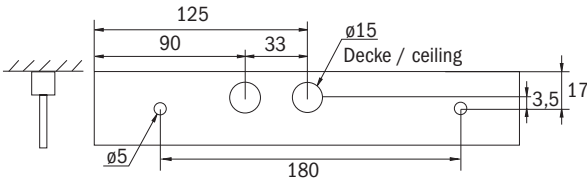
KSC with clear cover

				
Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC	KSC011SC	 1 h	4,6 W - 170 lm	3,2V / 3,0 Ah LiFePO4 
LED, 3h, 230V AC	KSC013SC	 3 h	4,6 W - 170 lm	3,2V / 0,57Ah LiFePO4 
LED, 8h, 230V AC	KSC018SC	 8 h	4,6 W - 76 lm	3,2V / 3,0 Ah LiFePO4 
Self-Contained luminaires with Wireless Basic module				
LED, 3h, 230V AC	KSC013WB	 3 h	5,3 W	3,2V / 3,0 Ah LiFePO4 
Self-Contained luminaires with Wireless Professional module (switchable)				
LED, 1h, 230V AC	KSC011WL	 1 h	5,3 W - 170 lm	3,2V / 3,0 Ah LiFePO4 
LED, 3h, 230V AC	KSC013WL	 3 h	5,3 W - 170 lm	3,2V / 3,0 Ah LiFePO4 
LED, 8h, 230V AC	KSC018WL	 8 h	5,3 W - 76 lm	3,2V / 3,0 Ah LiFePO4 
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	KSC019ML	CBS	3,2 W - 200 lm	

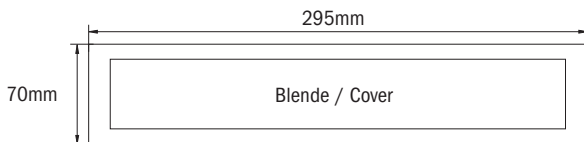


Universal mounting

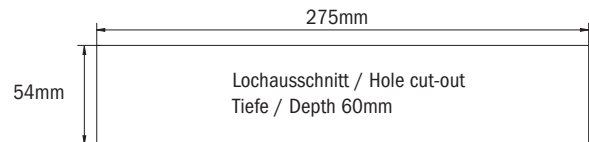
Drilling distances KSU/KSC ceiling / wall



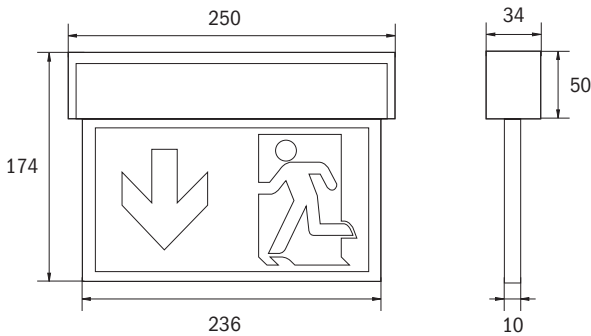
KME recessed frame



Hole cut-out KME recessed frame



Dimensions KSU/KSC

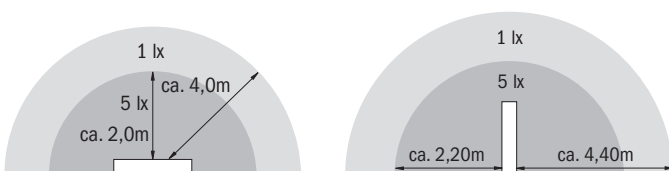


All dimensions in mm

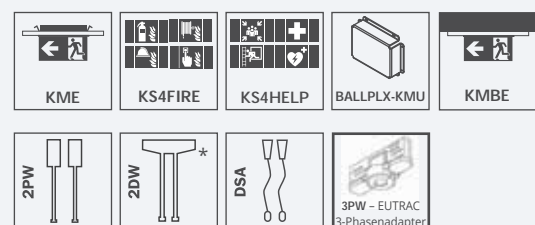
Distance table KSC013 for plane emergency routes

Mounting height (m)					
2.00	2.86	7.25	7.12	6.94	2.65
2.50	1.27	7.68	7.64	7.32	2.98
3.00	1.15	6.47	6.16	7.91	2.90
3.50	1.14	3.71	6.05	8.37	2.64
4.00	1.15	3.34	5.69	8.38	2.50

Illumination KSC013 – 1m above the ground,
Mounting height of the luminaire 2,20m



Accessories



* (not for KSU/KSC013)



KBU

MODULAR EMERGENCY AND EXIT SIGN LUMINAIRE

FACTS

- Plastic, white
- 14-30m viewing distance with optional pane sets
- Complete set of pictographs (ISO 7010)
- IP64
- Universal mounting
- Permissible Temperature:
 -5°C to +40°C;
 KBU019/KBU029/KBDUO029:
 -30°C to +40°C *
 KBU013-COOL: -30°C to +40°C

LED exit sign / emergency light according to DIN EN 60598-1, EN 60598-2-22, EN 7010 and DIN EN 1838. Cuboid plastic housing, discreetly reduced design on the lamps substance. Modular design and universal mounting for use as emergency luminaire with and without the application of pictograms.

The modular system allows the light to be converted at any time without dismantling and tools to a exit sign luminaire. Panes for mounting pictographs have to be ordered separately.

Advantages KB-DUO

Illumination of pictographs in normal operation with normal high power LED. In emergency operation the luminaire switches to the integrated ERT-LED for lighting escape routes as well as the pictograph. The use of special lenses and high performance ERT LED technology ensures a optimal light distribution in the escape and rescue route. This makes large luminaire distances possible.

You get planning safety by variable use and toolless change of pictographs.



*) The luminaires can be operated with individual luminaire monitoring in mixed mode circuits (1h-preheating time) and in maintained mode circuits or without individual luminaire monitoring in all circuit types.

MODULAR EMERGENCY AND EXIT SIGN LUMINAIRE

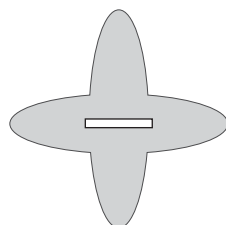
		 			
Self-Contained luminaires					
LED, 1h, 230V AC	KBU011		1 h	6,1 W	4,8V/2,0Ah NiMH
LED, 1h, 230V AC	KBU021		1 h	6 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	KBU013	KBU013-COOLIP54 *	3 h	6,1 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	KBU023		3 h	6 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	KBU018	KBU018-COOLIP54 *	8 h	6,7 W	9,6V/2,0Ah NiMH
Self-Contained luminaires with SelfControl module					
LED, 3h, 230V AC	KBU013SC	KBU013SC-COOLIP54 *	3 h	6,1 W	4,8V/2,0Ah NiMH 
LED, 3h, 230V AC	KBU023SC		3 h	6 W	4,8V/2,0Ah NiMH 
LED, 3h, 230V AC	KBU011SC	KBU011SC-COOLIP54 *	1 h	6,1 W	4,8V/2,0Ah NiMH 
LED, 3h, 230V AC	KBU021SC	KBU021SC-COOLIP54 *	1 h	6 W	4,8V/2,0Ah NiMH 
LED, 8h, 230V AC	KBU018SC	KBU018SC-COOLIP54 *	8 h	6,7 W	9,6V/2,0Ah NiMH 
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 3h, 230V AC	KBU011WL	KBU011WL-COOLIP54 *	3 h	7,5 W	12V/0,8Ah NiMH 
LED, 8h, 230V AC	KBU018WL	KBU018WL-COOLIP54 *	8 h	7,5 W	12V/0,8Ah NiMH 
Luminaires for central battery systems					
LED, 230V AC/DC	KBU019		CBS	4,5 W	
LED, 230V AC/DC	KBU029		CBS	4,6 W	
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	KBU019ML		CBS	5,2 W	
LED, 230V AC/DC	KBU029ML		CBS	5,2 W	
LED, 230V AC/DC	KBDO029ML		CBS	5,9 W	

*) All versions also available as COOL-luminaires with external battery housing in IP 54 for mounting within the building. The luminaire may be mounted outside or in cool stores.

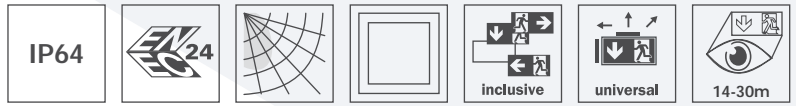
Comparison of light distribution KBU / KB-DUO



KBU 029



KB-DUO



Distance table KBDUO 029ML in Deckenmontage for plane emergency routes

Mounting height (m)					
2.00	6.97	16.50	14.69	8.24	3.33
2.50	8.18	18.99	16.85	9.00	3.57
3.00	9.23	21.29	18.76	9.68	3.70
3.50	9.62	23.41	20.49	10.26	3.75
4.00	10.42	25.35	22.07	10.50	3.73

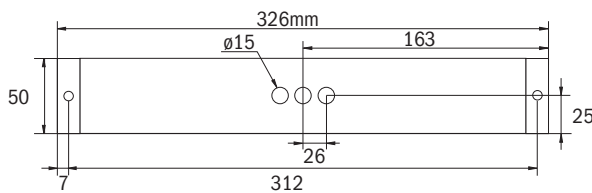
The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

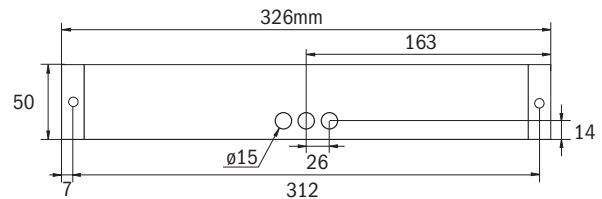
Universal mounting



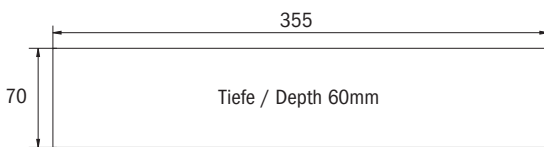
Dimensions KBU ceiling mounting



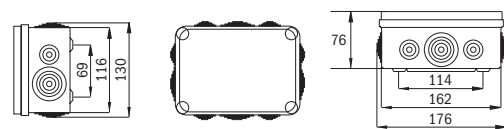
Dimensions KBU wall mounting



Lochausschnitt für KB recessed frame

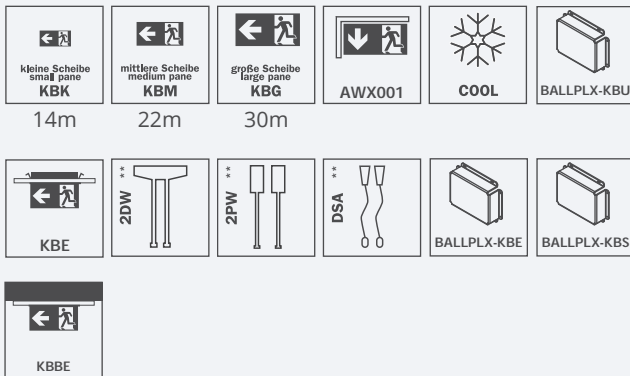


External battery housing -COOLIP54



All dimensions in mm

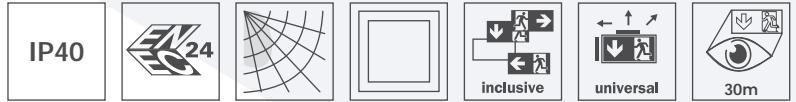
Accessories





KX

PLASTIC EDGE LUMINAIRE



FACTS

- Plastic, white
- 30m Viewing distance
- Complete set of pictographs (ISO 7010)
- IP40
- Universal mounting
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Innovative plastic edge luminaire for universal mounting wall/ceiling/recessed ceiling. Tapered design housing for appealing area perception. Applicable for maintained or nonmaintained operation mode.

Improved reliability through easy to install universal use of pictograms. Universal insertion pictogram set (left, right, down, up) included. Signs according to EN 60598-1, EN 60598-2-22 and EN 1838 norms.

- Also available as combined safety light/rescue sign with ERT-LED and clear cover
- Simple pictogram mounting (one and double-sided), plugging-technique



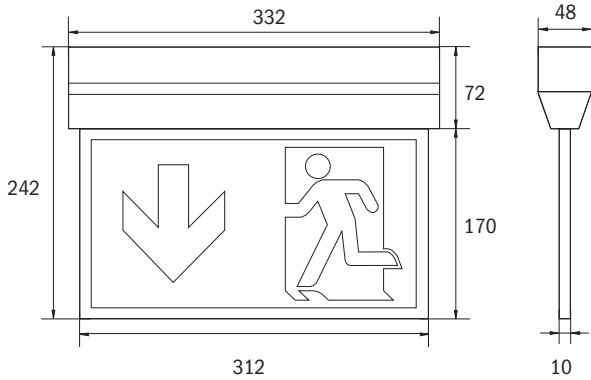
PLASTIC EDGE LUMINAIRE

					
Self-Contained luminaires					
LED, 1h, 230V AC	KXU021 - with clear cover	1 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KXU011 - with clear cover	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KXU003 - with white cover	3 h	3,0 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KXU013 - with clear cover	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KXU023 - with clear cover	3 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	KXU018 - with clear cover	8 h	6,7 W - 120 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KXU008 - with white cover	8 h	4,2 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	KXU021SC - with clear cover	1 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KXU011SC - with clear cover	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KXU001SC - with white cover	1 h	3,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KXU003SC - with white cover	3 h	3,0 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KXU013SC - with clear cover	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KXU023SC - with clear cover	3 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	KXU018SC - with clear cover	8 h	6,7 W - 120 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KXU008SC - with white cover	8 h	4,2 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module					
LED, 1h, 230V AC	KXU011WL - with clear cover	1 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 3h, 230V AC	KXU001WL - with white cover	1 h	5,3 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KXU013WL - with clear cover	3 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 8h, 230V AC	KXU018WL - with white cover	8 h	7,5 W	12V/0,8Ah NiMH	
Luminaires for central battery systems					
LED, 230V AC/DC	KXU009 - with white cover	CBS	0,9 W		
LED, 230V AC/DC	KXU029 - with clear cover	CBS	4,6 W - 520 lm		
LED, 230V AC/DC	KXU019 - with clear cover	CBS	4,5 W - 340 lm		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	KXU029ML - with clear cover	CBS	5,2 W - 520 lm		
LED, 230V AC/DC	KXU019ML - with clear cover	CBS	5,2 W - 340 lm		

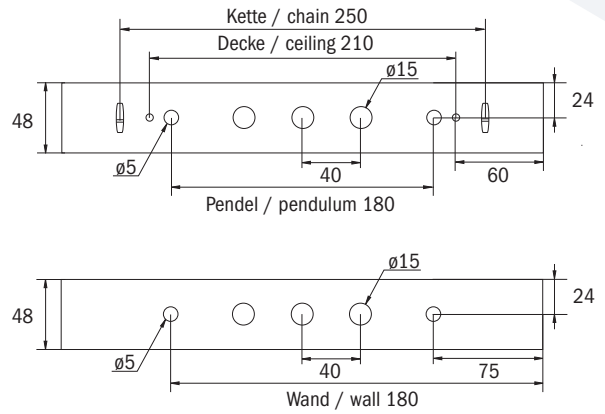


Universal mounting

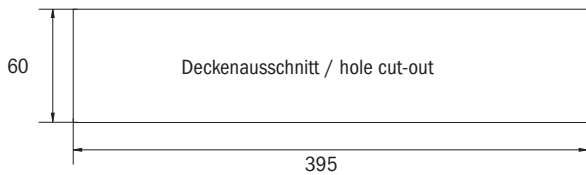
Dimensions KXU



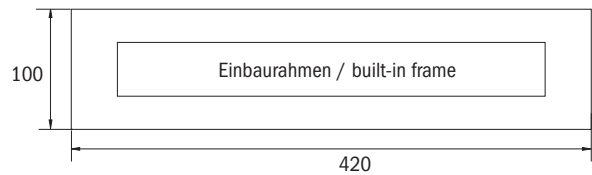
Drilling distances KXU



Cut-out KXE recessed frame

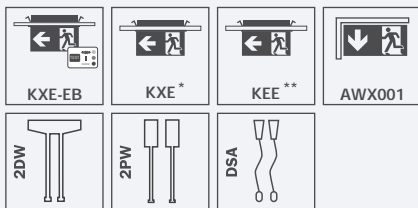


Dimensions KXE recessed frame



All dimensions in mm

Accessories



* KXE: for emergency sign luminaires

** KEE: for combination emergency sign luminaires & rescue sign luminaire

Distance table KXU029 mit klarer Haube for plane emergency routes

Mounting height (m)					
2.00	8.02	19.70	16.50	5.35	2.00
2.50	8.72	21.94	18.24	5.64	1.95
3.00	9.23	23.93	19.32	5.75	1.87
3.50	9.62	25.62	20.24	5.70	1.63
4.00	9.90	26.71	20.65	5.51	1.30

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m



IL

EMERGENCY ROUTE LIGHTING

FACTS

- Plastic, white
- Ceiling or recessed mounting
- -5°C to +40°C;
- For ILDx029:
-20° to +30° C in IL-IP65 housing
- ILD: IP40; ILE: IP20
- For self-contained luminaires test switch is integrated in LED
- As luminaire for central battery systems with dimming function for reduced blinding effect

The discreet designed LED emergency luminaire IL is a true all-rounder. Whether as self-contained emergency light or for connection to central battery systems: it is ready for almost all requirements and provides always the right solution. As many as four different lenses for different light distribution are available and make a perfect adaptation to the respective mounting situation possible. All versions of the IL are available for surface mounting and as recessed mounted luminaire.

The IL surface mounted luminaire consists of 2 parts, the ceiling mounted bar includes the power supply terminals. The actual luminaire is mounted without tools and is at disassembly mains voltage free.

The status LED within the lens does not disturb the homogenous look of the luminaire.

ILDR / ILER

Radiate beam for escape routes with ceiling heights up to 4m.

ILDF / ILEF

Focused lens in two main directions for luminaire distances of up to 24m at ceiling heights of up to 4m.

ILDH / ILEH

Special lens with focused light in two main directions. For luminaire distances of over 30m at ceiling heights of up to 16m.

ILDS / ILES

The spot lens ensures an even distribution of light in all directions, even with ceiling heights over 4m.



EMERGENCY ROUTE LIGHTING

Self-Contained luminaires with SelfControl module						
Corridor lighting	ILDF021SC	ILEF021SC	1 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	ILDR021SC	ILER021SC	1 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	ILDS021SC	ILES021SC	1 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	ILDF023SC	ILEF023SC	3 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	ILDR023SC	ILER023SC	3 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	ILDS023SC	ILES023SC	3 h	3,7 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	ILDS028SC	ILES028SC	8 h	3,7 W - 110 lm	4,8V/2,0Ah NiMH	
Corridor lighting	ILDF028SC	ILEF028SC	8 h	3,7 W - 110 lm	4,8V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Basic module						
Circular beam	ILDR023WB	ILER023WB	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	ILDF023WB	ILEF023WB	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	ILDS023WB	ILES023WB	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (switchable)						
Circular beam	ILDR021WL	ILER021WL	1 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	ILDF021WL	ILEF021WL	1 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	ILDS021WL	ILES021WL	1 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Circular beam	ILDR023WL	ILER023WL	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Corridor lighting	ILDF023WL	ILEF023WL	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	ILDS023WL	ILES023WL	3 h	4 W - 240 lm	4,8V/2,0Ah NiMH	
Spot	ILDS028WL	ILES028WL	8 h	4 W - 110 lm	4,8V/2,0Ah NiMH	
Corridor lighting	ILDF028WL	ILEF028WL	8 h	4 W - 110 lm	4,8V/2,0Ah NiMH	
Luminaires for central battery systems AC/DC incl. monitoring module						
Circular beam	ILDR029ML	ILER029ML	CBS	4,6 W - 360 lm		
Corridor lighting	ILDF029ML	ILEF029ML	CBS	4,6 W - 360 lm		
Für hohe Decken	ILDH029ML	ILEH029ML	CBS	4,6 W - 360 lm		
Spot	ILDS029ML	ILES029ML	CBS	4,6 W - 360 lm		

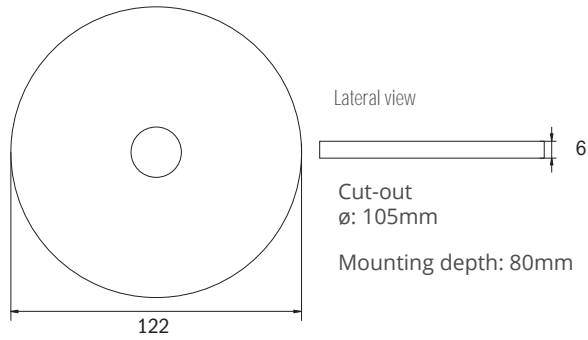
The emergency luminaire IL(E/D)H is available only for connection to central battery systems. Thanks to the special design of the lens the light of the ERT-LED is very concentrated in the predetermined

direction and thus allows at mounting heights of more than 8m luminaire distances of more than 30m in corridors.

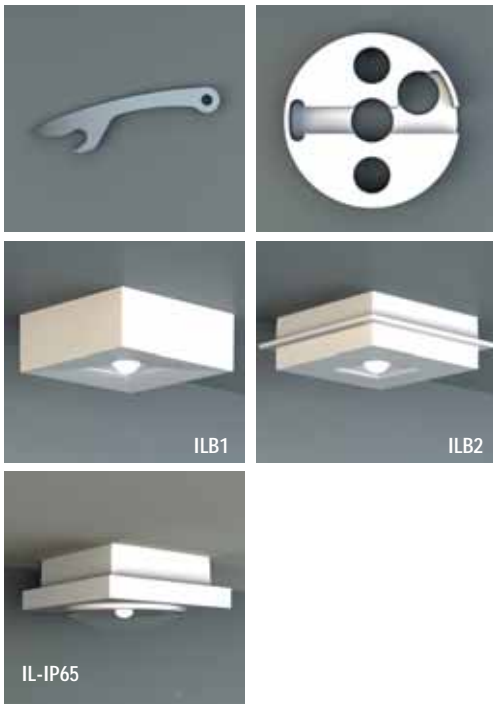
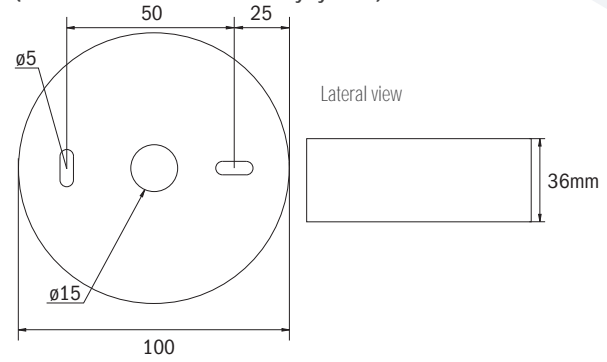
Ceiling mounting / recessed ceiling mounting



Dimensions and cut-out ILE (self-contained and central battery systems)



Dimensions and drilling distances
(self-contained and central battery systems)



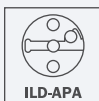
IL-IP65
Surface mounted housing for
all ILD luminaires featuring
IK 10 impact protection.



Accessories



IL-OEF: For easy opening of ILEx an optional opener is available.



IL-APA: Adapter plate for lateral cable feed to ILD-luminaires



IL-IP65: IP65 housing for IL ceiling luminaire (white or anthrazite, chlorine resistant)



ILB1/ILB2: Square covers



BALLPLX-ILD: Acrylic glass ball protection for ILD luminaires



BALLPLX-ILE: Acrylic glass ball protection for ILE luminaires



3PW - EUTRAC
3-Phasenadapter

EMERGENCY ROUTE LIGHTING






Distance table ILDF029ML / ILEF029ML for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	2.30	6.11	12.65	19.27	8.02
2.50	2.41	6.45	14.12	22.07	9.33
3.00	2.43	6.73	15.42	24.50	9.81
3.50	2.36	6.92	16.29	26.71	10.16
4.00	2.31	7.01	16.52	28.14	9.42






Distance table ILDS029ML / ILES029ML for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	2.30	5.44	5.43	5.43	2.30
2.50	2.88	6.80	6.78	6.79	2.88
3.00	3.11	7.75	7.73	7.71	3.11
3.50	3.38	8.26	8.24	8.21	3.26
4.00	3.60	8.80	8.76	8.72	3.48
5.00	3.90	9.70	9.64	9.60	3.90
6.00	4.20	10.50	10.44	10.36	4.04
7.00	4.38	11.22	11.14	11.04	4.20
8.00	4.44	11.82	11.70	11.56	4.26
9.00	4.38	12.27	12.15	12.00	4.38
10.50	4.23	12.81	12.63	12.42	4.02
12.00	3.66	12.99	12.78	12.57	3.66

Distance table ILDH029ML / ILEH029ML for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	0.39	1.16	5.55	10.06	4.29
2.50	0.49	1.45	6.93	12.58	5.36
3.00	0.58	1.74	8.32	15.10	6.43
3.50	0.68	2.03	9.70	17.61	7.51
4.00	0.78	2.32	11.09	20.13	8.58
5.00	0.80	2.18	12.24	22.88	9.40
6.00	0.84	2.24	12.96	25.08	9.98
7.00	0.98	2.40	13.66	26.82	10.78
8.00	0.98	2.60	14.16	28.46	11.02
9.00	1.11	2.76	14.55	29.88	11.52
10.50	1.11	2.85	15.03	31.53	12.09
12.00	1.26	3.09	15.54	32.73	12.42

Distance table ILDR029 im IL-IP65 Cabinet for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	4.71	10.79	10.79	10.78	4.71
2.50	5.36	12.49	12.49	12.50	5.36
3.00	5.20	13.98	14.00	14.02	5.20
3.50	3.89	14.53	14.51	14.78	4.03
4.00	2.60	13.78	13.78	13.88	2.60

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

EMERGENCY ROUTE LIGHTING

Distance table ILDF023SC / ILEF023SC for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	2.00	5.41	11.52	17.71	7.46
2.50	2.02	5.63	12.79	20.20	8.18
3.00	1.95	5.75	13.64	22.37	8.24
3.50	1.78	5.77	13.64	23.58	7.51
4.00	1.54	5.65	13.05	24.00	6.66






Distance table ILDS023SC(WL) / ILES023SC(WL) for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	1.74	4.10	4.10	4.10	1.74
2.50	1.95	4.61	4.61	4.61	1.95
3.00	2.18	5.09	5.09	5.09	2.18
3.50	2.36	5.57	5.57	5.57	2.36
4.00	2.50	6.01	6.01	6.01	2.50
5.00	2.78	6.82	6.82	6.82	2.78
6.00	2.80	7.48	7.48	7.48	2.80
7.00	2.68	7.94	7.94	7.94	2.68
8.00	2.44	8.18	8.18	8.18	2.44
9.00	1.74	8.16	8.16	8.16	1.74






Distance table ILDR023SC / ILER023SC for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	4.29	10.10	10.10	10.10	4.29
2.50	4.33	11.66	11.66	11.66	4.33
3.00	2.52	12.55	12.55	12.55	2.52
3.50	0.12	10.19	10.19	10.19	0.12
4.00	0.00	8.97	8.97	8.97	0.0

Distance table ILDF028SC(WL) / ILEF028SC(WL) for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	1.30	3.89	9.20	15.02	5.49
2.50	1.11	3.88	9.03	16.15	4.91
3.00	0.86	3.71	8.25	15.93	3.22
3.50	0.00	3.32	6.31	14.34	0.00
4.00	0.00	2.80	5.22	11.53	0.00

Distance table ILDS028SC(WL) / ILES028SC(WL) for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	1.93	4.76	4.76	4.76	1.93
2.50	2.17	5.31	5.31	5.31	2.17
3.00	2.34	5.80	5.80	5.80	2.34
3.50	2.54	6.24	6.24	6.24	2.54
4.00	2.60	6.62	6.62	6.62	2.60
5.00	2.66	7.26	7.26	7.26	2.66
6.00	2.68	7.66	7.66	7.66	2.66
7.00	2.42	7.82	7.82	7.82	2.42
8.00	2.00	7.74	7.74	7.74	2.00
9.00	1.44	7.38	7.38	7.38	7.38
10.50		6.39	6.39	6.39	

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m



KMB

EMERGENCY ROUTE LIGHTING

FACTS





















- Plastic, white
- Universal mounting
- IP54
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

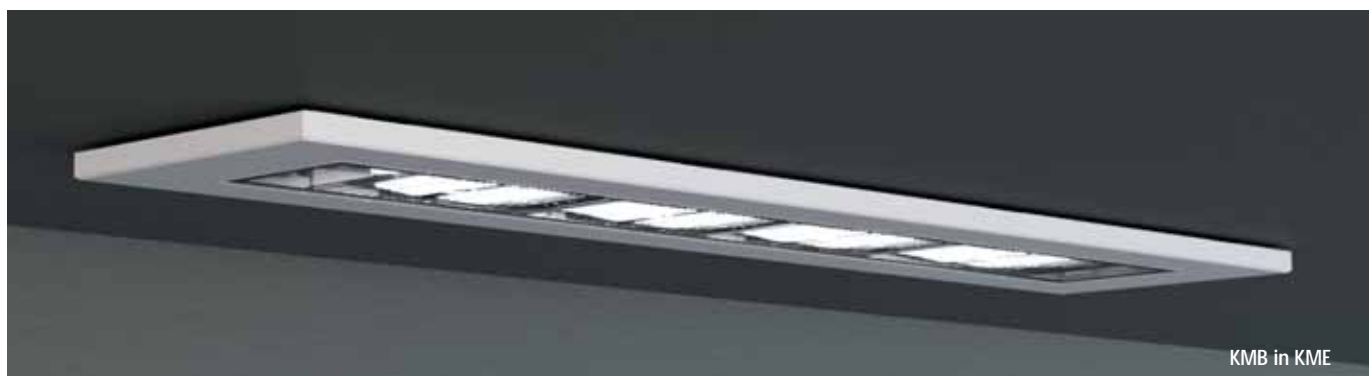
Compact emergency luminaire for illumination of escape routes with prismatic cover for optimized light distribution. Available as luminaire for central battery systems or as a selfcontained luminaire.

The optional recessed mounting frame hides the luminaire elegantly within the ceiling.



EMERGENCY ROUTE LIGHTING

	 universal					
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	KMB011SC	 5 GARANTIE WARRANTY	1 h	4,6 W - 170 lm	3,2V / 3,0 Ah LiFePO4	 SC
LED, 3h, 230V AC	KMB013SC	 5 GARANTIE WARRANTY	3 h	4,6 W - 170 lm	3,2V / 0,57Ah LiFePO4	 SC
LED, 8h, 230V AC	KMB018SC	 5 GARANTIE WARRANTY	8 h	4,6 W - 76 lm	3,2V / 3,0 Ah LiFePO4	 SC
Self-Contained luminaires with Wireless Basic module						
LED, 3h, 230V AC	KMB013WB	 5 GARANTIE WARRANTY	3 h	5,3 W - 170 lm	3,2V / 3,0 Ah LiFePO4	 WB
Self-Contained luminaires with Wireless Professional module (switchable)						
LED, 1h, 230V AC	KMB011WL	 5 GARANTIE WARRANTY	1 h	5,3 W - 170 lm	3,2V / 3,0 Ah LiFePO4	 WL
LED, 3h, 230V AC	KMB013WL	 5 GARANTIE WARRANTY	3 h	5,3 W - 170 lm	3,2V / 3,0 Ah LiFePO4	 WL
LED, 8h, 230V AC	KMB018WL	 5 GARANTIE WARRANTY	8 h	5,3 W - 76 lm	3,2V / 3,0 Ah LiFePO4	 WL
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	KMB019ML		CBS	3,2 W - 200 lm		 ML



Distance table KMB019ML for plane emergency routes

Mounting height (m)					
2.00	1.74	4.59	7.81	11.12	4.71
2.50	1.62	4.97	8.71	12.56	5.13
3.00	1.66	4.96	9.40	13.82	5.64
3.50	1.63	4.75	9.79	14.95	6.06
4.00	1.62	4.85	10.32	15.98	6.40

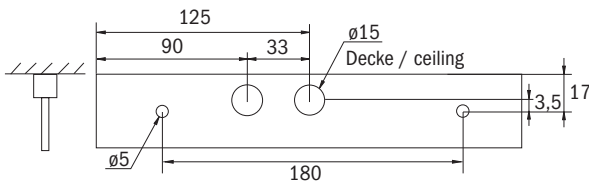
The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

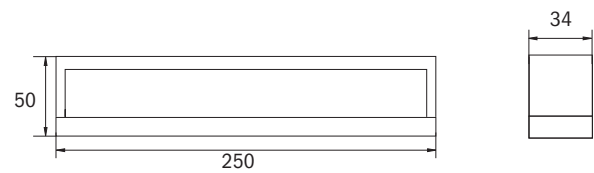
Universal mounting



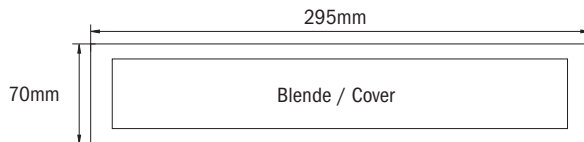
Drilling distances KMB ceiling/wall



Dimensions KMB



Dimensions KME recessed frame



Cut-out KME recessed frame

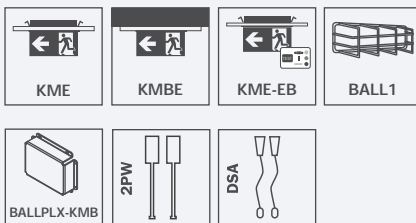


All dimensions in mm

KME recessed frame



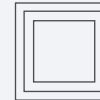
Accessories





KE

EMERGENCY ROUTE LIGHTING



FACTS
















- Plastic, white
- Universal mounting
- IP40
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Compact plastic luminaire with ERT-LED for universal mounting for the lighting of escape and rescue routes according to DIN EN 605981, DIN EN 60598-2-22 and EN 1838.

Available for central power systems or as a self-contained luminaire. Also available as ERT luminaire with improved illumination.



EMERGENCY ROUTE LIGHTING

	 universal				
Self-Contained luminaires					
LED, 1h, 230V AC	KEU021	1 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KEU011	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KEU013	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KEU023	3 h	7,1 W - 520 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KEU028	8 h	7,1 W - 200 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	KEU011SC	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KEU021SC	1 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KEU013SC	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KEU023SC	3 h	7,1 W - 520 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KEU018SC	8 h	7,1 W - 200 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 1h, 230V AC	KEU011WL	1 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 3h, 230V AC	KEU013WL	3 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 8h, 230V AC	KEU018WL	8 h	7,5 W - 60 lm	12V/0,8Ah NiMH	
Luminaires for central battery systems					
LED, 230V AC/DC	KEU019	CBS	4,5 W - 340 lm		
LED, 230V AC/DC	KEU029	CBS	4,6 W - 520 lm		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	KEU019ML	CBS	5,2 W - 340 lm		
LED, 230V AC/DC	KEU029ML	CBS	5,2 W - 520 lm		

Distance table KEU029 for plane emergency routes

Mounting height (m)					
2.00	8.02	20.31	17.19	7.16	2.86
2.50	9.33	22.81	19.10	7.86	3.09
3.00	9.81	24.91	20.52	8.38	3.22
3.50	10.16	26.78	21.59	8.79	3.26
4.00	10.42	28.26	22.14	9.09	3.36

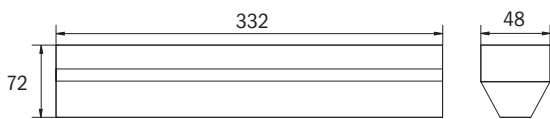
The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

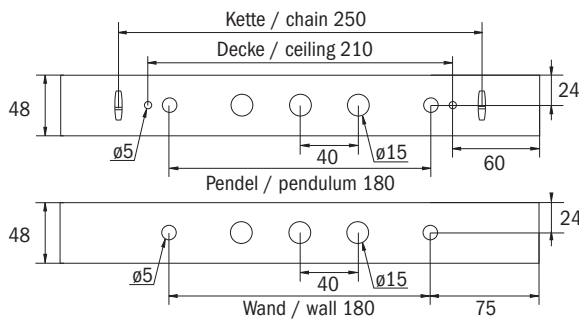
Universal mounting



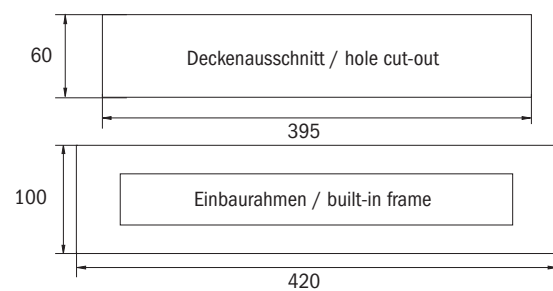
Dimensions KE wall/ceiling



Drilling distances KE wall/ceiling

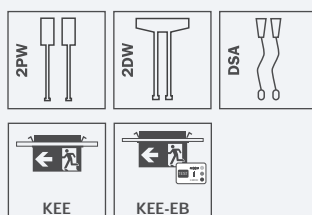


Cut-out KE recessed frame



All dimensions in mm

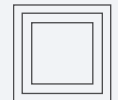
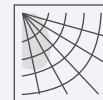
Accessories





DO

EMERGENCY ROUTE LIGHTING



FACTS

- Plastic, transparent
- Optional for application in third party luminaires
- IP20
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C











Compact Emergency lighting unit with oval lighting ERT-LED luminaire for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and EN 1838. For recessed mounting or snap-on mounting on T5/T8 illuminants and metal objects.

Transparent body material makes the luminaire a perfect match in any setting. Available with electronics box or as bulk version for application in existing luminaire cases. Dowel and clips included.



DO incl. electronics box

EMERGENCY ROUTE LIGHTING

	bulk, for mounting in existing luminaires	incl. housing				
Self-Contained luminaires						
LED, 1h, 230V AC	DOS021	DOE021	1 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	DOS023	DOE023	3 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	DOS028	DOE028	8 h	4,4 W - 91 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	DOS021SC	DOE021SC	1 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	DOS023SC	DOE023SC	3 h	3 W - 140 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	DOS028SC	DOE028SC	8 h	4,4 W - 91 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (switchable)						
LED, 1h, 230V AC	DOS021WL	DOE021WL	1 h	5,6 W - 100 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	DOS023WL	DOE023WL	3 h	5,6 W - 100 lm	4,8V/2,0Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	DOS029	DOE029	CBS	1,9 W - 140 lm		
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	DOS029ML	DOE029ML	CBS	2,8 W - 140 lm		

Distance table DO 023 / DO 029 ERT-LED for plane emergency routes

Mounting height (m)					
2.00	1.51	3.74	7.22	10.83	4.71
2.50	1.62	4.16	8.30	12.62	5.36
3.00	1.73	4.49	9.14	14.14	5.64
3.50	1.71	4.74	9.65	15.34	5.60
4.00	1.54	4.89	9.32	16.14	4.44

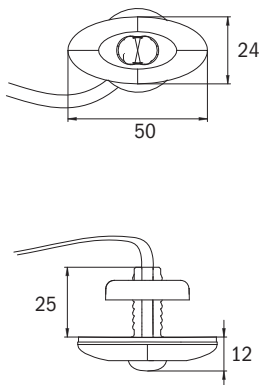
The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m



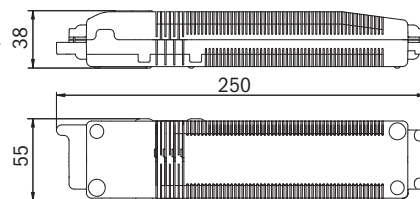
Ceiling mounting

Dimensions DOE023 / 029

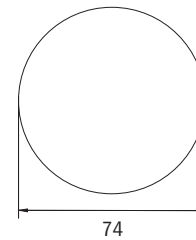


All dimensions in mm

Electronics box



Cut-out Electronics Box



Cut-out DO



For concrete installation, we recommend the recessed boxes HaloX-0 + HaloX-40 from Kaiser.



INDUSTRIAL LUMINAIRES





KC

PLASTIC LUMINAIRE

FACTS

- Plastic, white
- 30m Viewing distance
- Complete set of pictographs (ISO 7010)
- KCW: IP54, optional IP64
- KCD: IP40
- Wall or ceiling mounting
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Convex exit sign made of plastic for wall or ceiling mounting. Sign with pluggable, solvent free, internally mounted pictograph. Pictogram set included. This luminaire can be used without pictogram as an emergency lighting luminaire with a clear cover.

Escape route/Exit sign/ emergency luminaire according to EN 60598-1, EN 60598-2-22 and EN 1838 norms.



KCW



KCW



Self-Contained luminaires						
LED, 1h, 230V AC	KCW011	KCW011-COOLIP54 *	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCW013	KCW013-COOLIP54 *	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCW023	KCW023-COOLIP54 *	3 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	KCW018	KCW018-COOLIP54 *	8 h	6,7 W - 120 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	KCW021SC	KCW021SC-COOLIP54 *	1 h	6 W - 520 lm	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KCW011SC	KCW011SC-COOLIP54 *	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCW013SC	KCW013SC-COOLIP54 *	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCW023SC	KCW023SC-COOLIP54 *	3 h	7,1 W - 520 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KCW018SC	KCW018SC-COOLIP54 *	8 h	6,7 W - 120 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KCW028SC		8 h	7,1 W - 200 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (not switchable)						
LED, 1h, 230V AC	KCW011WL	KCW011WL-COOLIP54 *	1 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 3h, 230V AC	KCW013WL	KCW013WL-COOLIP54 *	3 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 8h, 230V AC	KCW018WL	KCW018WL-COOLIP54 *	8 h	7,5 W - 60 lm	12V/0,8Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	KCW019		CBS	4,5 W - 340 lm		
LED, 230V AC/DC	KCW029		CBS	4,6 W - 520 lm		
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	KCW029ML		CBS	5,2 W - 520 lm		
LED, 230V AC/DC	KCW019ML		CBS	5,2 W - 340 lm		

*) All versions also available as COOL-luminaires with external battery housing in IP20 for mounting within the building. The luminaire may be mounted outside or in cool stores.

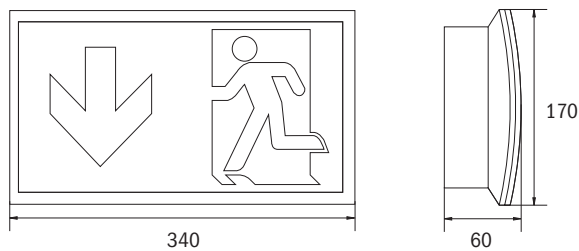
***) Optional -EHE: with electronic heating element for use of the luminaire at temperatures low to - 15°C



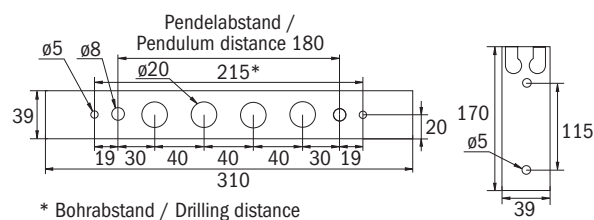
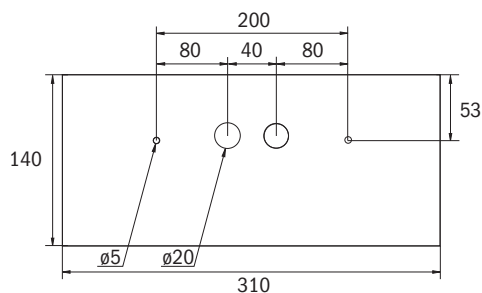
(SE) Luminaires are switchable by radio with the optional switching extension with the Wireless Professional system.

KCW wall or ceiling mounting

Dimensions KC wall

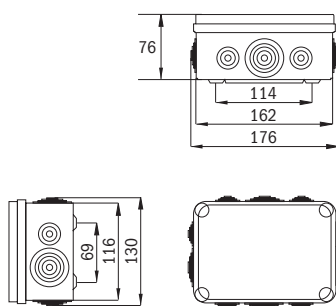


Drilling distances KC



* Bohrabstand / Drilling distance

External electronics housing -COOL (IP54)



IP54

All dimensions in mm















Distance table KCW029 for plane emergency routes

Mounting height (m)					
2.00	7.46	16.44	15.49	8.50	3.33
2.50	8.72	19.75	18.20	9.18	3.44
3.00	9.81	22.80	20.34	9.57	3.45
3.50	10.77	25.37	22.28	9.86	3.50
4.00	10.99	27.55	22.99	9.84	3.48

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue

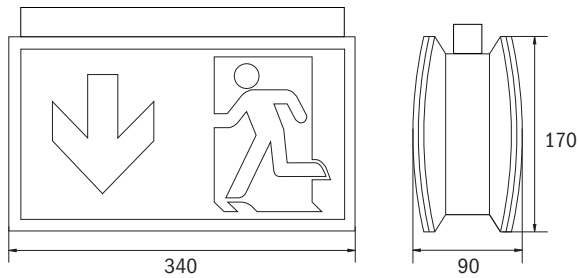
route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

KCD

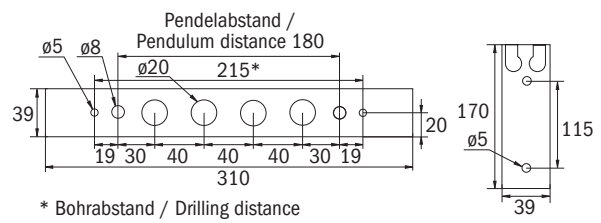
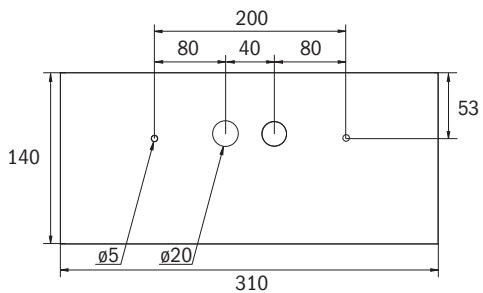
					
Self-Contained luminaires					
LED, 1h, 230V AC	KCD011	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCD013	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCD023	3 h	7,1 W - 520 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KCD018	8 h	6,7 W - 120 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	KCD011SC	1 h	6,1 W - 300 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCD013SC	3 h	6,1 W - 150 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KCD023SC	3 h	7,1 W - 520 lm	9,6V/2,0Ah NiMH	
LED, 8h, 230V AC	KCD018SC	8 h	6,7 W - 120 lm	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 1h, 230V AC	KCD011WL	1 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 3h, 230V AC	KCD013WL	3 h	7,5 W - 150 lm	12V/0,8Ah NiMH	
LED, 8h, 230V AC	KCD018WL	8 h	7,5 W - 60 lm	12V/0,8Ah NiMH	
Luminaires for central battery systems					
LED, 230V AC/DC	KCD019	CBS	4,5 W - 340 lm		
LED, 230V AC/DC	KCD029	CBS	4,6 W - 520 lm		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	KCD019ML	CBS	5,2 W - 340 lm		
LED, 230V AC/DC	KCD029ML	CBS	5,2 W - 520 lm		

KCD ceiling mounting

Dimensions KC ceiling

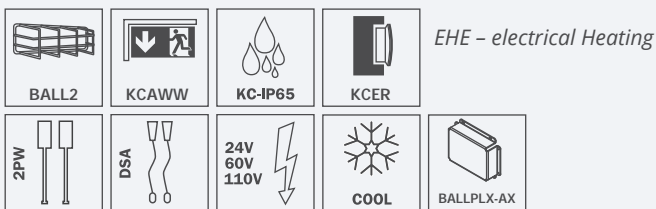


Drilling distances KC



All dimensions in mm

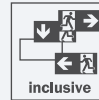
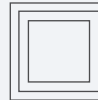
Accessories KCW / KCD





KD / KL

PLASTIC LUMINAIRE



FACTS

- Plastic, white
- 22m (KD) or 34m (KL) Viewing distance
- Complete set of pictographs (ISO 7010)
- IP43
- Universal mounting incl. wall bracket
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Slim design plastic luminaire for universal mounting (wall/ ceiling or as wall bracket with supplied adapter).

This luminary provides additional downward lighting to enhance safety at the egress route. Applicable for maintained or non-maintained operation mode.

Improved reliability through easy to install universal use of pictograms. Signs according to EN 60598-1, EN 60598-2-22 and EN 1838 norms.



KD / KL

PLASTIC LUMINAIRE

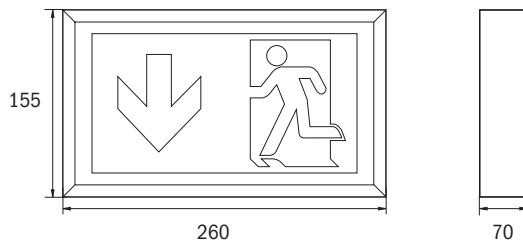
KD (22m)

	 universal				
Self-Contained luminaires					
LED, 1h, 230V AC	KDU011	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KDU013	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	KDU018	8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	KDU011SC	1 h	6,1 W	4,8V/2,0Ah NiMH	 SC
LED, 3h, 230V AC	KDU013SC	3 h	6,1 W	4,8V/2,0Ah NiMH	 SC
LED, 8h, 230V AC	KDU018SC	8 h	6,7 W	9,6V/2,0Ah NiMH	 SC
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 1h, 230V AC	KDU011WL	1 h	7,5 W	12V/0,8Ah NiMH	 WL
LED, 3h, 230V AC	KDU013WL	3 h	7,5 W	12V/0,8Ah NiMH	 WL
LED, 8h, 230V AC	KDU018WL	8 h	7,5 W	12V/0,8Ah NiMH	 WL
Luminaires for central battery systems					
LED, 230V AC/DC	KDU019	CBS	4,5 W		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	KDU019ML	CBS	5,2 W		 ML

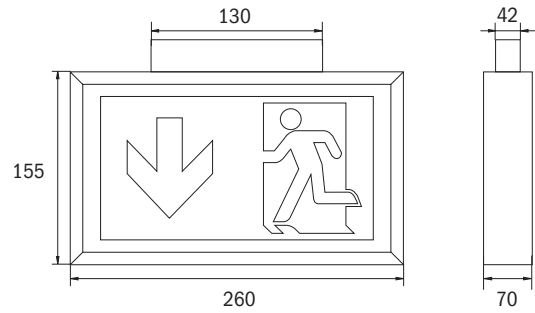
Universal mounting



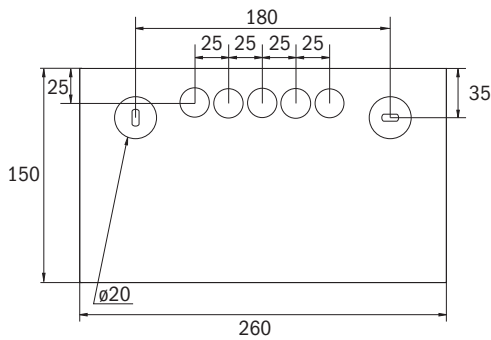
Dimensions KD wall



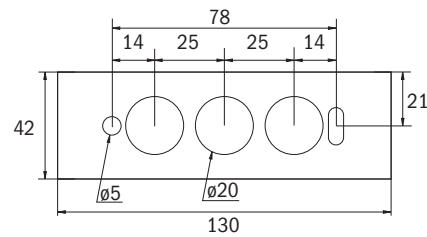
Dimensions KD ceiling



Drilling distances KD wall

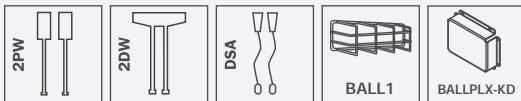


Drilling distances KD ceiling



All dimensions in mm













Accessories KD



KD / KL

PLASTIC LUMINAIRE

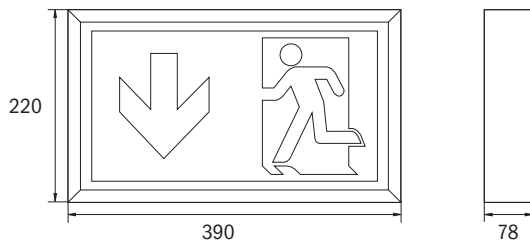
KL (34m)

	 universal				
Self-Contained luminaires					
LED, 1h, 230V AC	KLU011	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KLU013	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	KLU018	8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	KLU011SC	1 h	6,1 W	4,8V/2,0Ah NiMH	 SC
LED, 3h, 230V AC	KLU013SC	3 h	6,1 W	4,8V/2,0Ah NiMH	 SC
LED, 8h, 230V AC	KLU018SC	8 h	6,7 W	9,6V/2,0Ah NiMH	 SC
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 1h, 230V AC	KLU011WL	1 h	7,5 W	12V/0,8Ah NiMH	 WL
LED, 3h, 230V AC	KLU013WL	3 h	7,5 W	12V/0,8Ah NiMH	 WL
LED, 8h, 230V AC	KLU018WL	8 h	7,5 W	12V/0,8Ah NiMH	 WL
Luminaires for central battery systems					
LED, 230V AC/DC	KLU019	CBS	4,5 W		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	KLU019ML	CBS	5,2 W		 ML

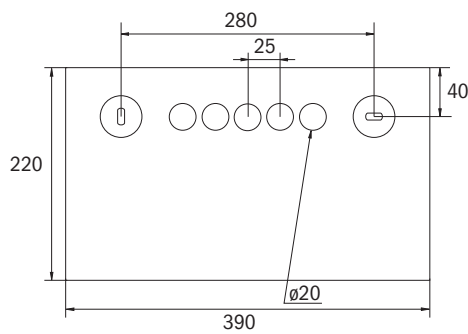
Universal mounting



Dimensions KL wall

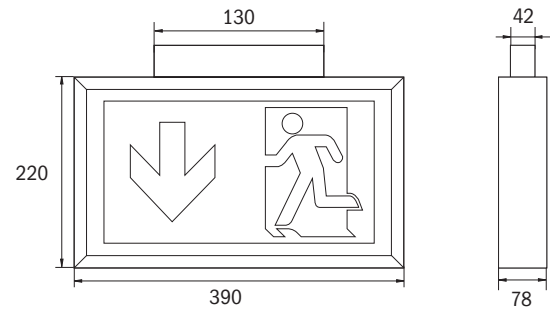


Drilling distances KL wall

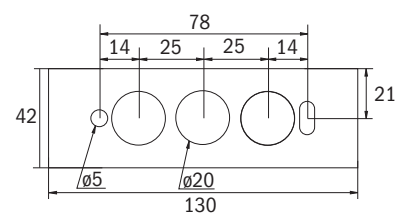


All dimensions in mm

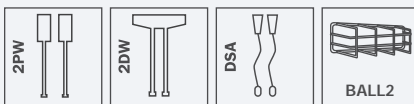
Dimensions KL ceiling



Drilling distances KL ceiling



Accessories KL



When mounting with cord suspension or pendulum the protection class is reduced to IP20.



LM / LX / LS

ALUMINIUM PROFILED LUMINAIRES



GENERAL INFORMATION

FACTS

- Aluminium housing
- 22m (LM), 34m (LX) or 56m (LS) viewing distance
- Complete set of pictographs (ISO 7010) - not for LS
- IP40
- Available for wall or ceiling mounting
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Luminare designed in slender aluminum profile, matte anodized, finishing for ceiling mounting with additional downward lighting, enhancing safety. Toolless mounting chassis. Applicable for maintained or non-maintained operation mode.

Improved reliability through easy to install universal use of pictograms. Pictogram set (left, right, up, down signs) included (not for LS). Signs according to EN 60598-1, EN 60598-2-22 and EN 1838 norms.



DESIGN LUMINAIRES



DYNAMIC LUMINAIRES

UNIVERSAL LUMINAIRES

INDUSTRIAL LUMINAIRES

GENERAL LIGHTING WITH EMERGENCY LIGHT

WIRELESS MONITORING

ACCESSORIES

MODULES

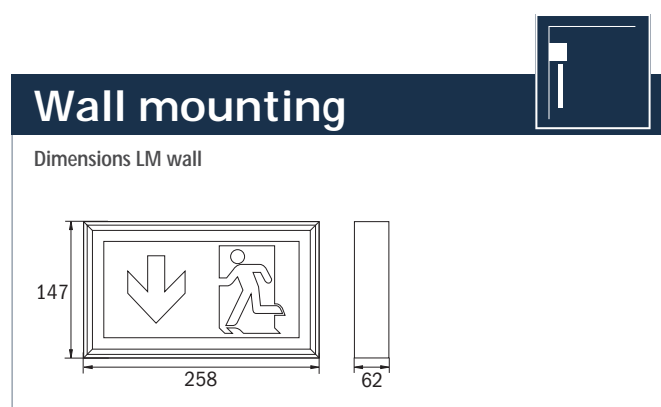
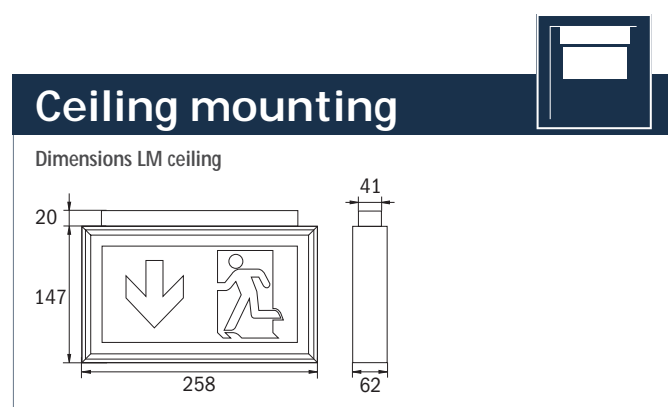


LM / LX / LS

ALUMINIUM PROFILED LUMINAIRES

LM (22m)

Self-Contained luminaires					
LED, 1h, 230V AC	LMD011	LMW011	1 h	6,1 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	LMD013	LMW013	3 h	6,1 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	LMD018	LMW018	8 h	6,7 W	9,6V/2,0Ah NiMH
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	LMD011SC	LMW011SC	1 h	6,1 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	LMD013SC	LMW013SC	3 h	6,1 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	LMD018SC	LMW018SC	8 h	6,7 W	9,6V/2,0Ah NiMH
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 1h, 230V AC	LMD011WL	LMW011WL	1 h	7,5 W	12V/0,8Ah NiMH
LED, 3h, 230V AC	LMD013WL	LMW013WL	3 h	7,5 W	12V/0,8Ah NiMH
LED, 8h, 230V AC	LMD018WL	LMW018WL	8 h	7,5 W	12V/0,8Ah NiMH
Luminaires for central battery systems					
LED, 230V AC/DC	LMD019	LMW019	CBS	4,5 W	
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	LMD019ML	LMW019ML	CBS	5,2 W	



All dimensions in mm

Accessories LM

DSA

2PS

AWW

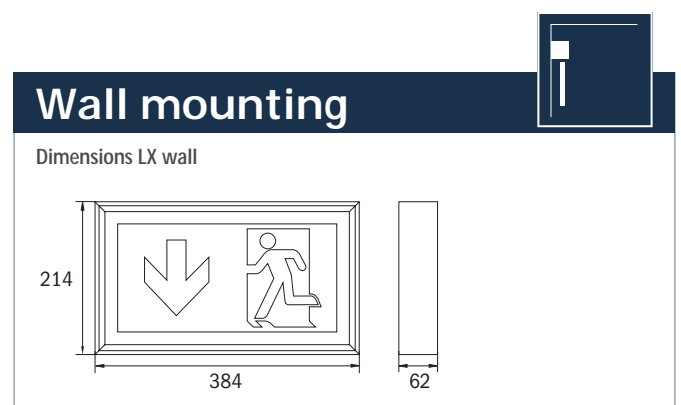
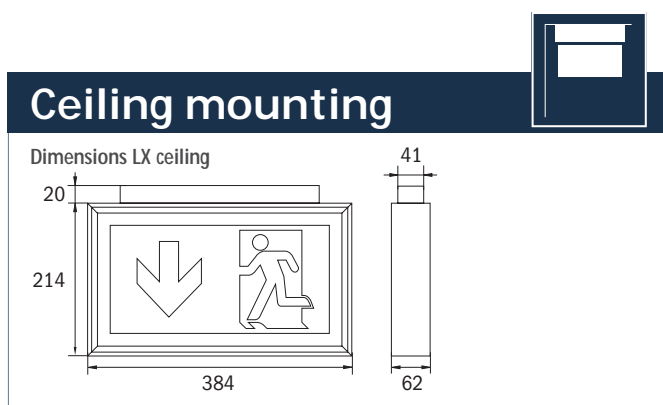
AWM/AWX

BALL 1



LX (34m)

Self-Contained luminaires						
LED, 1h, 230V AC	LXD011	LXW011	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	LXD013	LXW013	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	LXD018	LXW018	8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	LXD011SC	LXW011SC	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	LXD013SC	LXW013SC	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	LXD018SC	LXW018SC	8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (not switchable)						
LED, 1h, 230V AC	LXD011WL	LXW011WL	1 h	7,5 W	12V/0,8Ah NiMH	
LED, 3h, 230V AC	LXD013WL	LXW013WL	3 h	7,5 W	12V/0,8Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	LXD019	LXW019	CBS	4,5 W		
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	LXD019ML	LXW019ML	CBS	5,2 W		



Accessories LX

BALL 2

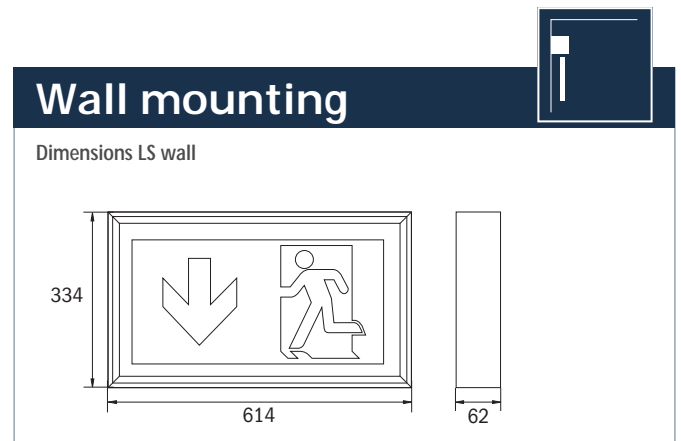
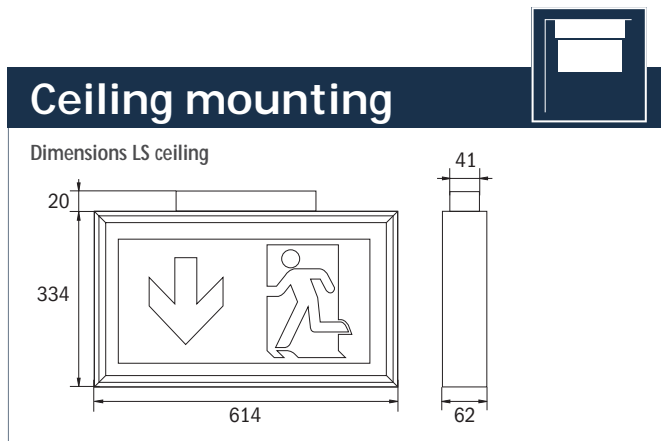
AWM/AWX

LM / LX / LS

ALUMINIUM PROFILED LUMINAIRES

LS (56m) – No pictograph set included; please specify pictograph

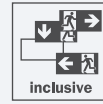
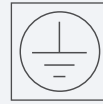
Self-Contained luminaires					
LED, 1h, 230V AC	LSD011	LSW011	1 h	6,1 W	4,8V/2,0Ah NiMH
LED, 3h, 230V AC	LSD013	LSW013	3 h	6,5 W	9,6V/2,0Ah NiMH
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	LSD011SC		1 h	6,1 W	9,6V/2,0Ah NiMH
LED, 3h, 230V AC	LSD013SC	LSW013SC	3 h	6,5 W	9,6V/2,0Ah NiMH
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 1h, 230V AC	LSD011WL	LSW011WL	1 h	7,5 W	12V/0,8Ah NiMH
Luminaires for central battery systems					
LED, 230V AC/DC	LSD019	LSW019	CBS	8,3 W	
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	LSD019ML	LSW019ML	CBS	9,3 W	



All dimensions in mm

Accessories LS





GENERAL INFORMATION

DESIGN LUMINAIRES

DYNAMIC LUMINAIRES

UNIVERSAL LUMINAIRES

INDUSTRIAL LUMINAIRES

GENERAL LIGHTING WITH EMERGENCY LIGHT

WIRELESS MONITORING

ACCESSORIES

MODULES





KW

PLASTIC LUMINAIRE



FACTS

- Plastic, white
- Complete set of pictographs (ISO 7010)
- IP43
- Available for wall or ceiling mounting
- SelfContained: -5° to +40°C
Central battery: -30° to +40°C

Classic plastic luminaire for wall or ceiling mounting. Pictogram set included. Improved reliability through easy to install universal use of pictograms.

The slim design makes it possible to use this luminaire even if there is not much space between the door and the ceiling Signs according to EN 60598-1, EN 60598-2-22 and EN 1838 norms.



AVAILABLE SOON:



KWI

In this further development of the KW luminaire series, the focus was on screw fastening of the hood and a circumferential seal that is unaffected by this. At the same time, the size that has proven itself in practice has been retained. In addition, the mounting holes are located at the same points, which allows a KW light that has already been installed to be replaced one-to-one without having to drill and repair again.

- Viewing distance 16m
- IP 65
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)



PLASTIC LUMINAIRE

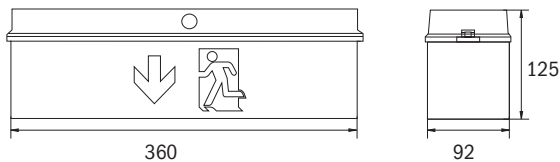
						
Self-Contained luminaires						
LED, 1h, 230V AC	KWD011	KWW011	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KWD003	KWW003	3 h	3,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KWD013	KWW013	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KWD023	KWW023	3 h	6 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	KWD018	KWW018	8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	KWD001SC		1 h	3,1 W	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KWD021SC	KWW021SC	1 h	6 W	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC	KWD011SC	KWW011SC	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KWD003SC	KWW003SC	3 h	3,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KWD013SC	KWW013SC	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KWD023SC	KWW023SC	3 h	6 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	KWD018SC	KWW018SC	8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module						
LED, 1h, 230V AC		KWW001WL	1 h	5,3 W	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC		KWW011WL	1 h	7,5 W	12V/0,8Ah NiMH	
LED, 3h, 230V AC	KWD003WL	KWW003WL	3 h	5,3 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	KWD013WL	KWW013WL	3 h	7,5 W	12V/0,8Ah NiMH	
LED, 8h, 230V AC	KWD018WL	KWW018WL	8 h	7,5 W	12V/0,8Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	KWD019	KWW019	CBS	4,5 W		
LED, 230V AC/DC	KWD029	KWW029	CBS	4,6 W		
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	KWD019ML	KWW019ML	CBS	5,2 W		
LED, 230V AC/DC	KWD029ML	KWW029ML	CBS	5,2 W		

*) All versions also available as COOL-luminaires with external battery housing IP54 for mounting within the building. The luminaire may be mounted outside or in cool stores.

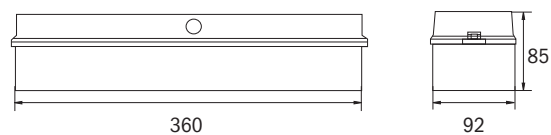


Ceiling mounting / Wall mounting

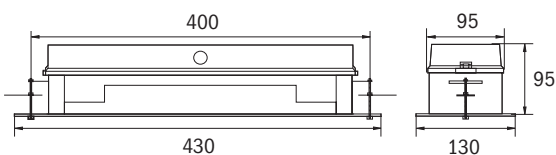
Dimensions KW ceiling



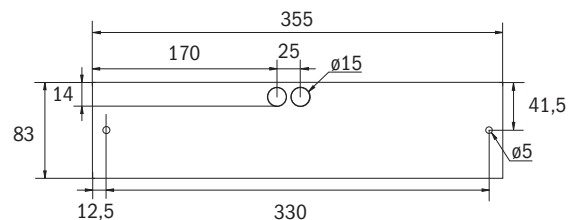
Dimensions KW wall



Dimensions KW recessed frame

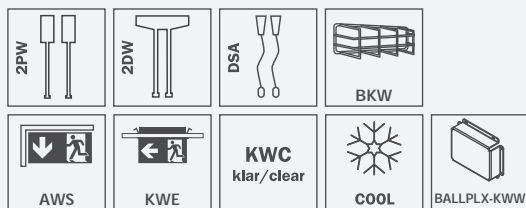


Bohrabstände KW ceiling / wall

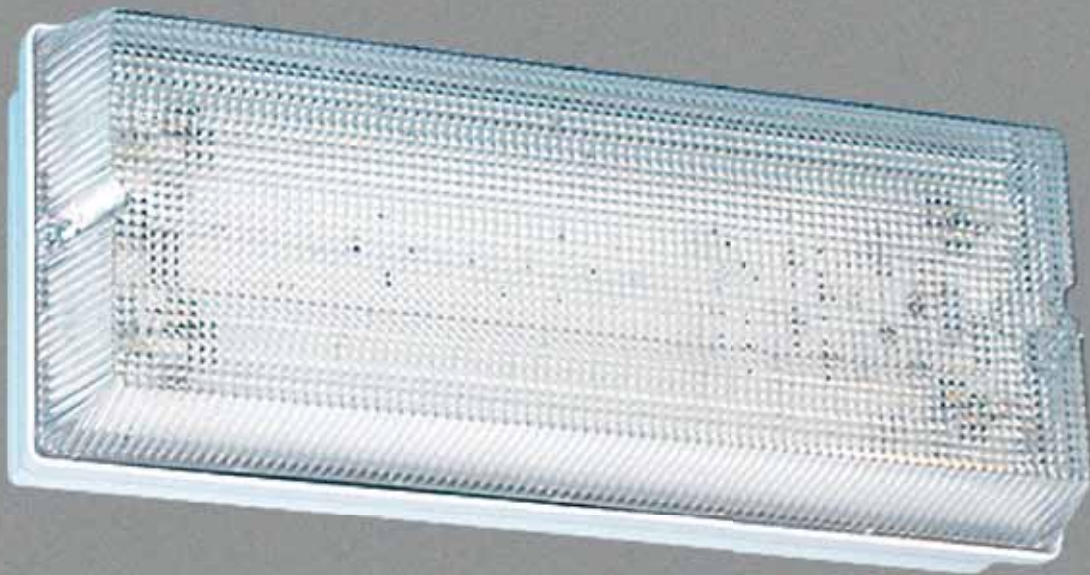


All dimensions in mm

Accessories KW



When mounting with cord suspension or pendulum the protection class is reduced to IP20.




















PF

PLASTIC LUMINAIRE

FACTS

- Plastic, white
- Complete set of pictographs (ISO 7010)
- IP65
- Available for wall or ceiling mounting
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°C

Plastic luminaire for the marking and lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and EN 1838. For single or double sided labeling. Available for central power systems or as a self-contained emergency luminaire.

						
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	PFD011SC *	PFW011SC *	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 1h, 230V AC		PFW021SC *	1 h	6 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	PFD013SC *	PFW013SC *	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC		PFW023SC *	3 h	6 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	PFD018SC *	PFW018SC *	8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (not switchable)						
LED, 1h, 230V AC		PFW011WL *(SE)	1 h	7,5 W	12V/0,8Ah NiMH	
LED, 3h, 230V AC	PFD013WL *(SE)	PFW013WL *(SE)	3 h	7,5 W	12V/0,8Ah NiMH	
LED, 8h, 230V AC	PFD018WL *(SE)	PFW018WL *(SE)	8 h	7,5 W	12V/0,8Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	PFD019	PFW019	CBS	4,5 W		
LED, 230V AC/DC		PFW029	CBS	4,6 W		
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	PFD019ML	PFW019ML	CBS	5,2 W		
LED, 230V AC/DC		PFW029ML	CBS	5,2 W		






*) All versions also available as COOL-luminaires with external battery housing in IP20 for mounting within the building. The luminaire may be mounted outside or in cool stores.

Optional -EHE: with electronic heating element for use of the luminaire at temperatures low to - 15°C

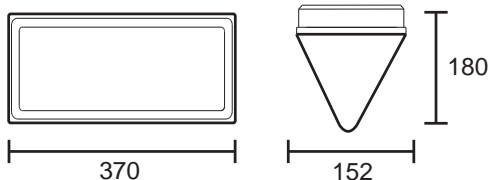


(SE) Luminaires are switchable by radio with the optional switching extension with the Wireless Professional system.

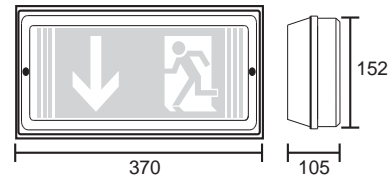
Distance table PFW029(ML) for plane emergency routes

Mounting height (m)					
2.00	6.97	17.83	15.10	7.07	2.75
2.50	7.26	19.80	15.77	7.64	2.98
3.00	7.43	21.12	16.07	8.10	3.11
3.50	7.51	21.63	16.03	8.46	3.15
4.00	4.44	21.94	15.05	8.71	3.13

Dimensions PF ceiling



Dimensions PF wall

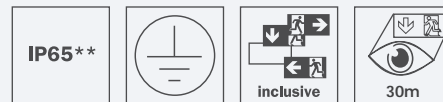


All dimensions in mm



V2W

WALL MOUNTED STAINLESS STEEL LUMINAIRE



FACTS

- Stainless steel V2A (optional V4A)
- Complete set of pictographs (ISO 7010)
- IP65
- Wall mounting
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°C

High quality vandal proof high-grade steel luminaire for wall mounting according to DIN EN 60598-1, DIN EN 60598-2-22 and EN 1838 for the marking and lighting of escape and rescue routes.

Service-friendly folding mechanism with external screws. Suitable for maintained or non-maintained mode.



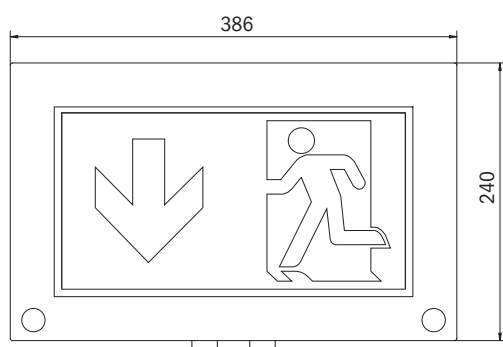
Self-Contained luminaires with SelfControl module				
LED, 3h, 230V AC	V2W013SC *	3 h	6,1 W	4,8V/2,0Ah NiMH
LED, 8h, 230V AC	V2W018SC *	8 h	6,7 W	9,6V/2,0Ah NiMH
Luminaires for central battery systems				
LED, 230V AC/DC	V2W019 *	CBS	4,5 W	
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	V2W019ML *	CBS	5,2 W	

* Optional with floatglass (detergent resistant)



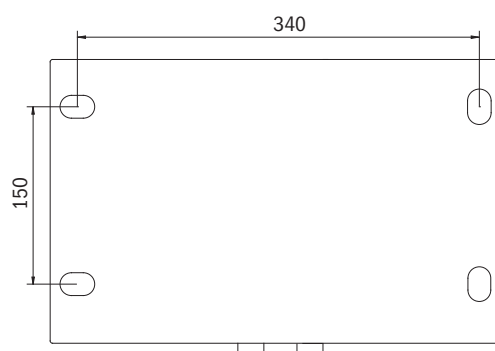
Wandmontage

Dimensions V2W



All dimensions in mm

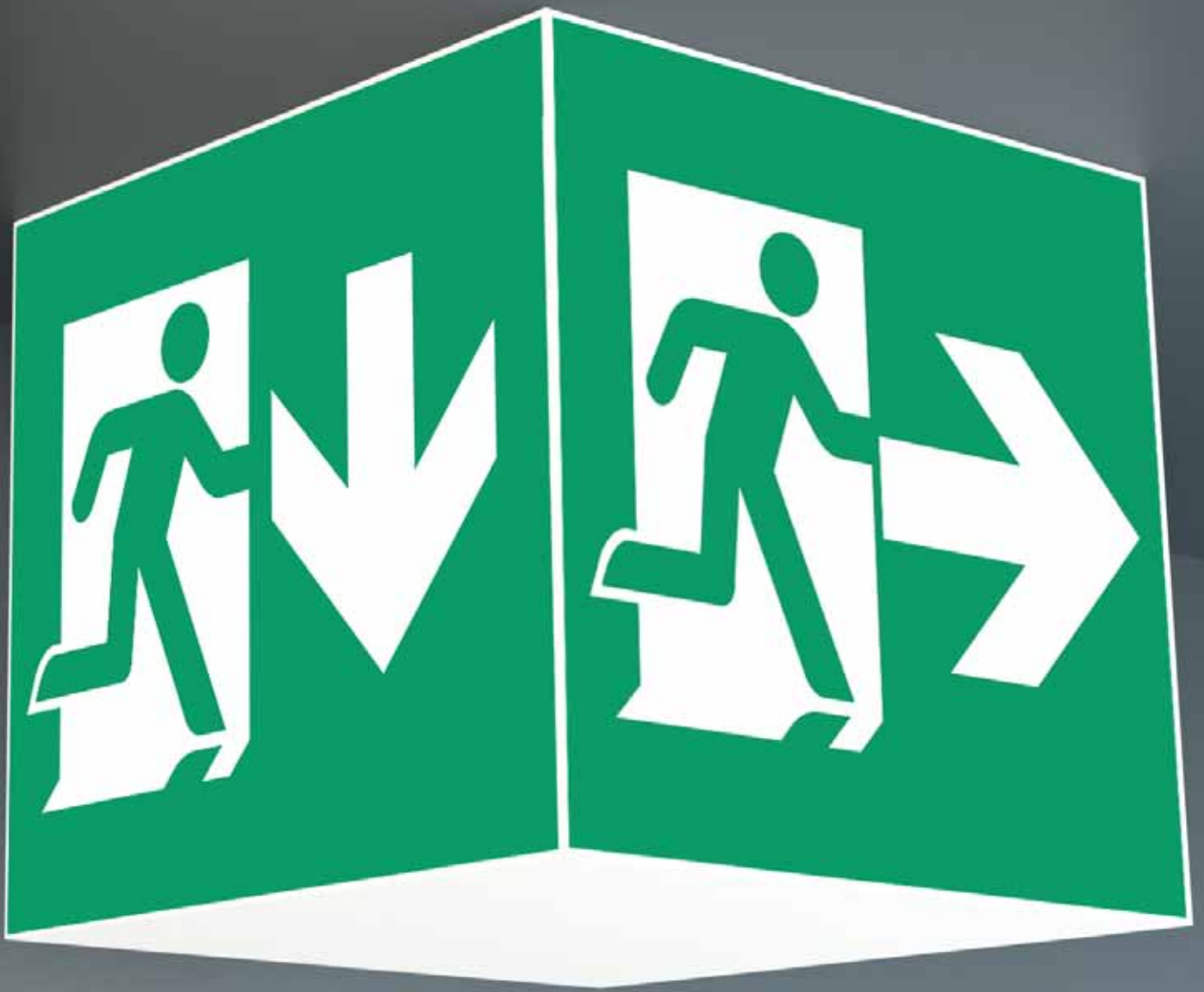
Drilling distances V2W



Accessories V2W



** Only in optional V4A version suitable for use in swimming pools or slaughterhouses (not chlorine / chemical resistant)



WK / WG / WX

PLASTIC CUBE LUMINAIRES



FACTS

- Plastic, white
- Viewing distance
WK: 36m, WG: 46m, WX: 90m
- IP20
- Mounting:
Wall, ceiling, pendulum, chain
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°C

The omnidirectional recognizable cube-plastic luminaire is suited for a visible marking of escape routes in four main directions. Ideal for usage at crossroads for example in department stores with several aisles.

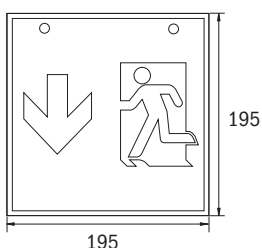
Planning security is provided through logically predefined imprinted pictograms. LED escape route indication luminaire in accordance with DIN EN 60598-1, EN 605982-22, EN 7010 and DIN EN 1838th



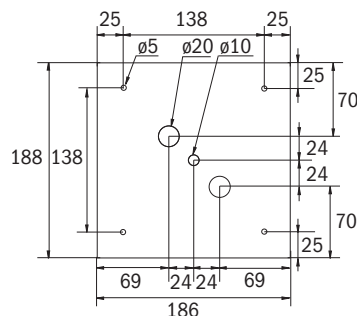
WK (36m)

Self-Contained luminaires						
LED, 3h, 230V AC	WKD013		3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	WKD018		8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	WKD011SC	WKW011SC	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	WKD013SC	WKW013SC	3 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	WKD018SC		8 h	6,7 W	9,6V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (not switchable)						
LED, 1h, 230V AC	WKD011WL	WKW011WL	1 h	7,5 W	12V/0,8Ah NiMH	
LED, 3h, 230V AC	WKD013WL	WKW013WL	3 h	7,5 W	12V/0,8Ah NiMH	
LED, 8h, 230V AC	WKD018WL		8 h	7,5 W	12V/0,8Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	WKW019		CBS	4,5 W		
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	WKD019ML		CBS	5,2 W		

Dimensions WK



Drilling distances WK







All dimensions in mm












WK / WG / WX

PLASTIC CUBE LUMINAIRES

WG (46m)

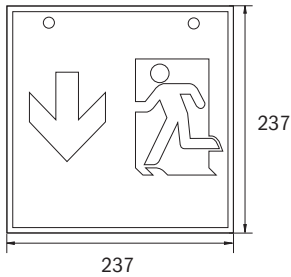
					
Self-Contained luminaires					
LED, 3h, 230V AC	WGD013		3 h	6,1 W	4,8V/2,0Ah NiMH
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	WGD011SC	WGW011SC	1 h	6,1 W	4,8V/2,0Ah NiMH 
LED, 3h, 230V AC	WGD013SC	WGW013SC	3 h	6,1 W	4,8V/2,0Ah NiMH 
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 1h, 230V AC	WGD011WL	WGW011WL	1 h	7,5 W	12V/0,8Ah NiMH 
LED, 3h, 230V AC	WGD013WL	WGW013WL	3 h	7,5 W	12V/0,8Ah NiMH 
LED, 8h, 230V AC	WGD018WL		8 h	6,7 W	9,6V/2,0Ah NiMH 
Luminaires for central battery systems					
LED, 230V AC/DC	WGD019	WGW019	CBS	4,5 W	
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	WGW019ML		CBS	5,2 W	

WX (90m)

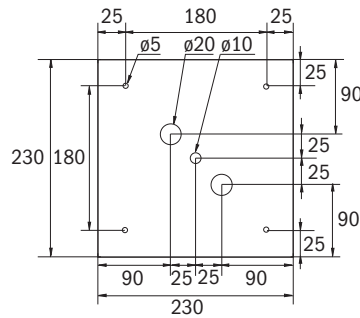
					
Self-Contained luminaires					
LED, 3h, 230V AC	WXD013		3 h	6,1 W	4,8V/2,0Ah NiMH
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	WXD011SC		1 h	6,1 W	4,8V/2,0Ah NiMH 
LED, 3h, 230V AC	WXD013SC		3 h	6,1 W	4,8V/2,0Ah NiMH 
Einzelbatterieleuchten mit Wireless Professional Modul (nicht schaltbar)					
LED, 1h, 230V AC	WXD011WL		1 h	7,5 W	12V/0,8Ah NiMH 
LED, 3h, 230V AC	WXD013WL		3 h	7,5 W	12V/0,8Ah NiMH 
Luminaires for central battery systems					
LED, 230V AC/DC	WXD019		CBS	4,5 W	
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	WXD019ML		CBS	5,2 W	



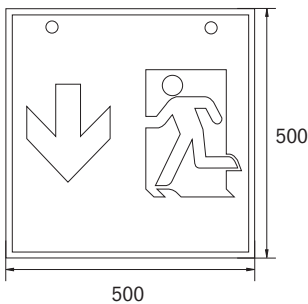
Dimensions WG



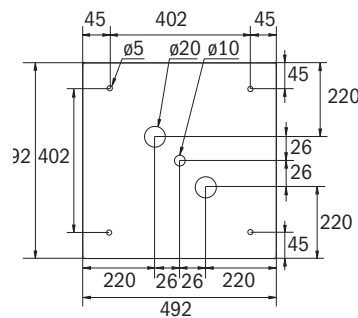
Drilling distances WG



Dimensions WX

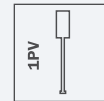


Drilling distances WX



All dimensions in mm

Accessories



WK



WKO: 4 chain eyes for suspended mounting

AVAILABLE SOON:

WH

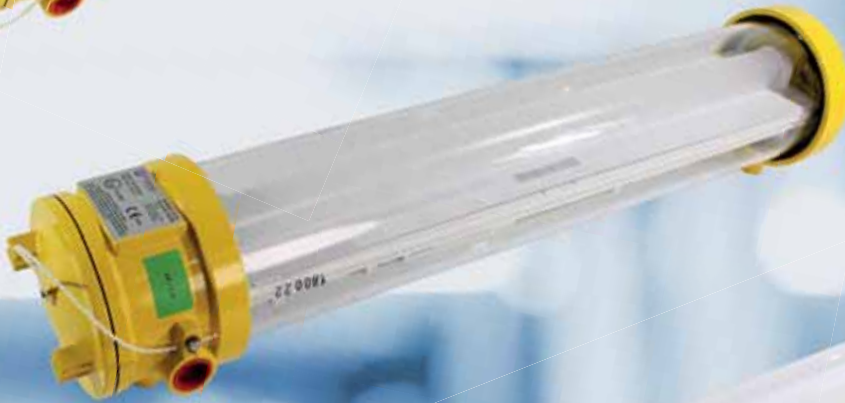
This further development of the cube luminaire at a ratio of 2 to 1 ratio is designed for industrial use. The luminaires are characterised by their high protection class and chain mounting with the corresponding strain relief. Optionally, it is possible to illuminate escape and rescue routes with an additional LED in DUO technology.

- Exit sign luminaire with 30m (M) or 50m (X) viewing distance
- IP 54
- DUO-Technology for additional illumination of the rescue route
- Strain relief
- Bayonet
- As self-contained luminaire or for connection to central battery systems (with or without monitoring module)





XI



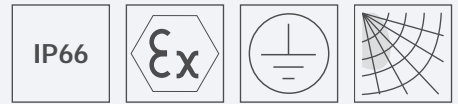
XM



XX

XI / XM / XX

EXPLOSION PROOF LUMINAIRES



FACTS

- Explosion proof glass or polycarbonate cylinder
- IK05 (polycarbonate cylinder) IK07 (glass cylinder)
- IP66
- Wall or ceiling mounting
- 0°C to +40°C (SelfContained) -20°C to +40°C (CBS)

Explosion-proof LED glass or polycarbonate cylinder Safety light for gas and dust Ex zones. Available in three sizes with a luminous flux of up to 5000lm.

Prepared for two cable entries for through-wiring. By applying a pictogram can also be used as a exit sign.

Mounting options Wall or ceiling mounting with adapter or suspension with chain eye.

According to 94/9/EG (ATEX) Zone 1 / Zone 21 gas and dust
 • Ex d IIB T6 Gb / Ex d IIB T6 Gb
 • Ex t IIIC T85°C Db

XI (Glass cylinder)



Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC - Non maintained mode	XGIU001SC-BS	1 h	5,8 W - 350 lm	3,6V/1,6Ah NiCd
LED, 1h, 230V AC - maintained-/non-maintained mode	XGIU011SC	1 h	24 W - 750 lm	6V/1,6Ah NiCd
LED, 3h, 230V AC - Non maintained mode	XGIU003SC-BS	3 h	6,9 W - 350 lm	3,6V/1,6Ah NiCd
Luminaires for central battery systems				
LED, 230V AC/DC	XGIU009	CBS	11 W - 1200 lm	
LED, 230V AC/DC	XGIU019	CBS	20 W - 2100 lm	
Luminaires for central battery systems incl. monitoring module				
LED, 230V AC/DC	XGIU009ML	ZBA	11 W - 1200 lm	
LED, 230V AC/DC	XGIU019ML	ZBA	20 W - 2100 lm	

XI (Polycarbonate cylinder)



Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC - Non maintained mode	XPIU001SC-BS	1 h	5,8 W - 350 lm	3,6V/1,6Ah NiCd
LED, 1h, 230V AC - maintained-/non-maintained mode	XPIU011SC	1 h	24 W - 750 lm	6V/1,6Ah NiCd
LED, 3h, 230V AC - Non maintained mode	XPIU003SC-BS	3 h	6,9 W - 350 lm	3,6V/1,6Ah NiCd
Luminaires for central battery systems				
LED, 230V AC/DC	XPIU009	CBS	11 W - 1200 lm	
LED, 230V AC/DC	XPIU019	CBS	20 W - 2100 lm	
Luminaires for central battery systems incl. monitoring module				
LED, 230V AC/DC	XPIU009ML	ZBA	11 W - 1200 lm	
LED, 230V AC/DC	XPIU019ML	ZBA	20 W - 2100 lm	

XI / XM / XX

EXPLOSION PROOF LUMINAIRES

XM (Glass cylinder)

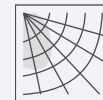
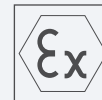
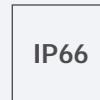


Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC - Non-maintained mode	XGMU001SC-BS	1 h	5,8 W - 700 lm	6V/1,6Ah NiCd	
LED, 1h, 230V AC - mainteind-/Non-maintained mode	XGMU011SC	1 h	40 W - 750 lm	6V/1,6Ah NiCd	
LED, 1h, 230V AC - mainteind-/Non-maintained mode	XGMU013SC	3 h	40 W - 750 lm	6V/4Ah NiCd	
LED, 3h, 230V AC - Non-maintained mode	XGMU003SC-BS	3 h	9,2 W - 750 lm	6V/4Ah NiCd	
Luminaires for central battery systems					
LED, 230V AC/DC	XGMU009	CBS	20 W - 2400 lm		
LED, 230V AC/DC	XGMU019	CBS	40 W - 4600 lm		
Luminaires for central battery systems incl. monitoring module					
LED, 230V AC/DC	XGMU009ML	ZBA	20 W - 2400 lm		
LED, 230V AC/DC	XGMU019ML	ZBA	40 W - 4600 lm		

XM (Polycarbonate cylinder)



Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC - Non-maintained mode	XPMU001SC-BS	1 h	5,8 W - 700 lm	6V/1,6Ah NiCd	
LED, 1h, 230V AC - mainteind-/Non-maintained mode	XPMU011SC	1 h	40 W - 750 lm	6V/1,6Ah NiCd	
LED, 3h, 230V AC - Non-maintained mode	XPMU003SC-BS	3 h	9,2 W - 750 lm	6V/4Ah NiCd	
LED, 3h, 230V AC - mainteind-/Non-maintained mode	XPMU013SC	3 h	40 W - 750 lm	6V/4Ah NiCd	
Luminaires for central battery systems					
LED, 230V AC/DC	XPMU009	CBS	20 W - 2400 lm		
LED, 230V AC/DC	XPMU019	CBS	40 W - 4600 lm		
Luminaires for central battery systems incl. monitoring module					
LED, 230V AC/DC	XPMU009ML	ZBA	20 W - 2400 lm		
LED, 230V AC/DC	XPMU019ML	ZBA	40 W - 4600 lm		



XX (Glass cylinder)



Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC - mainteind-/Non-maintained mode	XGXU011SC	1 h	45 W - 750 lm	6V/1,5Ah NiCd
LED, 3h, 230V AC - mainteind-/Non-maintained mode	XGXU013SC	3 h	45 W - 750 lm	6V/4Ah NiCd
Luminaires for central battery systems				
LED, 230V AC/DC	XGXU009	CBS	40 W - 4600 lm	
Luminaires for central battery systems incl. monitoring module				
LED, 230V AC/DC	XGXU009ML	ZBA	40 W - 4600 lm	

XX (Polycarbonate cylinder)



Self-Contained luminaires with SelfControl module				
LED, 1h, 230V AC - mainteind-/Non-maintained mode	XPXU011SC	1 h	45 W - 750 lm	6V/1,5Ah NiCd
LED, 3h, 230V AC - mainteind-/Non-maintained mode	XPXU013SC	3 h	45 W - 750 lm	6V/4Ah NiCd
Luminaires for central battery systems				
LED, 230V AC/DC	XPXU009	CBS	40 W - 4600 lm	
Luminaires for central battery systems incl. monitoring module				
LED, 230V AC/DC	XPXU009ML	ZBA	40 W - 4600 lm	

Accessories

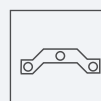


4-fold pictograph set
Viewing distance 14m.

Art.-No. X4N



Chain eyes
Art.-No. X-KO001








Mounting brackets for wall/ceiling mounting
Art.-No. X-MB001






XI / XM / XX

EXPLOSION PROOF LUMINAIRES






Distance table XGIU003SC for plane emergency routes

Mounting height (m)					
2.00	4.04	9.73	9.58	9.44	3.94
2.50	4.44	10.79	10.66	10.52	4.33
3.00	4.75	11.72	11.58	11.43	4.64
3.50	4.98	12.52	12.37	12.21	4.89
4.00	5.14	13.17	13.01	12.86	5.08

Distance table XGMU013SC for plane emergency routes

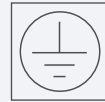
Mounting height (m)					
2.00	4.60	11.40	10.34	9.30	3.89
2.50	5.50	13.65	12.44	11.22	4.68
3.00	5.88	14.65	13.47	12.26	5.07
3.50	6.21	15.51	14.36	13.16	5.42
4.00	6.46	16.29	15.14	13.92	5.72

Distance table XGXU013SC for plane emergency routes

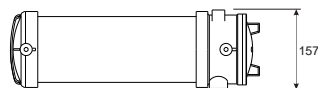
Mounting height (m)					
2.00	5.18	12.92	11.70	10.49	4.35
2.50	5.89	14.84	13.48	12.12	5.01
3.00	6.22	15.84	14.48	13.14	5.38
3.50	6.52	16.62	15.29	14.02	5.69
4.00	6.76	17.28	16.05	14.82	5.96

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

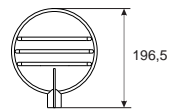
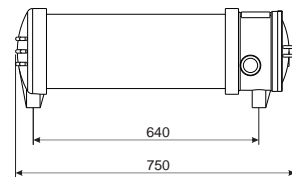
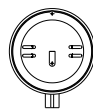
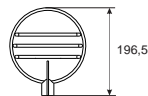
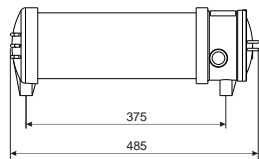
The luminaire distances for luminaires with polycarbonate cylinders is approx. 10-15% smaller than the distances specified in these tables for luminaires with glass cylinders.



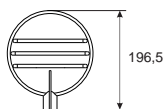
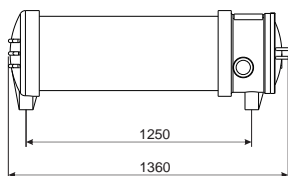
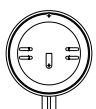
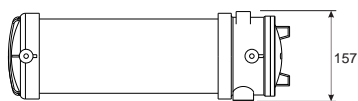
Dimensions XI



Dimensions XM



Dimensions XX

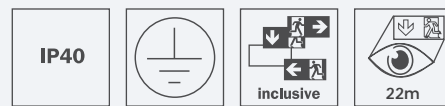


All dimensions in mm



U6

RECESSED WALL MOUNTED LUMINAIRE



FACTS

- Zinc housing, white
- Complete set of pictographs (ISO 7010)
- IP40
- 22m viewing distance
- Recessed wall mounting
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°C

Integrated into the wall this escape route indication luminaire adapts to the interior design. The variable use and toolless change of pictograms provides planning security on site.

LED escape route luminaire for recessed wall mounting according to DIN EN 60598-1, EN 60598-2-22, EN 7010 and DIN EN 1838.

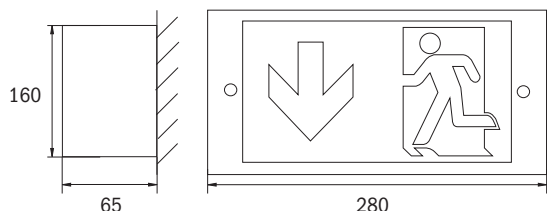


Self-Contained luminaires					
LED, 1h, 230V AC	U6E011	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	U6E013	3 h	6,1 W	4,8V/2,0Ah NiMH	
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	U6E011SC	1 h	6,1 W	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	U6E013SC	3 h	6,1 W	4,8V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED, 3h, 230V AC	U6E013WL	3 h	7,5 W	12V/0,8Ah NiMH	
Luminaires for central battery systems					
LED, 230V AC/DC	U6E019	CBS	4,5 W		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	U6E019ML	CBS	5,2 W		

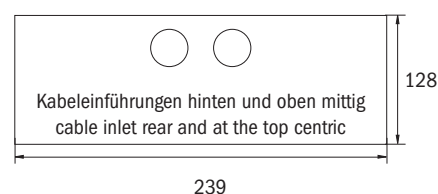
Recessed wall mounting



Dimensions U6



Cut-out U6



AVAILABLE SOON: UEMR

This frameless recessed escape sign luminaire for wall level is both functional and design-oriented: a simple appearance combined with user-friendly levelling and mounting.



SKS / SGS

EMERGENCY ROUTE LIGHTING



FACTS

- Steelsheet housing
- IP54
- Wall mounting
- -5°C to +40°C

Emergency floodlight in a non-maintained circuit for lighting spaces or emergency routes with pre-mounted or externally mountable floodlights, for fixed location or transportable. Remote monitoring via Wireless Professional is possible. Technical specifications with deep discharge protection and integrated lock against switching back on, limit switch, IC technology.

With maintenance free, long-life, gas-proof, Pb rechargeable batteries, electronic construction with switching option as well as LED function monitoring indicator.








Self-Contained luminaires with SelfControl module					
LED Notlichtstrahler, 230V AC	SKS2101SC	1 h	2 x 900 lm	AGM Battery 12V 9Ah	
LED Notlichtstrahler, 230V AC	SKS2103SC	3 h	2 x 900 lm	AGM Battery 12V 9Ah	
LED Notlichtstrahler, 230V AC	SKS2108SC	8 h	2 x 900 lm	AGM Battery 12V 17Ah	
LED Notlichtstrahler, 230V AC	SKS2301SC	1 h	2 x 2500 lm	AGM Battery 12V 17Ah	
LED Notlichtstrahler, 230V AC	SGS2303SC	3 h	2 x 2500 lm	AGM Battery 12V 28Ah	
LED Notlichtstrahler, 230V AC	SGS1308SC	8 h	2 x 900 lm	AGM Battery 12V 28Ah	
LED Notlichtstrahler, 230V AC	SGS2501SC	1 h	2 x 4100 lm	AGM Battery 12V 28Ah	
LED Notlichtstrahler, 230V AC	SGS2503SC	3 h	2 x 4100 lm	AGM Battery 12V 40Ah	
Self-Contained luminaires with Wireless Professional module (not switchable)					
LED Notlichtstrahler, 230V AC	SKS2101WL	1 h	2 x 900 lm	AGM Battery 12V 9Ah	
LED Notlichtstrahler, 230V AC	SKS2103WL	3 h	2 x 900 lm	AGM Battery 12V 9Ah	
LED Notlichtstrahler, 230V AC	SKS2108WL	8 h	2 x 900 lm	AGM Battery 12V 17Ah	
LED Notlichtstrahler, 230V AC	SKS2301WL	1 h	2 x 2500 lm	AGM Battery 12V 17Ah	
LED Notlichtstrahler, 230V AC	SGS2303WL	3 h	2 x 2500 lm	AGM Battery 12V 28Ah	
LED Notlichtstrahler, 230V AC	SGS1308WL	8 h	2 x 900 lm	AGM Battery 12V 28Ah	
LED Notlichtstrahler, 230V AC	SGS2501WL	1 h	2 x 4100 lm	AGM Battery 12V 28Ah	
LED Notlichtstrahler, 230V AC	SGS2503WL	3 h	2 x 4100 lm	AGM Battery 12V 40Ah	

Note: Versions with 30 / 50W LED floodlight don't have lights mounted on the housing. The illuminants have to be mounted separately within max. 1m distance.






SKS / SGS

EMERGENCY ROUTE LIGHTING

Distance table SKS2101 for plane emergency routes. The luminaire distances are measured with the theoretical ceiling mount of the luminaire.

Mounting height (m)					
2,00	3,46	6,91	8,26	9,16	4,29
2,50	4,16	8,64	10,33	11,45	5,13
3,00	4,80	10,07	11,82	13,14	5,64
3,50	5,39	11,38	13,10	14,48	6,06
4,00	5,93	12,58	14,16	15,57	6,40
5,00	6,64	14,74	16,26	17,44	7,14
6,00	7,40	16,62	18,10	18,96	7,40
7,00	7,78	18,28	19,62	20,22	7,78
7,50	7,77	19,02	20,25	20,73	7,77
8,00	7,72	19,74	20,80	21,14	7,72
9,00	7,56	20,67	21,78	21,87	7,56
10,00	7,28	21,36	22,16	22,16	7,28
10,50	7,08	21,51	22,20	22,23	7,08
12,00	6,93	21,72	22,02	22,08	6,39
14,00	6,52	20,80	21,16	21,24	4,84
16,00	0,84	19,84	20,00	19,80	0,56

Distance table SGS1308 for plane emergency routes. The luminaire distances are measured with the theoretical ceiling mount of the luminaire.

Mounting height (m)					
2,00	4,10	9,23	9,47	10,09	4,29
2,50	5,13	11,54	11,84	12,61	5,36
3,00	6,15	13,85	14,21	15,13	6,43
3,50	7,18	16,16	16,57	17,66	7,51
4,00	8,20	18,47	18,94	20,18	8,58
5,00	9,40	22,60	23,04	24,34	10,26
6,00	10,82	25,68	25,80	26,70	10,82
7,00	11,20	27,94	28,00	28,72	11,64
7,50	11,55	28,98	29,01	29,61	12,00
8,00	11,86	29,96	29,98	30,48	12,32
9,00	12,39	31,77	31,74	32,04	12,84
10,00	12,80	33,20	33,16	33,40	13,28
10,50	12,96	33,78	33,75	34,02	13,44
12,00	13,32	35,34	35,37	35,67	13,80
14,00	13,52	36,92	37,00	37,36	14,00
16,00	13,44	38,08	38,20	38,60	13,92



Distance table SGS2501 / SGS2503 for plane emergency routes. The luminaire distances are measured with the theoretical ceiling mount of the luminaire.

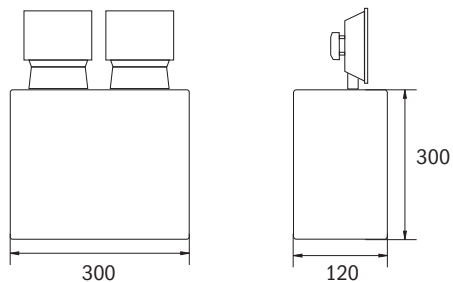
Mounting height (m)					
2,00	3,76	8,20	8,60	9,15	4,10
2,50	4,70	10,25	10,74	11,43	5,13
3,00	5,64	12,30	12,89	13,72	6,15
3,50	6,58	14,36	15,04	16,01	7,18
4,00	7,52	16,40	17,20	18,30	8,20
5,00	9,40	20,50	21,48	22,86	10,26
6,00	11,28	24,60	25,79	27,44	12,30
7,00	12,62	28,08	29,14	31,02	13,16
7,50	12,99	29,58	30,51	32,49	13,53
8,00	13,85	31,04	31,80	33,69	13,85
9,00	14,40	33,78	34,26	35,70	14,40
10,00	14,85	36,33	36,49	37,49	15,40
10,50	15,00	37,53	37,56	38,34	15,57
12,00	15,92	40,48	40,18	40,64	16,52
14,00	16,67	43,05	42,69	43,20	17,29
16,00	16,56	45,04	44,72	45,30	17,76

The distance table is based on the following parameters: Maintenance factor: 0.8; emergency lighting factor 1.00; Minimum illumination on the center line: 1.00 lux; Minimum illumination on the half width of the rescue route: 0.50 lux, uniformity on the midline maximum 40:1; Width of the rescue route 2.00m

For a light calculation adapted to the particular mounting situation and alignment of the spotlights, please use a software for the light calculation and the provided LDT files.

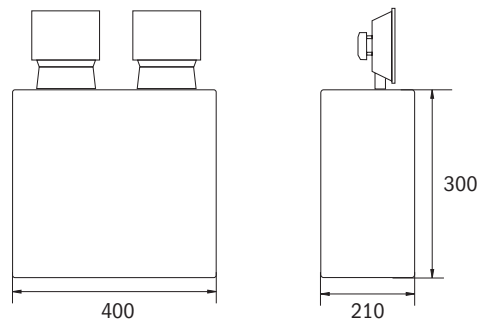
Wall mounting

Dimensions SKS 9Ah, 17Ah



All dimensions in mm

Dimensions SGS 28Ah, 40Ah

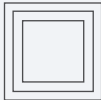




HX

HANDHELD SPOTLIGHT

IP54



230V AC
12V AC

FACTS

- Polycarbonate, impact-resistant, black
- IP54
- 3 Watt Power-LED, white
- Li-ion battery maintenance-free 7,4V
- Charging time max. 6 hrs.
- Operating time at 100% luminosity: 5 hrs at 25% luminosity: 10 hrs
- Charging voltage: 230V AC or 12V DC
- Weight: 655g

Rechargeable Signal Lamp with 3W Power-LED and magnetic socket for professional use.

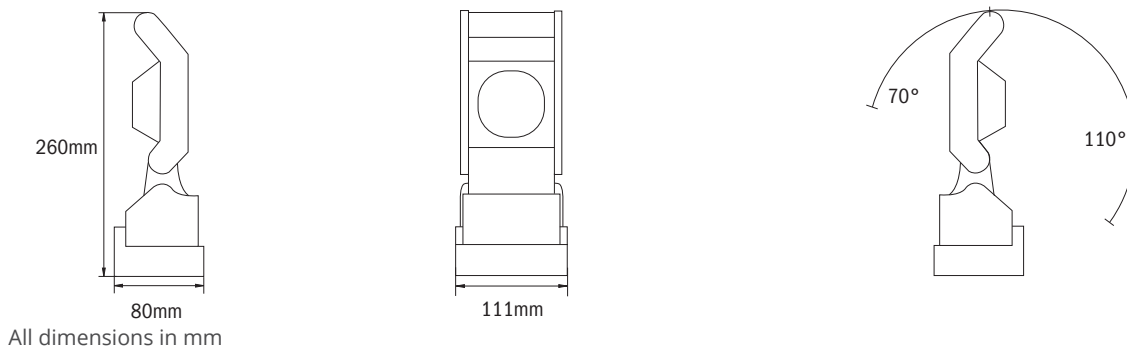
Upon mains failure the emergency function turns the light on automatically. Swiveling Lamp head with tilt angle 70° slew forward and 110° backward. Including flashing as well as dimmed mode for longer operation time. Wall bracket with charger function (230V supply).



Self-Contained luminaires			
LED 230V AC, 4h	HX	4 h	Li-Ion, 7,4V

An explosion proof version is available on request.

Dimensions



Distance to the handheld spotlight	luminosity (un-dimmed)
1m	5100 lux
2m	1100 lux
3m	525 lux
4m	415 lux
5m	320 lux
10m	100 lux



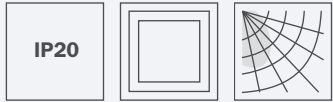
GENERAL-PURPOSE LIGHTING FOR SAFETY USE





QAW

GENERAL PURPOSE AND EMERGENCY LIGHTING



FACTS

- Metal housing with PMMA Cover
- IP20
- Wall or ceiling mounting
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°C

Round metal luminaire for general lighting and the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and EN 1838.

In mains operation the luminaire works with 26W / 1.600lm LED. Available for central power systems or as a self-contained emergency luminaire - on request with motion sensor.

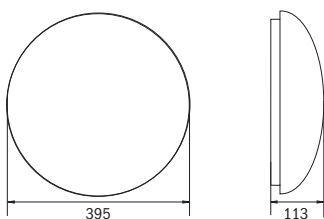
Self-Contained luminaires with SelfControl module						
LED, 1h, 230V AC	QAW021SC *	QAW021SC-SI*	1 h	3,7 W – 240 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	QAW003SC *	QAW003SC-SI*	3 h	4 W – 360 lm	4,8V/4.0Ah NiMH	
LED, 3h, 230V AC	QAW023SC *	QAW023SC-SI*	3 h	3,7 W – 240 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	QAW028SC *	QAW028SC-SI*	8 h	3,7 W – 110 lm	4,8V/2,0Ah NiMH	
Self-Contained luminaires with Wireless Professional module (switchable)						
LED, 1h, 230V AC	QAW021WL *	QAW021WL-SI*	1 h	4 W – 240 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	QAW023WL *	QAW023WL-SI*	3 h	4 W – 240 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	QAW028WL *	QAW028WL-SI*	3 h	4 W – 110 lm	4,8V/2,0Ah NiMH	
Luminaires for central battery systems						
LED, 230V AC/DC	QAW009 *	QAW009-SI*	CBS	26 W – 1600 lm		
Luminaires for central battery systems AC/DC incl. monitoring module						
LED, 230V AC/DC	QAW009ML *	QAW009ML-SI*	CBS	26 W – 1600 lm		
LED, 230V AC/DC	QAW029ML *	QAW029ML-SI*	CBS	4,6 W – 360 lm		

* Also available with an integrated HF motion sensor. It switches the luminaire only in mains operation. Add -BM at the end of the order number.



Wall or ceiling mounting

Dimensions QAW



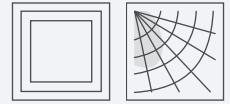
All dimensions in mm



QBW

GENERAL PURPOSE AND EMERGENCY LIGHTING

IP44












FACTS

- Plastic housing, white
- IP44
- 17W LED with 1.800lm luminous flux in mains mode
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°C

Round plastic luminaire for general lighting and illumination of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and DIN EN 1838.

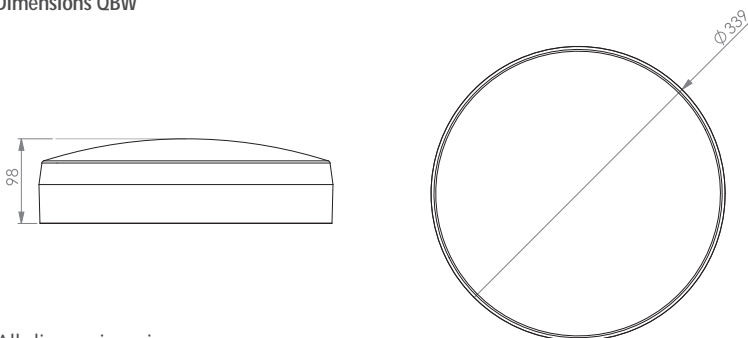
Robust and timeless design, suitable for indoor use. The emergency light LED can be unfolded tool-free during assembly e.g. for optimally illumination of the escape and rescue routes especially for wall mounting.

					
Self-Contained luminaires with SelfControl module					
LED, 1h, 230V AC	QBW021SC	1 h	19 W - 470 lm	4,8V/2,0Ah NiMH	
LED, 3h, 230V AC	QBW023SC	3 h	19 W - 235 lm	4,8V/2,0Ah NiMH	
LED, 8h, 230V AC	QBW028SC	8 h	19 W - 210 lm	4,8V/2,0Ah NiMH	
Luminaires for central battery systems					
LED, 230V AC/DC	QBW009	CBS	17 W - 1800 lm		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	QBW029ML	CBS	19 W - 470 lm		

Wall or ceiling mounting








Dimensions QBW



All dimensions in mm

Distance table QBW009 for plane emergency routes

Mounting height (m)					
2.00	4.63	11.32	11.28	11.23	4.60
2.50	5.79	14.15	14.10	14.04	5.75
3.00	6.95	16.99	16.92	16.85	6.90
3.50	7.71	18.90	18.82	18.75	7.66
4.00	8.13	20.00	19.92	19.85	8.07



QCW

GENERAL PURPOSE AND EMERGENCY LIGHTING



FACTS

- Zinc die-cast housing, white or anthracite
- IP54
- 17W LED with 1.600lm luminous flux in mains mode
- Self-Contained: -5° to +40°C
Central battery: -30° to +40°

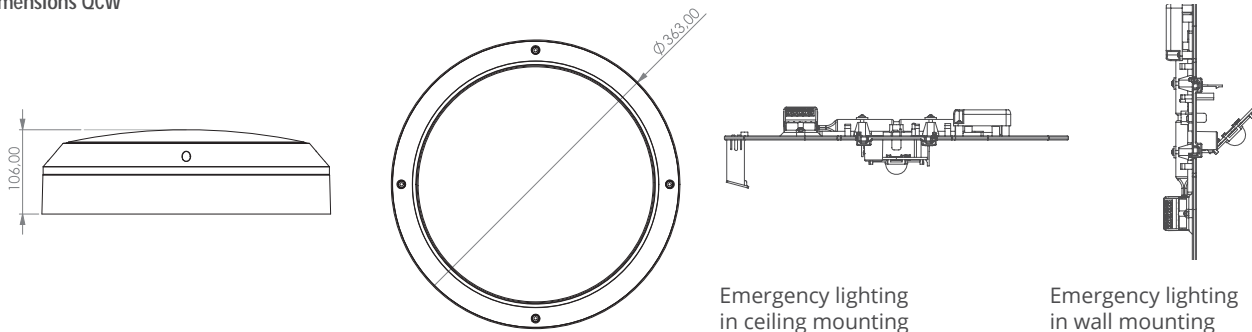
Round die-cast aluminum luminaire for general lighting and illumination of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and DIN EN 1838.

Robust and timeless design, suitable for indoor and outdoor use. The emergency light LED can be unfolded tool-free during assembly e.g. for optimally illumination of the escape and rescue routes especially for wall mounting.

Self-Contained luminaires with SelfControl module		Luminaires for central battery systems		Luminaires for central battery systems AC/DC incl. monitoring module	
LED, 1h, 230V AC	QCW021SC	QCW021SC-AZ	CBS	17 W - 1800 lm	
LED, 3h, 230V AC	QCW023SC	QCW023SC-AZ	CBS	17 W - 1800 lm	
LED, 8h, 230V AC	QCW028SC	QCW028SC-AZ	CBS	17 W - 1800 lm	
LED, 230V AC	QCW029ML	QCW029ML-AZ	CBS	19 W - 470 lm	ML

Wall or ceiling mounting

Dimensions QCW



All dimensions in mm

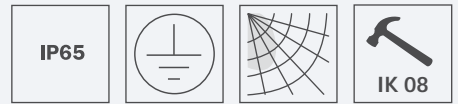
Distance table QCW009 for plane emergency routes

Mounting height (m)					
2.00	4.47	10.86	10.75	10.65	4.40
2.50	5.59	13.57	13.44	13.31	5.50
3.00	6.71	16.29	16.13	15.98	6.60
3.50	7.52	18.30	18.13	17.96	7.40
4.00	7.94	19.42	19.25	19.09	7.82



LFD

GENERAL PURPOSE AND EMERGENCY LIGHTING



FACTS

- Glass fiber reinforced polyester, grey
- Acrylic glass prismatic transparent
- IP65
- Wall or ceiling mounting
- -5°C to +40°C

Combined LED general and emergency luminaire for illuminating escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and DIN EN 1838.

The robust LED wall and ceiling luminaire made of glass fiber reinforced polyester for wet room applications is suitable for illuminating storage areas, car parks etc. In mains operation, the luminaire provides up to 7.000lm. External mounting brackets facilitate installation.

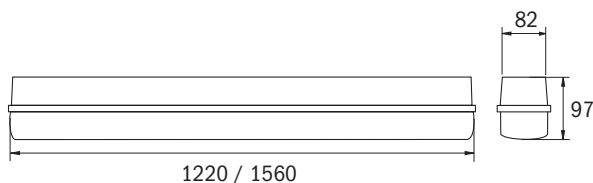
Self-Contained luminaires with SelfControl module					
LED, 3h, 230V AC	LFD15003SC-NW	3 h	55 W - 500 lm	3,2V/4,5Ah LiFeP04	
LED, 3h, 230V AC	LFD12003SC-NW	3 h	40 W - 500 lm	3,2V/4,5Ah LiFeP04	
Luminaires for central battery systems					
LED, 230V AC/DC	LFD12009-NW	CBS	38 W - 4500 lm		
LED, 230V AC/DC	LFD15009-NW	CBS	56 W - 7000 lm		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	LFD15009ML-NW	CBS	56 W - 7000 lm		
LED, 230V AC/DC	LFD12009ML-NW	CBS	38 W - 4500 lm		

Versions with 1h und 8h in development.



Wall or ceiling mounting

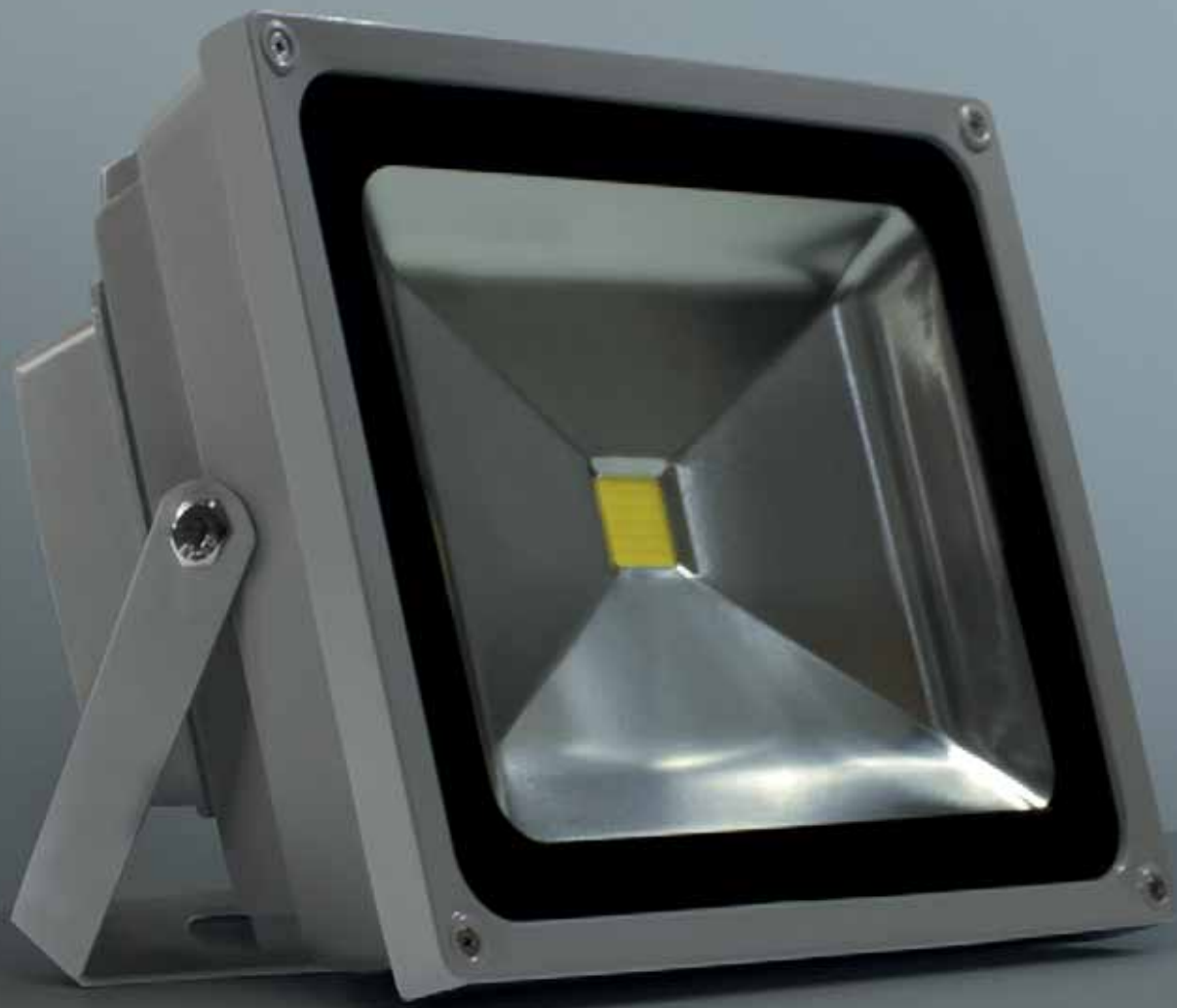
Dimensions LFD



All dimensions in mm

Distance table LFD15003SC for plane emergency routes (additional distance tables on our website)

Mounting height (m)					
2.00	4.32	10.66	10.16	9.66	4.00
2.50	4.70	11.68	11.16	10.64	4.35
3.00	4.99	12.54	12.01	11.47	4.64
3.50	5.23	13.27	12.72	12.17	4.86
4.00	5.40	13.89	13.34	12.78	5.04



FL

EMERGENCY ROUTE LIGHTING



FACTS

- Aluminium body
- LED 10W, 30W or 50W
- IP65
- -10°C to +35°C (10W / 30W)
- -25°C to +35°C (50W)
- Operation time 12h 75% ED S3

LED emergency luminaire for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and DIN EN 1838.

The floodlight is suitable for indoor and outdoor use due to its protection class of IP65 and the coated aluminum housing. The wide beam angle can easily illuminate large areas.

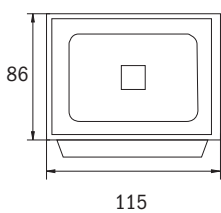


Luminaires for central battery systems

10W, 230V AC/DC	FL10NW	CBS	11,3 W - 900 lm
30W, 230V AC/DC	FL33NW	CBS	32,8 W - 2500 lm
50W, 230V AC/DC	FL55NW	CBS	54,7 W - 4200 lm

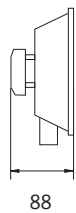


Wall or ceiling mounting

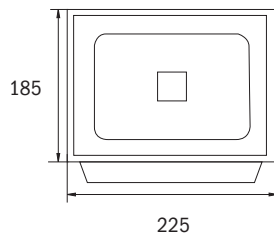


FL10

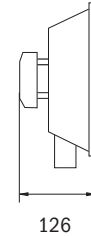
All dimensions in mm



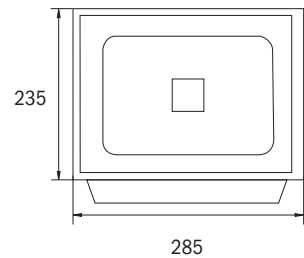
88



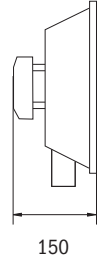
FL33



126



FL55



150

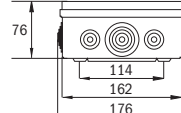
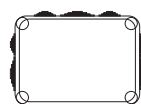
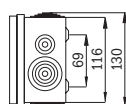
Distance table FL10 for plane emergency routes

Mounting height (m)					
2.00	3.46	6.91	8.26	9.16	4.29
3.00	4.80	10.07	11.82	13.14	5.64
4.00	5.93	12.58	14.16	15.57	6.40
5.00	6.64	14.74	16.26	17.44	7.14
6.00	7.40	16.62	18.10	18.96	7.40
7.00	7.78	18.28	19.62	20.22	7.78
8.00	7.72	19.74	20.80	21.14	7.72

Accessories



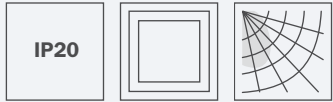
Dimensions MU05-BOX





ROED – CANTONE

GENERAL PURPOSE AND EMERGENCY LIGHTING



FACTS

- Zinc die-cast cover
- LED 9W
- IP20
- Cut-out ø 68mm
- 0°C to +40°C

LED emergency luminaire for the lighting of escape and rescue routes according to DIN EN 60598-1, DIN EN 60598-2-22 and DIN EN 1838.

The recessed mounted Spotlight combines LED general lighting with emergency lighting electronics to ensure the illumination in case of general mains failure. For mounting in suspended ceilings with 68mm cut-out.



Self-Contained luminaires with SelfControl module					
LED, 3h, 230V AC	ROED0901SC	3 h	10,2 W - lm	4,8V/4.0Ah NiMH	
Luminaires for central battery systems					
LED, 230V AC/DC	ROED0901	CBS	10,2 W - lm		
Luminaires for central battery systems AC/DC incl. monitoring module					
LED, 230V AC/DC	ROED0901ML	CBS	10,2 W - lm		

Distance table ROED0901 and ROED0902 for plane emergency routes

Mounting height (m)					
2.00	2.17	4.79	4.92	5.03	2.23
2.50	2.71	5.99	6.15	6.29	2.78
3.00	3.25	7.19	7.38	7.55	3.34
3.50	3.80	8.38	8.61	8.81	3.90
4.00	4.34	9.58	9.84	10.07	4.46

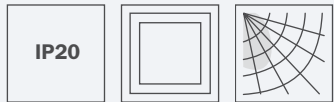
Distance table ROED0901SC and ROED0902SC for plane emergency routes

Mounting height (m)					
2.00	2.19	4.90	4.74	4.62	2.06
2.50	2.74	6.13	5.93	5.78	2.58
3.00	3.22	7.18	7.01	6.83	3.03
3.50	3.53	8.02	7.82	7.60	3.37
4.00	3.85	8.77	8.54	8.27	3.69



ROPA – PREMIUM PANEL

GENERAL PURPOSE AND EMERGENCY LIGHTING



FACTS

- LED 54W
- IP20
- For 620mm grid ceilings
(For 600mm grid ceilings on request)
- 0°C to +40°C

The Premium LED panel for suspended ceilings offers you the highest brightness of approx. 4,500 lm at the best price. That's about 135 lm per watt!

The cover is made of PMMA plastic and therefore UV resistant which prevents yellowing.

The Premium LED Panel cleverly combines energy-saving general lighting with the prescribed emergency lighting.



Self-Contained luminaires with SelfControl module				
LED, 3h, 230V AC	ROPA4201SC-WW	3 h	54 W - lm	
Luminaires for central battery systems				
LED, 230V AC/DC	ROPA4201	CBS	54 W - lm	
Luminaires for central battery systems AC/DC incl. monitoring module				
LED, 230V AC/DC	ROPA4201ML	CBS	54 W - lm	

Distance table ROPA4201SC for plane emergency routes

Mounting height (m)					
2.00	3.80	8.73	4.64	7.79	3.84
2.50	4.13	10.22	5.11	8.49	4.17
3.00	4.38	10.98	11.05	11.12	4.44
3.50	4.57	11.63	11.71	11.78	4.63
4.00	4.71	12.17	12.25	12.33	4.77

Wireless Basic® & Lightlinx®

CONTROL AND MONITOR EMERGENCY LIGHTS COMFORTABLE BY APP



Wireless Basic® connects up to 50(*) self-contained luminaires in a small emergency lighting system via Bluetooth Low Energy (BLE) to your Android Smartphone or Tablet. The luminaires communicate via BLE with each other and build a closed, safe Bluetooth Mesh Network. Each exit sign or emergency luminaire equipped with a **Wireless Basic**® module will report its current status and the results of the legally required regular tests to the Bluetooth-requesting mobile device. In addition, the results of the tests will be stored safely in the cloud based RP-Onlineportal LIGHTLINX® (www.Lightlinx.com).

The installation of the luminaires is done quick and easy, because there are no additional wires needed thanks to the Bluetooth radio modules.

In the **Wireless Basic**® app luminaires can be grouped and assigned to projects. The lights can also be switched or a test triggered via the Bluetooth interface.

As with the Wireless Professional, the individual luminaires also communicate with each other during the **Wireless Basic**® monitoring, thus increasing the range of the Bluetooth signal. If a mobile device is within range of a luminaire of a system, the data of all associated luminaires can be transmitted. This minimizes testing effort.

The wireless connection of the **Wireless Basic**® luminaires via BLE offers several advantages for smaller emergency lighting systems with up to 50 individual luminaires: minimal installation and maintenance effort, omission of a central control unit, cost-effective monitoring via app, secure storage of data and test protocols in the cloud.

* - Depending on the country of installation, further restrictions may be imposed by local regulations.

LIGHTLINX® 1 Error , 0 Warning , 1 Info

Startseite Ordner und Projekte verwalten APTTest Techniken Abmelden Deutsch

Alle

Projekte nach Status filtern: Alle Ok Info Warnung Fehler

Status	Projektname	Projektzahl	Stadt	Zuletzt aktualisiert	Typ
🔴	Demo Projekt	63110	Rodgau	24.01.2020, 16:57:34	WirelessBasic
🟢	Freies Project 1	63110	Rodgau	24.01.2020, 16:57:34	WirelessBasic
🟢	Freies Project 2	63110	Rodgau	24.01.2020, 16:57:34	WirelessBasic
🟢	Freies Project 3	63110	Rodgau	24.01.2020, 16:57:34	WirelessBasic
🟡	Test Project	63110	Rodgau	24.01.2020, 16:57:34	WirelessBasic
🟢	Test Project II	63110	Rodgau	24.01.2020, 16:57:34	WirelessBasic

The **Lightlinx®** Cloud gives the operator of emergency lighting systems an overview of the various installed systems and their status.

In the event of a malfunction, it is possible to react quickly and efficiently to ensure the operation of the system.

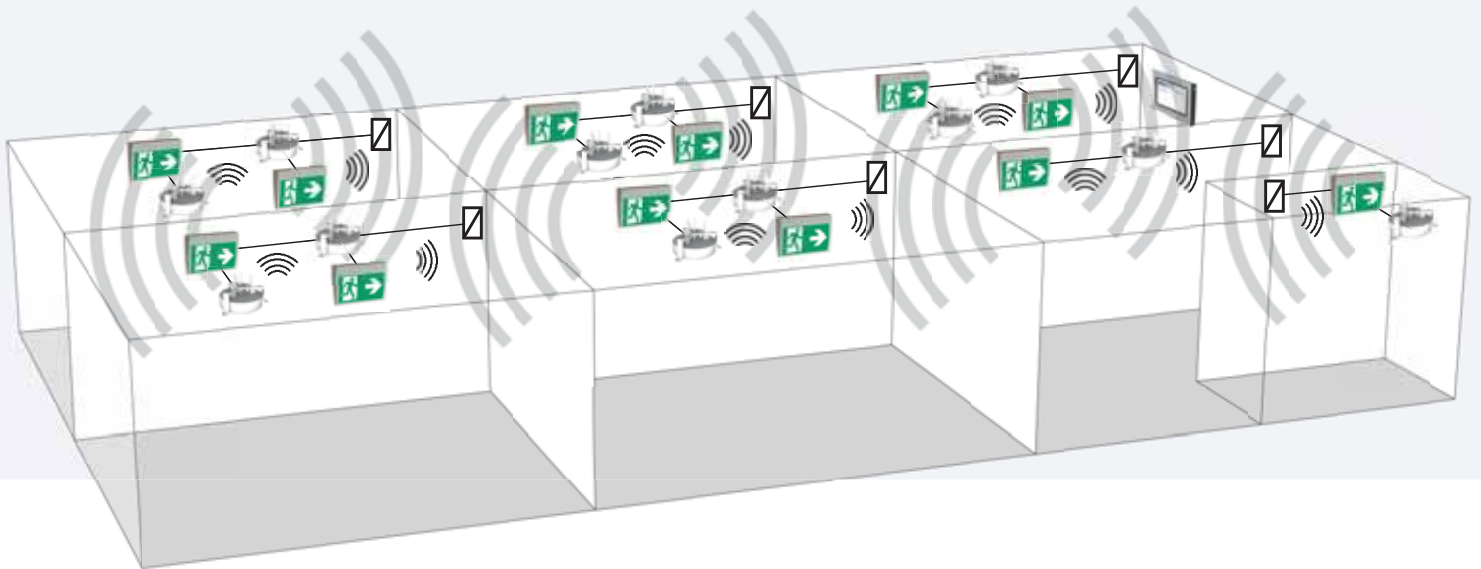
Wireless Basic® is currently available for luminaires of the following types:

- ASMU
- EA
- IL
- KM
- KMB
- KS
- ZAW

Further luminaire types are in preparation.

Wireless Professional

WIRELESS LUMINAIRE MONITORING



Next Generation luminaire monitoring and control

With the new Wireless Professional the control and monitoring of self-contained emergency and security lighting is a snap! To install the lights the only thing necessary is a connection to a normal power supply with 230V AC. The subsequent installation of the wireless system for monitoring and controlling the luminaires is taking care of itself.

Each luminaire equipped with wireless professional may connect to other luminaires or the central unit on the European approved frequency of 868 MHz and report its own and the status of others through the system registered luminaires. The indoor range sums up to at least 30m. Thanks to the radio frequency of 868 MHz even a reinforced concrete ceiling between floors is no insurmountable barrier.

The wireless system can include 250 devices (sum of all luminaires, repeater and I/O boxes connected to the system) per central unit as standard and is expandable up to 1,000. Furthermore 5 timer-functions and a networked system are possible by standard. The extent of functions can be expanded afterwards with a code within the software.

The radio system is organizing itself ad-hoc. Each Wireless Professional luminaire automatically contacts all reachable nodes: other luminaires, repeaters or the central control unit itself. By networking of several central units the 1,000 luminaire limit can be exceeded.

The software for the central unit is available in several languages, allows the storage of building maps and can be installed on an existing Windows system. The registered luminaires can be placed on the digital floor map and appear with their current status.

Many of the available Wireless Professional luminaires can be switched by radio. A timetable stored in the central unit makes it possible to put the emergency lights in an unused building at the weekend in standby mode. Thus, the Wireless Professional saves energy and even the security is guaranteed at all times.

Wireless Professional lights are very inconspicuous. Even in stainless steel or aluminum cases the radio technology works without any visible antennas.



Wireless Professional - Advantages at a glance

- Easy installation – only 230V AC needed
- Self-organizing ad-hoc wireless system
- Range between luminaires guaranteed 30m inside buildings (even through a concrete ceiling)
- Europe conform frequency of 868 MHz
- Up to 4 times higher range than 2.4 GHz-Systems
- Resistant to DECT, Bluetooth and WLAN signals
- 250 devices per system (expandable in steps of 250 up to 1,000 per system)
- 5 Timerfunctions (expandable in steps of 10)
- 1 networking system (expandable in steps of 5)
- Multi-language easy to use software
- No visible antenna on the luminaires
- Many luminaires can be switched via timetable
- Status and error reports are delivered to the system via E-Mail administrator
- Log for daily/weekly function test stored in the central unit
- Capacity test (also in groups) of the battery for the whole operating time (usually 3h) possible
- Repeater for range extension
- Switching of luminaires between non-maintained and maintained mode by software
- No faulty connection – no BUS-line
- Polarised
- Monitoring system according to EN 62034 Type ER



WLZENT 01

The Wireless Professional control centre developed for industrial use is based on a Linux Embedded PC. The functional, service-friendly wall-mounted housing with touch screen can be installed directly at a permanently manned location. Thus, all functions and system information of your Wireless Professional installation are available at your fingertips.

Wireless Professional

WIRELESS LUMINAIRE MONITORING

Wireless Professional central - available versions

Version	Order number	Scope of delivery
USB-Coordinator (1x needed per system)	WLKOR3	USB-Coordinator incl. Wireless Professional Software for connection to an existing Windows®-System; pre-programmed for up to 250 luminaires
Netbook	WLTOUCH7	Convertible PC with USB Coordinator and Wireless Professional Software for up to 250 luminaires
System extension	WLCODE-250	Software license for 250 additional luminaires
System extension Timer	WLCODE-T10	Software license for additional 10 Timerfunctions per system
System extension networking	WLCODE-S5	Software license for additional 5 networking systems
Wall housing for Netbook	WLWGTOUCH7	Lockable wall housing
Repeater	WLREP1-IP20	Repeater for range extension in areas with bad reception
Repeater	WLREP2-IP54	Repeater for range extension in areas with bad reception
Wireless Embedded PC	WLCPC1.OK	Wireless Professional Compact PC, DIN rail mounting 5TE Embedded, incl. WL Software, mains supply, without USB-Coordinator (WLCPC1 can assign 250 luminaires)



Wireless Embedded PC

Wireless IO-Box



FACTS

- 1 potential-free combined fault indication contact
- 2 potential-free programmable contacts
- 2 programmable galvanically isolated inputs
- Reverse polarity tolerant inputs
- Special fire alarm function integrated
- 24V DC auxiliary voltage output

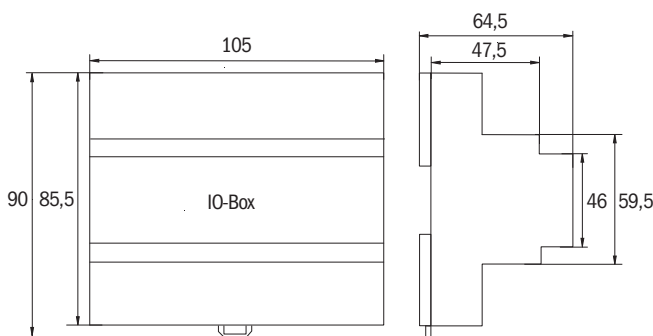
Art.-No.: WLIO32

The IO-box is an interface module of the automatic test and control system for emergency lighting Wireless Professional, whose inputs and outputs signalise states and conditions of and to the test and control system. The IO-box has 3 outputs in form of potential-free changeover contacts, of which contact 1 is used for a system disturbance combined fault indication. The other two contacts can be programmed by means of the Wireless Professional software, in order to signalise various system states such as last test - failure, and operating status or switch single luminaires or groups. An LED is allocated to each output relay which signalises whether the relay is triggered.

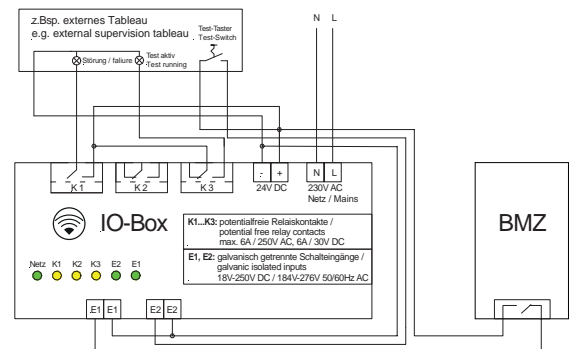
Furthermore, there are 2 galvanically isolated switch inputs to integrate control and/or sensor signals of e.g. an external test pushbutton or a key switch. An LED is allocated to each input to signalize that a switch voltage is applied to it. The IO-box has an auxiliary voltage output which provides an auxiliary voltage that can be used to energize the inputs. The auxiliary voltage can be used as shown in the connection example.

The IO-box is designed for mounting on a hat rail in a switching cabinet. The information transfer from the IO-box to the Wireless Professional centre is wireless. IO Box is able to switch luminaires regardless of the central unit.

Dimensions and connection example



All dimensions in mm

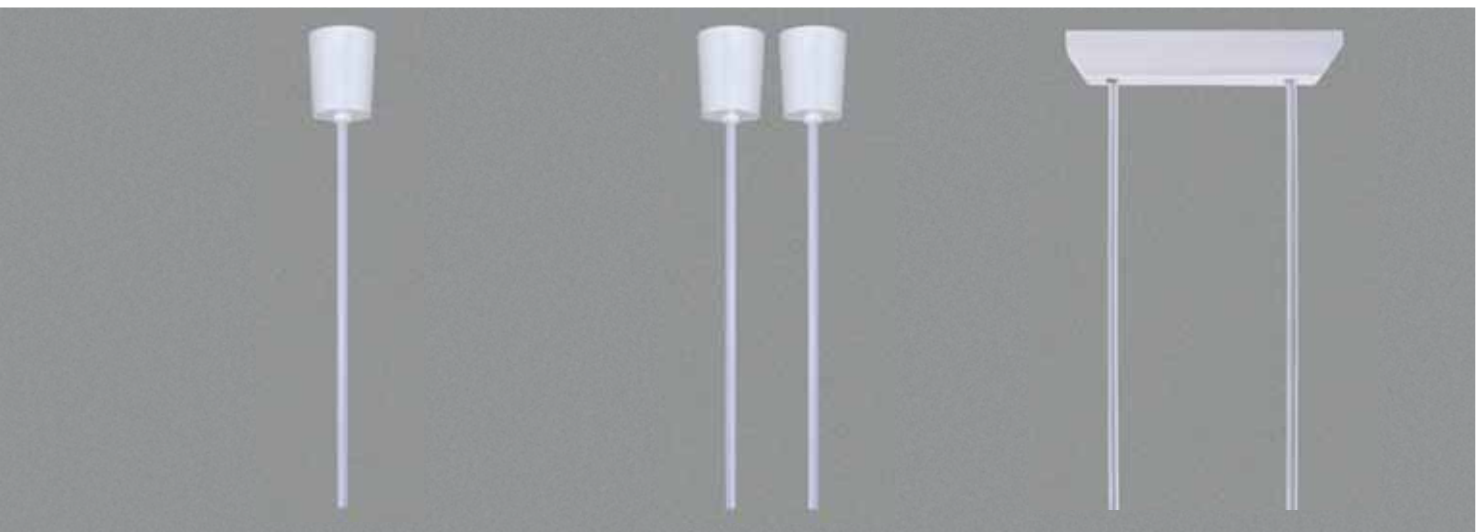


Accessories

Name	1PW	1PV	2PW	2PV	2DW	2DS	DSA / DSA2 / DSA3 / DSA4
Colour	white /	chrom	white	chrom	white	silber	silber
Standard length	50 cm	50 cm	50 cm	50 cm	50 cm	50 cm	1,5 m / 3m / 5m / 8m
Optional length	1 m / 2m	1 m / 2m	1 m / 2m	1 m / 2m	1 m / 2m	1 m / 2m	-
Material	Stahlrohr	Stahlrohr	Stahlrohr	Stahlrohr	Stahlrohr	Stahlrohr	Stahlseil
Suitable for	LI, KT, WK, WG, WX,	LI, KT, WK, WG, WX,	LM, LX, LS, RM, RX, KB, KX, KS, KM, KC, KD, KL, KW, PF, KE	LM, LX, LS, RM, RX, KB, KX, KS, KM, KC, KD, KL, KW, PF, KE, AS	LM, LX, LS, RM, RX, KB, KX, KS, KM, KC, KD, KL, KW, PF, KE	LM, LX, LS, RM, RX, KB, KX, KS, KM, KC, KD, KL, KW, PF, KE	LI, LM, LX, LS, RI, RM, RX, KB, KX, KS, KT, KM, KC, KD, KL, KW, PF, KE, AS

Please specify: Art.-No. -EB: Self-Contained 4-pole / - AC: 3-pole, wired

Pendulum / Cord suspension



1PW

2PW

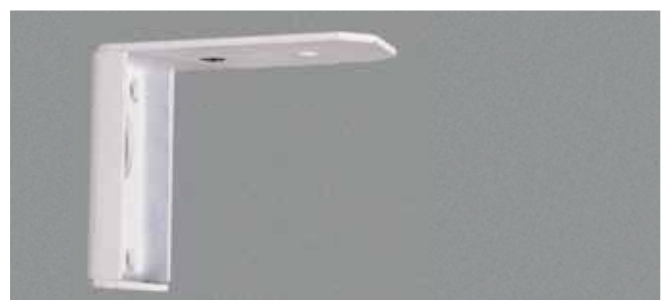
2DW /2DS

Wall bracket

Wall bracket



AWM AWX

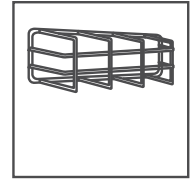


AWM suitable for:
RM, RI, LM, ASU, KT

AWKSU suitable for:
KS, KM, KT

Ball protection

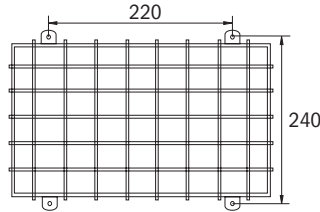
STEEL, POWDER COATED



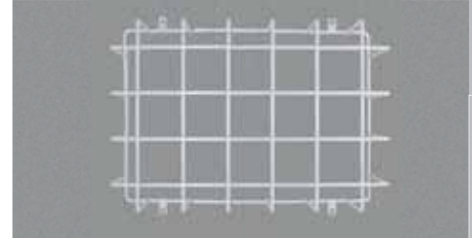
Suitable for luminaire types:
KD / KM / KS / LI / LM / SD / VM

Dimensions:
B x H x T 320 x 220 x 120 mm

Drilling distances:



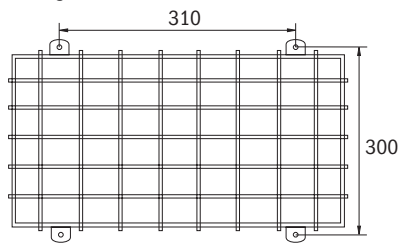
BALL1



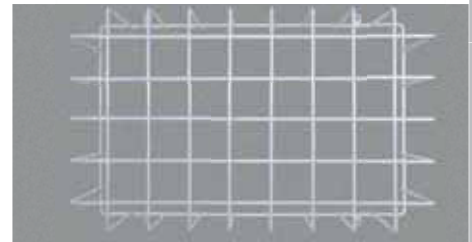
Suitable for luminaire types:
KC / KL / LX / PF

Drilling distances:
Dimensions:
B x H x T 450 x 280 x 125 mm

Drilling distances:



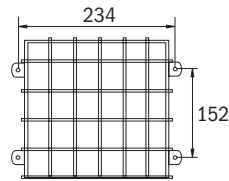
BALL2



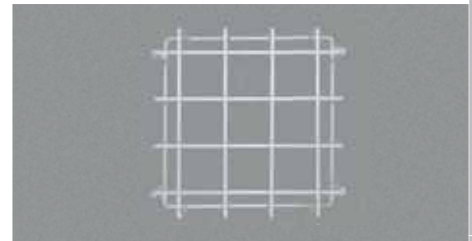
Suitable for luminaire types:
IL, KI, VI, RI, KT, DAQ, DAR

Dimensions:
B x H x T 200 x 200 x 80 mm

Drilling distances:



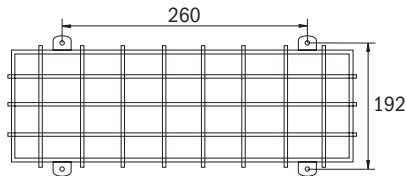
BALL3



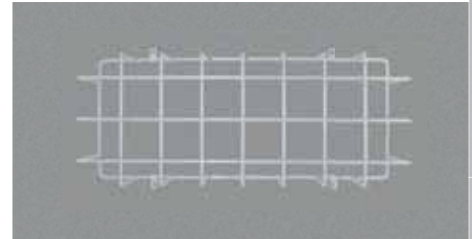
Suitable for luminaire types:
KW

Dimensions:
B x H x T 420 x 170 x 170 mm

Drilling distances:



BKW





BALL PROTECTION

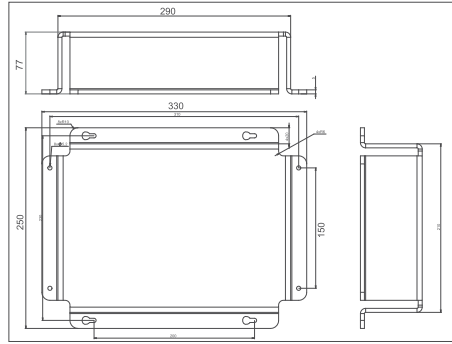
POLYCARBONATE, TRANSPARENT

Polycarbonate ball protection

290 x 210 x 77mm

Art.-No. BALLPLX-AM

Suitable for luminaires of types:
AM

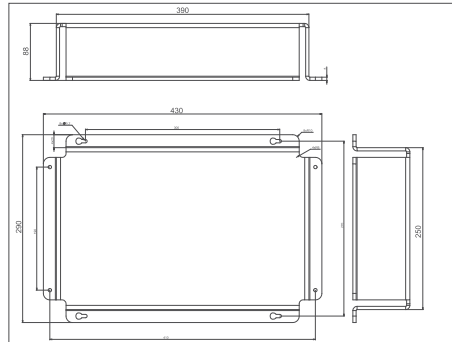


Polycarbonate ball protection

390 x 250 x 88mm

Art.-No. BALLPLX-AX

Suitable for luminaires of types:
AX, KC

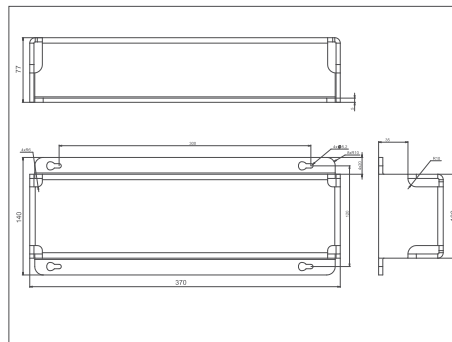


Polycarbonate ball protection

370 x 140 x 77mm

Art.-No. BALLPLX-KBU

Suitable for luminaires of types:
KBU

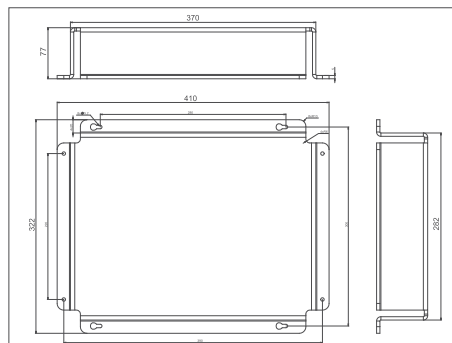


Polycarbonate ball protection

370 x 282 x 77mm

Art.-No. BALLPLX-KBS

Suitable for luminaires of types:
KB incl. KBG (KBM / KBK)

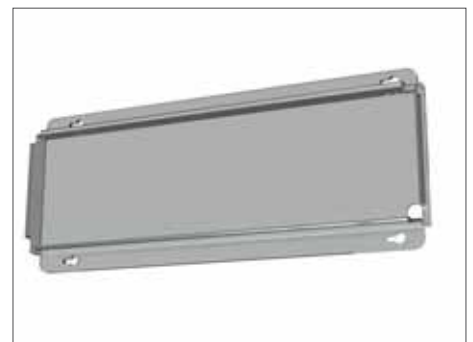
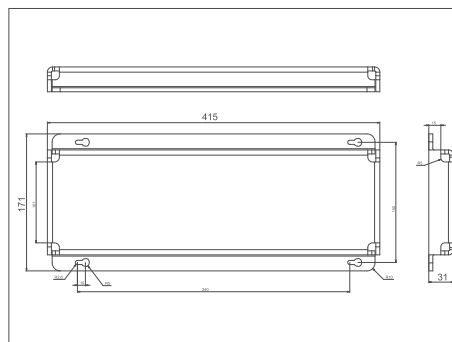


Polycarbonate ball protection

415 x 171 x 31mm

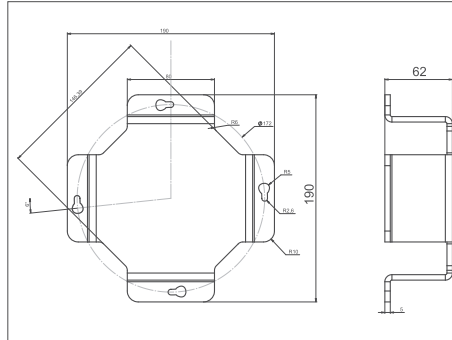
Art.-No. BALLPLX-KBE

Suitable for luminaires of types:
KBU in Recessed frame KBE



Ball protection

POLYCARBONAT, TRANSPARENT



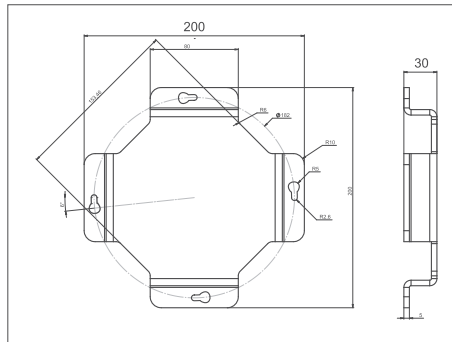
Polycarbonate ball protection

190 x 190 x 62mm

Art.-No. BALLPLX-ILD

Suitable for luminaires of types:

ILDx
EAR / EAQ



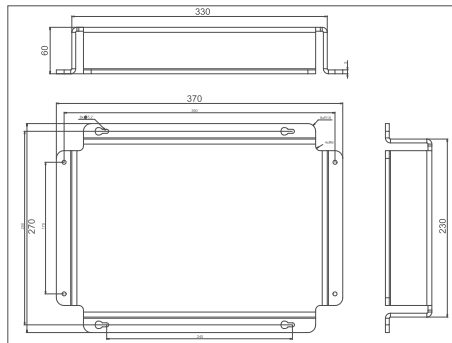
Polycarbonate ball protection

200 x 200 x 30mm

Art.-No. BALLPLX-ILE

Suitable for luminaires of types:

ILEx
EE



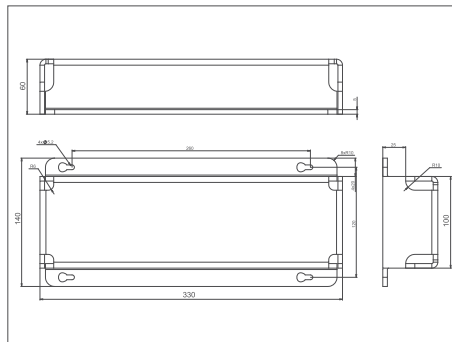
Polycarbonate ball protection

330 x 230 x 60mm

Art.-No. BALLPLX-KMU

Suitable for luminaires of types:

KMU, KSU, KSC



Polycarbonate ball protection

330 x 100 x 60mm

Art.-No. BALLPLX-KMB

Suitable for luminaires of types:

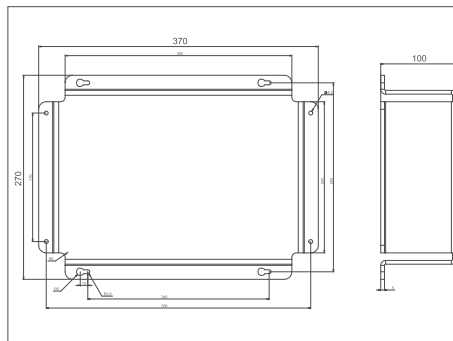
KMB

Polycarbonate ball protection

370 x 270 x 100mm

Art.-No. BALLPLX-KD

Suitable for luminaires of types:
KD

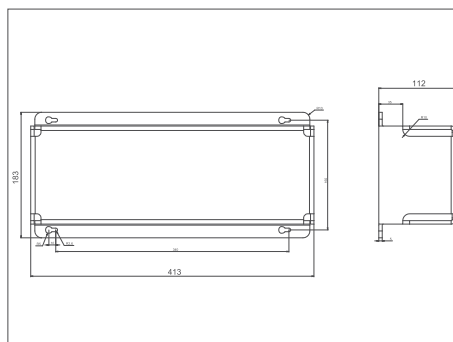


Polycarbonate ball protection

413 x 183 x 112mm

Art.-No. BALLPLX-KWW

Suitable for luminaires of types:
KW



Mounting recommendation

Stone or concrete wall: Dowel 8mm, Screw 5,5mm

Wood: Screw 5,5 x 35mm

MLED 500 / NT24

EMERGENCY LIGHT MODULES CENTRAL BATTERY SYSTEMS



The **MLED500** is an electronic switching power supply with integrated individual light monitoring, light management function, mains monitoring, dimmer and flashing functions. All switching modes are possible. The mains monitor allows the operation of connected luminaires in non-maintained mode in a maintained circuit. In case of a mains failure all lights are switched on automatically. LED illuminants with a max. output of 8W can be used as consumers.

The MLED500 is also capable of dimming the lights to 30% or 50% in mains operation and to execute a flashing function in emergency operation.

The MLED500 is suitable for use with emergency lighting systems of type: myControl plus, microControl plus, miniControl plus and multiControl plus.



NT24: Switch-mode power supply up to 5W for LED lights

Set-up of various output voltages (3.3V/5V/12V/24V) possible.

The NT24 power supply can be used in conjunction with a monitoring module for use in the following emergency light system types: my-, micro-, mini-, midi and multiControl. The respective output voltage is set via the switch.

LPU / LEM / LEX

SELF-CONTAINED EMERGENCY LIGHT MODULES

The **LPU** is a microprocessor-controlled self-contained emergency lighting unit for LED luminaires with 1-5W ERT modules, 5 to 11-fold low-power or 12V LED Strip LED modules. The operating time can be chosen between 1, 3 or 8 hours - depending on the capacity of the battery. In a 3 - or 8-hour operation, the lamp may operate in dimmed mode. The LED supply is equipped with connector for up to two 4.8 V batteries.

LPU meets the requirements acc. to EN 60598-2-22 and DIN VDE 0108 (deep discharge, lock-out and switching). In addition, the LPU is equipped with Self-Control (SC) function. All switching modes (including dimming and flashing function) are possible. Blocking of emergency operation is possible via the built-in Ff contact by 6-12V DC.



The **LEM** is a self-contained emergency lighting module intended for use on LED lights with 1x1W ERT or 8 to 11-fold low power LED strips.

externally connected test button (adhesive pad). A charge indicator LED is also integrated into this pad. This accurately displays the battery charge. Expandable with SELF-CONTROL, BUS-CONTROL and Wireless Professional.



The technical configuration of the LEM complies with EN 60598-2-22 and DIN VDE 0108 (deep discharge protection, restart interlock and switch-over device). A functionality test is possible at any time with the

The **LEX** (LED supply module) is intended for use with LED lights with a max. 4W output (e.g. 12V LED disc or LED strip). The technical configuration of the LEX complies with requirements per DIN EN 60598-2-22 and DIN VDE 0108 (deep discharge protection, restart interlock and switch-over device).

The LED lights that are connected to the LEX can be operated as switched lights, maintained lights or as non-maintained lights. It is possible to operate the connected lights whilst dimmed in maintained operation via the integrated cinema switching. The light intensity here equates to approx. 12.5% of the standard light intensity.



DESIGN LUMINAIRES

DYNAMIC LUMINAIRES

UNIVERSAL LUMINAIRES

INDUSTRIAL LUMINAIRES

GENERAL LIGHTING WITH EMERGENCY LIGHT

WIRELESS MONITORING

ACCESSORIES

MODULES

WRLED 011 / 013 / 018

SELF-CONTAINED EMERGENCY LIGHT MODULE FOR LED LUMINAIRES



LED emergency light device according to EN 62386, EN 61347-2-7, 2-13, EN 62384, EN 60598-2-22, EN 62034

The universal emergency inlet for LED consumer with constant current supply. The connection is made in the „parallel operation“ for LED drivers and supplies the light in dimmed mode when mains supply fails.

Technical data

Mains voltage:	220 – 240 V
Mains frequency:	50 / 60 Hz
Power consumption in non-maintained mode:	max. 3,5 VA (1 h emergency operation) max. 4 VA (3 h and 8 h emergency operation)
Nominal operating time:	1 h, 3 h or 8 h
Batterys:	LiFePO ₄ , 3,2 V / 4,5 Ah
Min. ambient temperature:	5 °C
Max. ambient temperature:	50 °C
Battery charging time:	24 h (self-test: 48 h)
Protection class:	I and II
IP code:	IP20
Certification:	CENELEC
Complying with:	EN 61347-2-7; EN 60598-2-22
Self-test complying with:	EN 62034
Suitable for systems complying with:	DIN 0108 / EN 50172
Plastic housing:	polycarbonate (glow wire test: 850 °C)

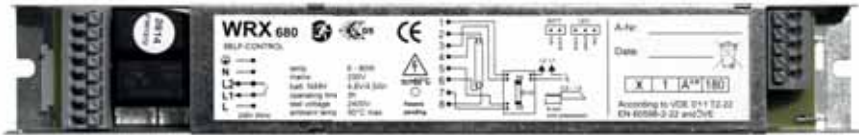
Conditions:

In order to use the WRLED013SC emergency lighting unit in an LED luminaire, the following conditions have to be fulfilled:

1. It is possible to supply direct current (DC) to the LED array using only two wires. This means that no other signal or voltage are needed by the LED array to emit light.
2. The two wires of the LED array must be accessible.
3. If the LED driver is a constant voltage source (usually 12V, 24V or 48V), the rated power supplied by the LED driver in mains operation must be higher than the power supplied by the emergency lighting unit in emergency operation.
4. The LED array current during the luminaire's mains operation must not exceed 2,5 A.

WRX680

EMERGENCY LIGHTING INVERTER FOR FLUORESCENT LAMPS (T5/T8)



Universal self-contained Emergency Lighting Inverter with automatic self testing operation complying with EN62034 for all 4-pin fluorescent lamps from 6 to 80 Watt. Suitable for non-maintained or maintained operation with all electronic and conventional ballasts.

The inverters include an automatic self testing facility. Every seven days the units will automatically initiate a self test by switching on the emergency lamp(s) for 2 minutes to prove correct functioning of the lamp(s) and battery. Additionally every 50 weeks from the unit being installed a full rated duration test will be performed.

- Compact dimensions - (21mm high) and very low heat dissipation.
- Battery charging - As soon as the batteries are charged, the charging operation will be controlled cyclically by a microprocessor. With this the life cycle of the NiMH-Batterys will be prolonged about 30%.
- 5 pole technology - The lamp is fully isolated from the electronic ballast in emergency operation (4-pole relay). Additionally the mains supply of the electronic ballast is also cut during emergency (1-pole relay). Due to microprocessor control of all the relay timing, the unit is compatible to all types of electronic ballast (1-up to 4 lamps ballasts).
- Full compliance with EMC requirements in emergency operation
- Complete isolation from the mains during emergency means the units comply with the EMC regulation in emergency operation as well as in mains operation.
- Can not be used for lamps with integrated starter.

Version	Order number	Operation time	Illuminant	Battery
Self-Contained luminaires with SelfControl module				
WRX680, 3h	WRX 680	3h	-	4,8V / 5,0 Ah

Model:	WRX680	Illuminant:	Illuminant rating:
Operating time:	3h	T8	15-18-32-36-58-70W
Battery:	4,8V 5Ah NiMH	T5 FH	14-21-28-35W
Battery dimensions:	(2 Sticks) Länge: je 100 mm Ø 25 mm	T5 FQ	24-39-49-54-80W
Mains voltage:	230-240V 50-60Hz	T5	6-8-13W
Permissible temperature:	Ta = 0°C ~ + 50°C	TR 16	„Circle“ 22-40-55-60W
Protection class:	I	TR 26	„Circle“ 22-32-40W
Short circuit protection:	ja	TC-L/TC-F	18-24-36-40-55W
Dimensions:	LxBxH 210x31,5x21,5 mm	TC-DEL	10-13-18-26W
Fixing centers:	206 mm	TC-TEL	18-26-32W (42W PL-T Xtra by Philips)
Approved to:	EN 61347-1 EN 61347-2-7	TC-SEL	7-9-11W
Approval:	ENEC 05	TC-DDEL (2D)	10-16-21-28W

All lamps using amalgam technology are not recommended for emergency lighting. They should all be tested before being used. The lifetime of all lamps is limited in emergency mode to about 25 hours. This list is only given as an indication. No guarantee can be given for any malfunction or shortened lifetime of lamps or lamp types. All applications must be tested prior to installation. This list can be changed at any time without any prior warning.

GENERAL INFORMATION
DESIGN LUMINAIRES
DYNAMIC LUMINAIRES
UNIVERSAL LUMINAIRES
INDUSTRIAL LUMINAIRES
GENERAL LIGHTING WITH EMERGENCY LIGHT
WIRELESS MONITORING
ACCESSORIES
MODULES



NVG

SELF-CONTAINED POWER SUPPLY

IP54**Ausgang
230V/50Hz**

FACTS

- Steelsheet or PC housing
- IP54
- Wall mounting
- -5°C to +40°C

Emergency power supply with output voltage: 230V / AC by an inverter. 2-wire-system up to max. 500 m distance. Single and double supply luminaire with the available illuminants: florescent lamps, filament lamps and LED at 100% luminous flux.

Technical specifications according to DIN EN 60598-2-22. With deep discharge protection and integrated switch-on-lock, treshold switch. The Power is provided by maintenance-free long-life and gas-proof Pb rechargeable batteries. The full electronic and time guided charging extends the battery life. The operational state and fails are shown by the LED function monitor. It is possible to manually activate a test via the build in test switch (not on WL).
















SELF-CONTAINED POWER SUPPLY

Order number	Housing	Dimensions	Output (incl. 20% Reserve)			Ingress Protection	Protection class	Battery	
			1h	3h	8h				
Self-Contained supply incl. Self-Control module									
NVKS203SC	Stahlblech	120 x 300 x 300 mm	45 W	20 W	9 W	IP54	1	OGIV1290LP, AGM Battery 12V 9Ah	
NVKS403SC	Stahlblech	120 x 300 x 300 mm	105 W	40 W	-	IP54	1	OGIV12170LP, AGM Battery 12V 17Ah	
NVGS653SC	Stahlblech	210 x 400 x 500 mm	130 W	65 W	30 W	IP54	1	OGIV12280L, AGM Battery 12V 28Ah	
NVGS903SC	Stahlblech	210 x 400 x 500 mm	210 W	90 W	-	IP54	1	OGIV12400LP, AGM Battery 12V 40Ah	
NVGK203SC	PC	230 x 265 x 540 mm	45 W	20 W	9 W	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVGK403SC	PC	230 x 265 x 540 mm	105 W	40 W	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK653SC	PC	230 x 265 x 540 mm	130 W	65 W	30 W	IP54	2	OGIV12280L, AGM Battery 12V 28Ah	
NVGK903SC	PC	230 x 265 x 540 mm	210 W	90 W	-	IP54	2	OGIV12400LP, AGM Battery 12V 40Ah	
Self-Contained supply incl. Wireless Professional module									
NVKK451WL	PC	120 x 300 x 300 mm	45 W	-	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVGK451WL	PC	230 x 265 x 540 mm	45 W	-	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVKK601WL	PC	120 x 300 x 300 mm	60 W	-	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK1051WL	PC	185 x 280 x 570 mm	105 W	-	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK1301WL	PC	230 x 265 x 540 mm	130 W	-	-	IP54	2	OGIV12280L, AGM Battery 12V 28Ah	
NVGK2101WL	PC	230 x 265 x 540 mm	210 W	-	-	IP54	2	OGIV12400LP, AGM Battery 12V 40Ah	
NVKK203WL	PC	120 x 300 x 300 mm	-	20 W	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVGK203WL	PC	230 x 265 x 540 mm	-	20 W	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVKK403WL	PC	120 x 300 x 300 mm	-	40 W	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK403WL	PC	230 x 265 x 540 mm	-	40 W	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK653WL	PC	230 x 265 x 540 mm	-	65 W	-	IP54	2	OGIV12280L, AGM Battery 12V 28Ah	
NVGK903WL	PC	230 x 265 x 540 mm	-	90 W	-	IP54	2	OGIV12400LP, AGM Battery 12V 40Ah	
NVGK308WL	PC	230 x 265 x 540 mm	-	-	30 W	IP54	2	OGIV12280L, AGM Battery 12V 28Ah	

IP54

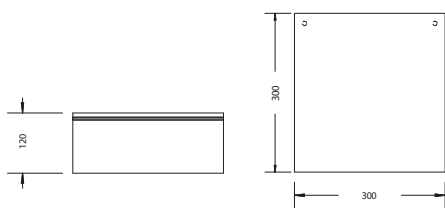
Ausgang
230V/50Hz

Order number	Housing	Dimensions	Output (incl. 20% Reserve)			Ingress Protection	Protection class	Battery	
			1h	3h	8h				
Self-Contained supply incl. switchable Wireless Professional module									
NVKK451WLSE	PC	120 x 300 x 300 mm	45 W	-	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVGK451WLSE	PC	230 x 265 x 540 mm	45 W	-	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVKK601WLSE	PC	120 x 300 x 300 mm	60 W	-	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK1051WLSE	PC	185 x 280 x 570 mm	105 W	-	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK1301WLSE	PC	230 x 265 x 540 mm	130 W	-	-	IP54	2	OGIV12280L, AGM Battery 12V 28Ah	
NVGK2101WLSE	PC	230 x 265 x 540 mm	210 W	-	-	IP54	2	OGIV12400LP, AGM Battery 12V 40Ah	
NVKK203WLSE	PC	120 x 300 x 300 mm	-	20 W	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVGK203WLSE	PC	230 x 265 x 540 mm	-	20 W	-	IP54	2	OGIV1290LP, AGM Battery 12V 9Ah	
NVKK403WLSE	PC	120 x 300 x 300 mm	-	40 W	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK403WLSE	PC	230 x 265 x 540 mm	-	40 W	-	IP54	2	OGIV12170LP, AGM Battery 12V 17Ah	
NVGK653WLSE	PC	230 x 265 x 540 mm	-	65 W	-	IP54	2	OGIV12280L, AGM Battery 12V 28Ah	
NVGK903WLSE	PC	230 x 265 x 540 mm	-	90 W	-	IP54	2	OGIV12400LP, AGM Battery 12V 40Ah	
NVGK308WLSE	PC	230 x 265 x 540 mm	-	-	30 W	IP54	2	OGIV12280L, AGM Battery 12V 28Ah	

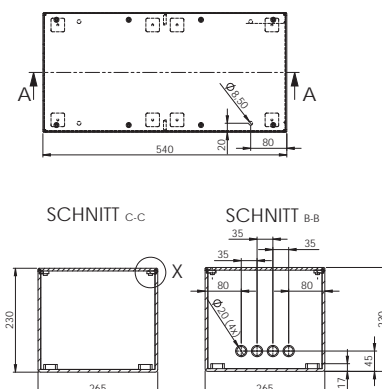
It is not necessary to state the operation time for Self-Control Versions! Nameplates for all possible operation times will be enclosed.

For Wireless Professional-Versions it is necessary to state the operation time because this is set by default on the radio chip. Not all types are suitable for 8h operation due to the charging unit.

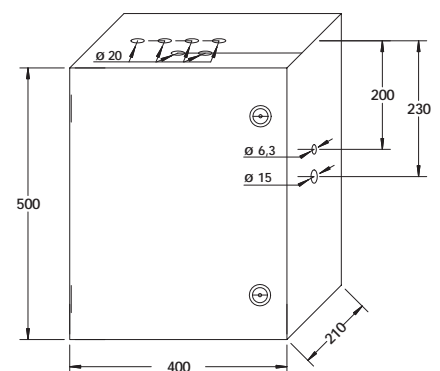
Dimensions small PC / steelsheet housing



Dimensions large PC housing



Dimensions large steelsheet housing



All dimensions in mm

SAFETY POWER SUPPLY SYSTEMS

SECURITY IN ACCORDANCE WITH VALID STANDARDS

Our power supply systems are manufactured in cooperation with well-known partner companies according to ISO 9001 and in Germany.

Our plant manufacturing facility as well as selected systems of the multiControl plus series are certified by TÜV Rheinland.

Our power supply systems are developed, manufactured and tested in accordance with the applicable European and national installer standards as well as the applicable directives and electrotechnical requirements.

This applies in particular to:

- DIN EN 50171: 2001; Central power supply systems
- E DIN EN 50171: 2013; Central power supply systems
- DIN EN 50172: 2005; Emergency lighting systems
- DIN VDE 0100-718: 2005; Erection of low-voltage systems - Part 718: Requirements for business premises, rooms and systems of a special kind - Structural systems for gatherings of people
- DIN VDE 0100-560: 2013; Erection of low-voltage systems - Part 5-56: Selection and erection of electrical equipment - Equipment for safety purposes (IEC 60364-5-56: 2009, modified)
- DIN VDE 0100-600: 2008; Installation of low voltage systems - Part 6: Tests (IEC 60364-6: 2006, modified)
- DIN VDE V 0108-100-1: 2018-12; Emergency lighting systems
- DIN EN 50272-2 (VDE 0510-2): 2001-12; Safety requirements for batteries and battery systems - Part 2: Stationary batteries
- DIN EN 62034: 2013; Automatic test systems for battery-operated emergency lighting for escape routes (IEC 62034: 2012)

OUR SAFETY POWER SUPPLY SYSTEMS

The systems of the multiControl *plus* series are battery-based safety power supply systems according to EN50171, which are designed for the supply and monitoring of exit sign and emergency luminaires. Up to 96 circuits per system enable the supply and additional line-free monitoring of up to 1920 lights.

The integration of commercially available lights (AC/DC compatible) is possible.

The circuit modules, which operate in AC / DC switchover mode, enable functions such as additional line-less individual light monitoring of up to 20 lights per circuit*, mains monitoring*, maintained, non-maintained or switched maintained luminaire. The mixed operation function* for the operation of maintained and non-maintained lights as well as earth fault, overload and fuse monitoring is integrated in every circuit module.

The display and control unit, consisting of an LC display, keypad and status LEDs, provides information about the current system status and enables configurations directly on the system.

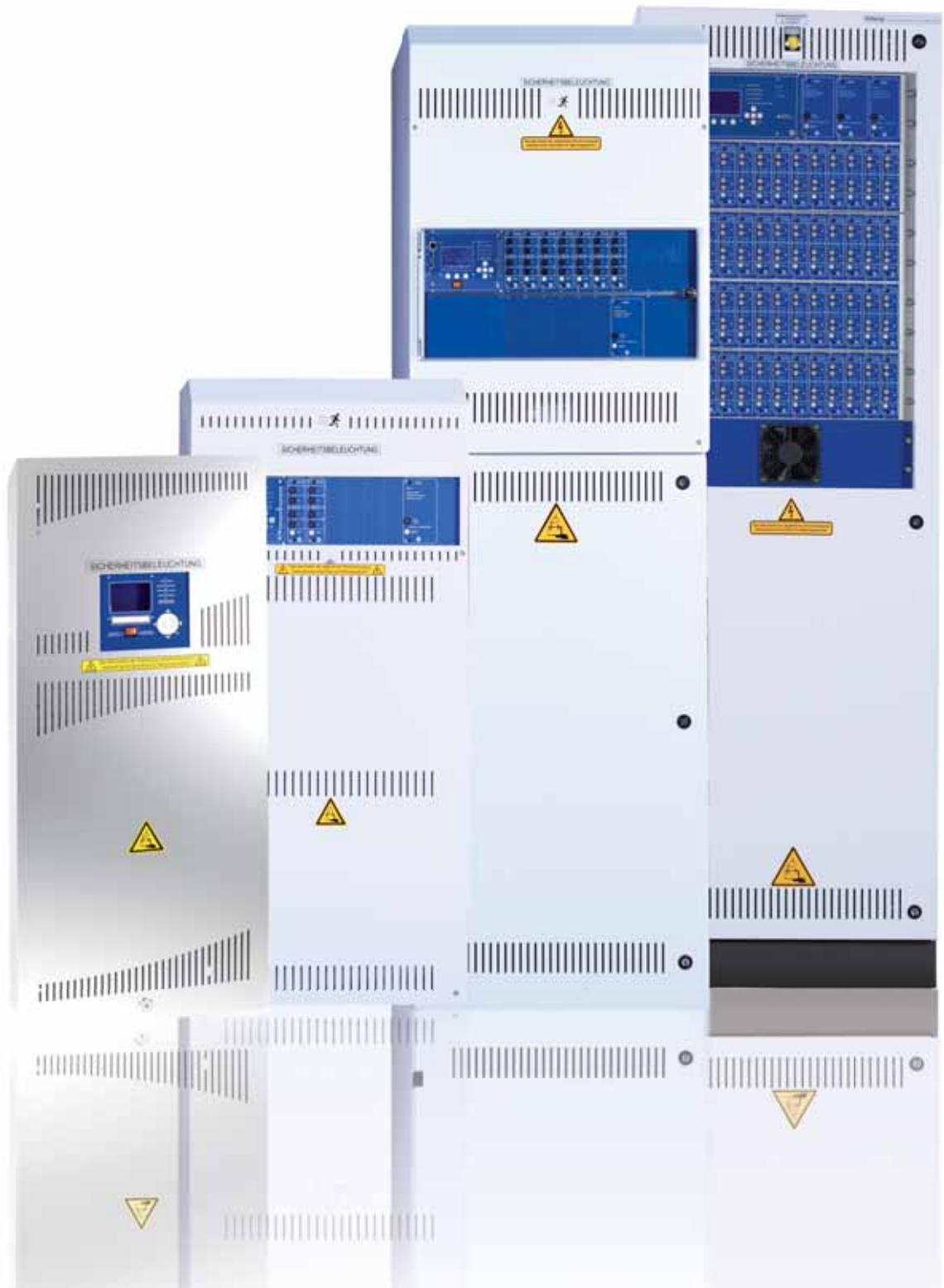
The test book records / stores data over a period of > 5 years. Each system has a BUS interface for connecting external switch request modules (SAM24), network monitors (MC-LM) and signaling and control panels (MCT-15).

A network monitor loop can be monitored on any system of the multiControl plus series, whereby all compact systems have an integrated CCIF for additional detection of clumping. The CCIF is optionally available for the multiControl *plus*.

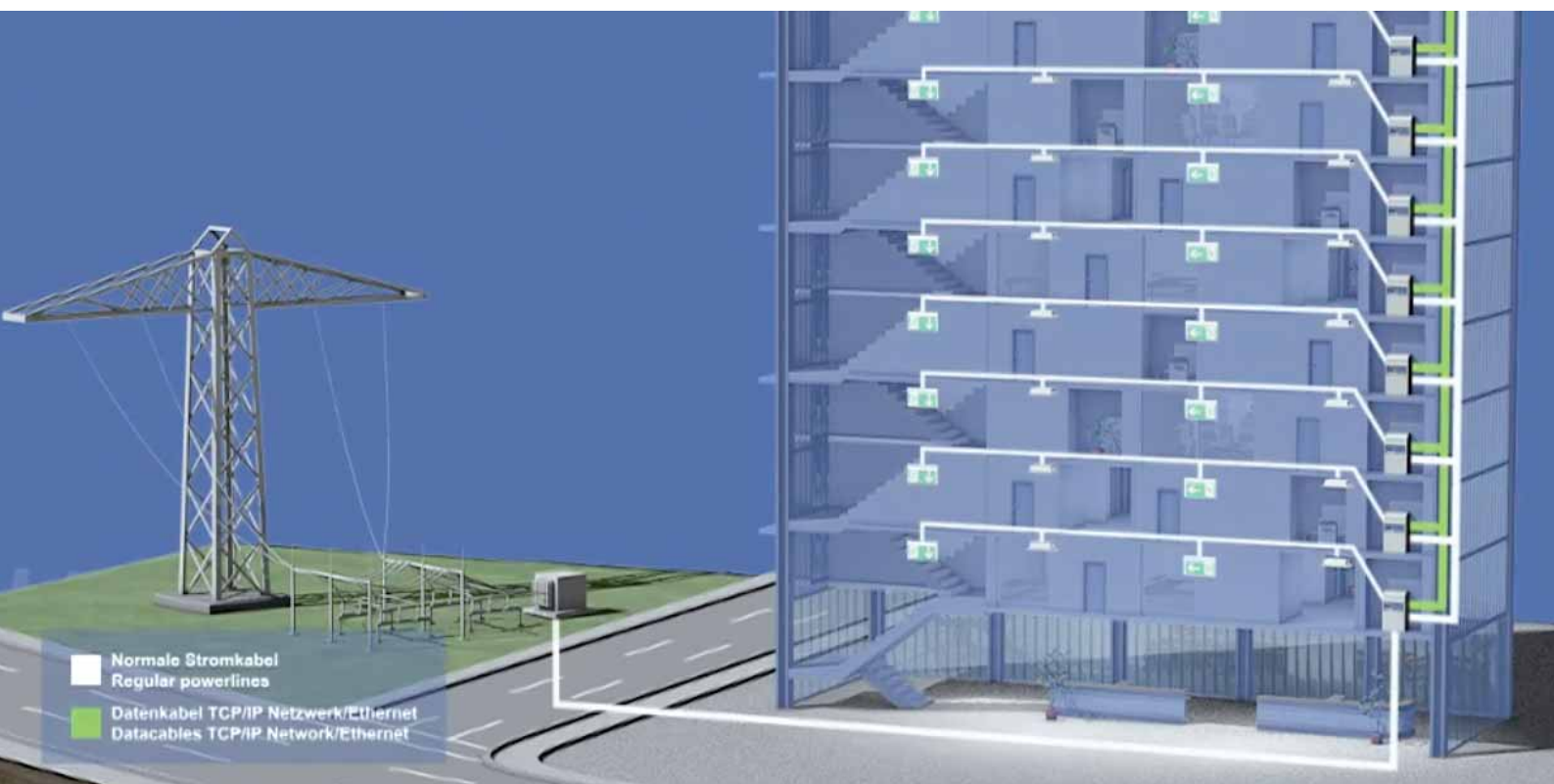
Each IOM manages up to 4 freely programmable inputs, e.g. for monitoring functions. The multiControl plus and MDC systems offer the option of connecting up to 5 IO modules in order to implement further messages.

All systems of the multiControl *plus* series can be visualized and configured via an integrated (patented) web interface.

* not MDC



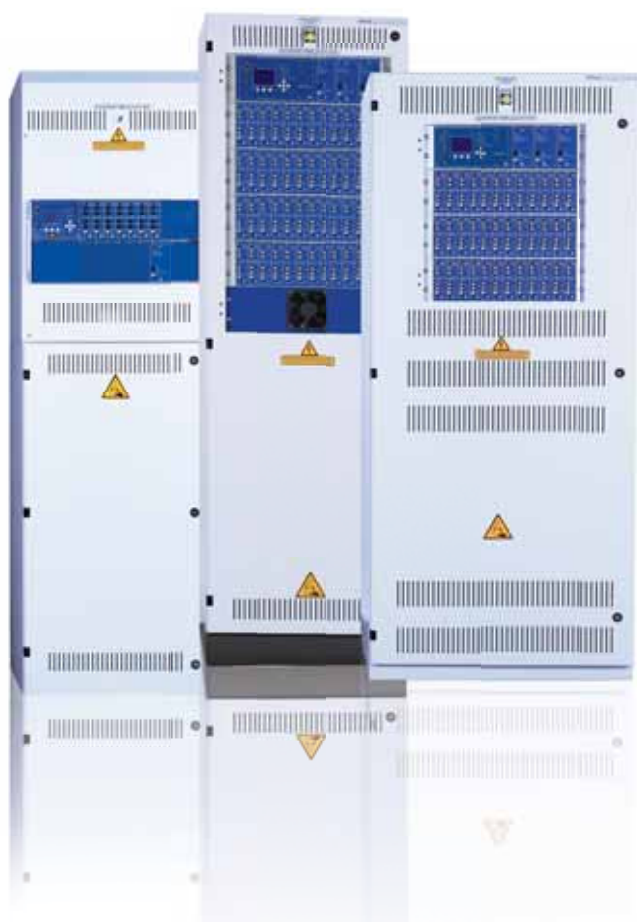
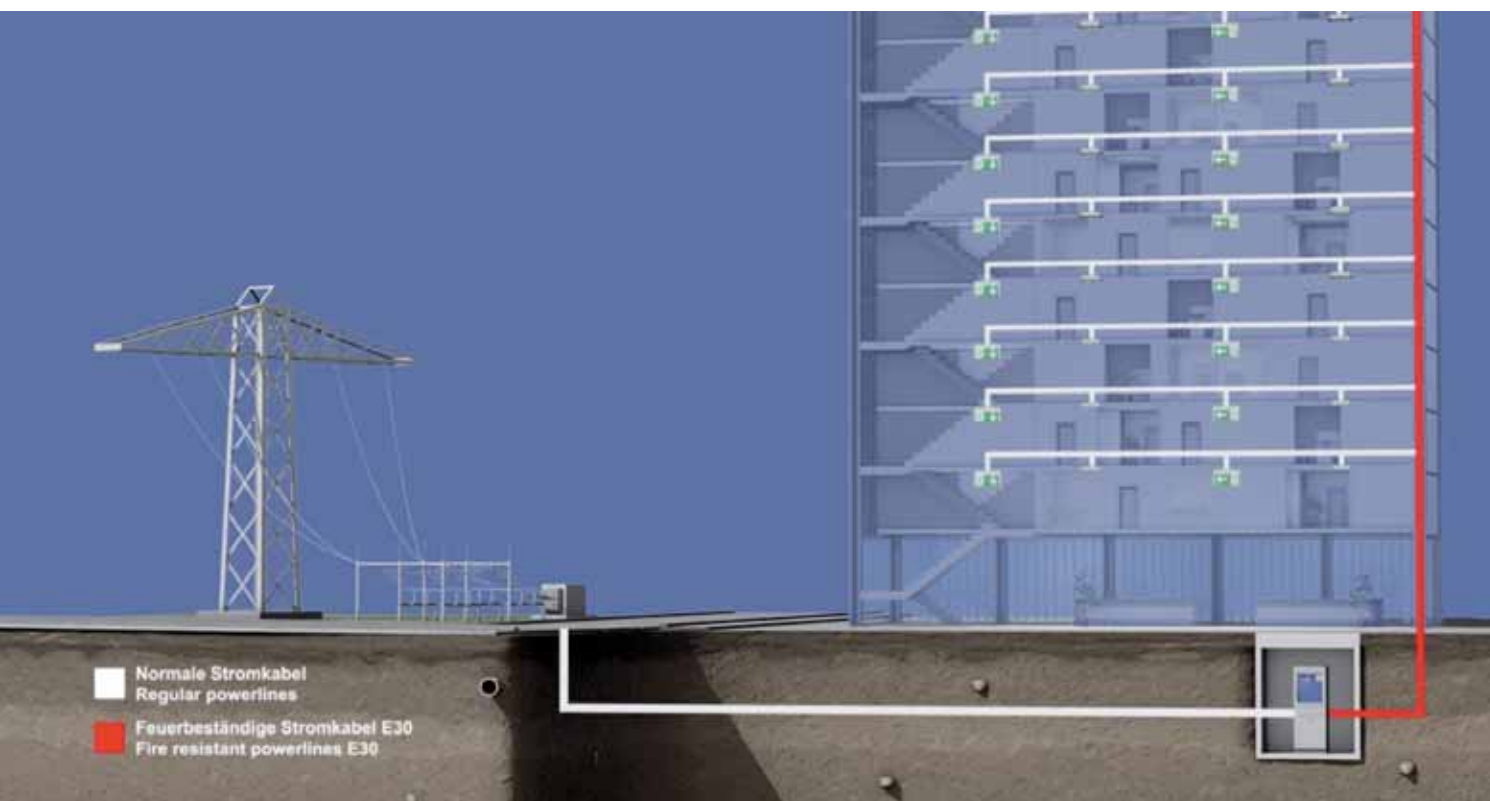
From Low Power Systems to Central Battery Systems



Power supply systems with limited output form the concept of decentralization of fire compartment-related safety lighting systems to supply emergency and safety lights in the fire compartment. This decentralized concept makes the use of cables in the maintenance of functions, for supplying the lights, superfluous according to MLAR 2005. Low power systems are approved up to an output power of 1500 W.

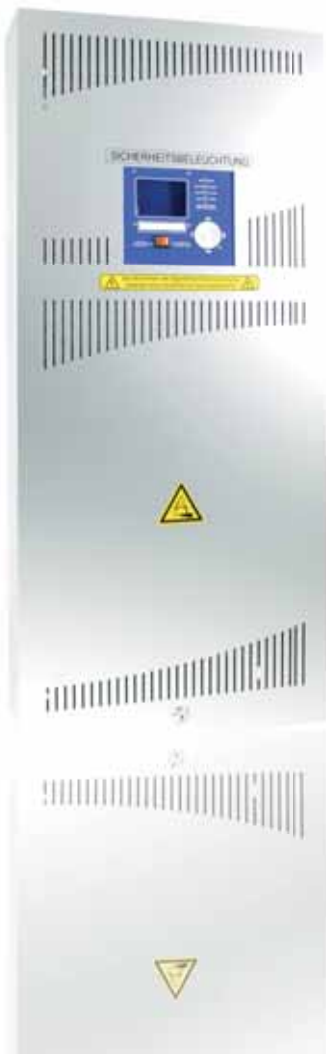
Despite decentralized systems, central monitoring and visualization via TCP / IP addressing of the entire system, consisting of up to 33 networked systems, is possible.





Central Battery Systems without power limitation form the concept of cross-fire compartment safety lighting systems for the supply of exit signs and emergency lights from a central point. The individual fire compartments are supplied by fire-proof cables that maintain their function. With up to 96 circuits, a maximum of 1920 lights can be supplied and monitored by the multiControl plus. To meet individual requirements, central battery systems offer the option of connecting substations and sub-distributors. By connecting a maximum of 32 substations, the possible number of luminaires that can be monitored increases to over 63,000. A large selection of different housing variants - from the wall cabinet to the free-standing cabinet - can meet many spatial needs.

Low Power Systems



myControl *plus*

4 mains circuits, 500 W / 1h, max. 80 luminaires

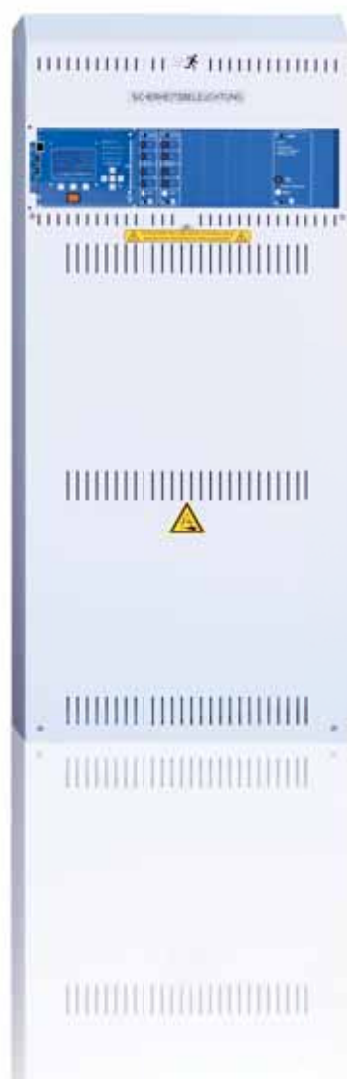
The myControl *plus* is a decentralized power supply system with limited output (low power system) up to a maximum of 500 W. The reduction of the electronics to a motherboard offers an optimal price / performance ratio.



microControl *plus*

max. 6 mains circuits, 500 W / 1h, max. 120 luminaires

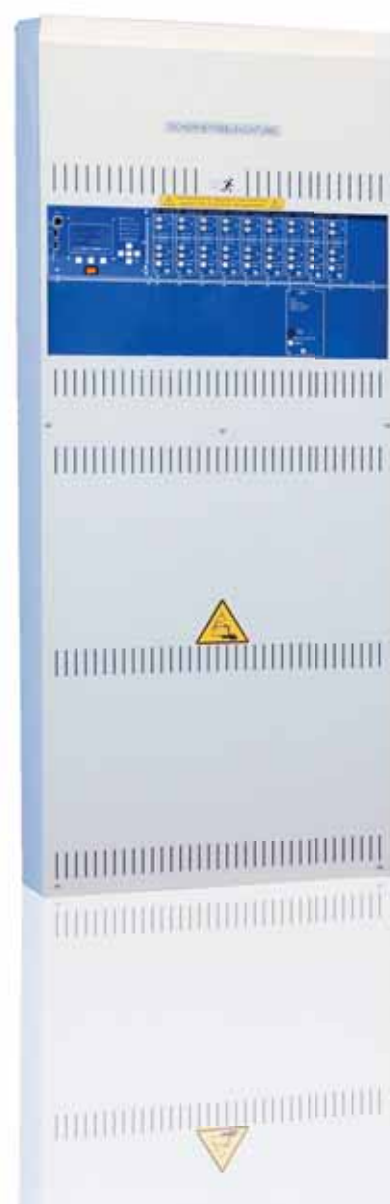
The microControl *plus* is a decentralized power supply system with limited output (low power system) up to a maximum of 500 W and service-friendly modular plug-in technology.



miniControl *plus*

max. 12 mains circuits, 1500 W / 1h, max. 240 luminaires

The dimensions of the miniControl *plus* lie between the smaller microControl *plus* (500 W / 1h, max. 6 circuits) and the larger miniControl *XL plus* (1500 W / 1h, max. 32 circuits).



miniControl *XL plus*

max. 32 mains circuits, 1500 W / 1h, max. 640 luminaires

The miniControl *XL plus* is the largest low power system with a maximum of 32 circuits and a maximum output of 1500 W / 1h.

Central Battery Systems



midiControl *plus*

max. 32 mains circuits, 5700 W / 1h, max. 640 luminaires

The midiControl *plus* is a preconfigured central battery system with a maximum output of 5700 W / 1h.

As an entry-level model in central battery systems, the midiControl *plus* with its compact motherboard for up to 16 circuit modules and up to 2 charging units offers an optimal price / performance ratio.



multiControl *plus*

max. 96 main circuits, max. 1920 luminaires

The multiControl *plus* is a central power supply system that convinces with a high degree of flexibility for individual requirements.

A large selection of different housing variants - from the wall cabinet to the free-standing cabinet - can meet many spatial needs. System expansions, which can be found in the options table, can be used to achieve an extensive increase in the range of functions.

Sophisticated to the detail



The connection panel is located on the inside of the cabinet on a mounting plate and is used to connect the system to the power supply, to external signaling and operating elements, and to connect to the consumer circuits. As shown in the figure, the electronics compartment offers enough space for wiring the connecting cables.

Depending on the housing, the cable entries are possible from above or optionally from below. Ventilation openings ensure the necessary air circulation in the electronics and battery compartment.

The central power supply system is available in two separate housings (electronics and battery housings) as a wall or floor cabinet. There is also the option of using a combination housing (see figure), which combines the electronic components and the battery in one housing, but separates them from one another by means of an internal partition.



The painting is carried out as standard using textured paint in the color RAL 7035. In order to achieve optimum service convenience, the electronic components are designed in modular slide-in technology, mounted in the cabinet door, which can optionally be equipped with a transparent door.

As shown, the battery can be placed in the sealed battery compartment of the combination housing or in separate housings or battery racks.



Central Battery systems



MDC

Central battery system

The MDC system is a central battery system with no power limitation. Depending on the housing design of the MDC, there is space for up to 72 circuits of 10 A each, a charging unit of up to 17.5 A and a permanent and standby light switch, in a standing housing.

Single luminaire or circuit monitoring is not possible with this system. The switchability of the circuits is only possible in connection with the associated contactor changeover.

The systems compared

	myControl plus	microControl plus	miniControl plus	miniControl XL plus	midicontrol plus	multiControl plus	MDC
Cabinet	900 x 450 x 125mm	660 x 350 x 230mm	1100 x 500 x 230mm	1470 x 570 x 230mm	1950 x 600 x 450 mm	verschiedene	verschiedene
max. mains circuits	4 (+1)	6 (+1)	12 (+1)	32	32	96	72
max. current per circuits	2A	3A	3A	4A	4A	6A	6A
possible mains circuit modules	-	DCM 12-E/32	DCM 12-E/32	DCM 12-E/32/42	DCM 12-E/42	DCM 12-E/32/42/62	-
LPS / CBS	LPS	LPS	LPS	LPS	CBS	CBS	CBS
Connection of 230 V luminaires							
max.connected load AC (Total)	800 VA	1682 VA	1682 VA	2810 VA	7340VA	47777 VA $\eta=0,9$	47777 VA $\eta=0,9$
max.connected load DC (Total)	500 W / 1h 200 W / 3h 80 W / 8h	500 W / 1h 200 W / 3h 80 W / 8h	1500 W / 1h 500 W / 3h 300 W / 8h	1500 W / 1h 500W / 3h 300W / 8h	5700 W / 1h 2604 W / 3h 1264 W / 8h	43200 W	43200 W
Automatic test facility according to DIN EN 62034							
Single luminaire switching and monitoring without additional wires							
Programmable mains circuits							
Networking of several systems	optional						
Control and monitoring by Web-Interface							
Floor plans in Web-Interface							
Substations / Subdistributions possible							

The CPU

The NLSR emergency lighting control computer forms the central display and test facility for the systems. Via the LCD and web interface, it visualizes the system parameters / states and enables the system to be configured.

- Service-friendly modular slide-in technology
- SD card slot
- Ethernet port
- integrated web interface
- 2x USB port 2.0
- multilingual message texts



The software of the NLSR is continuously developed. With the integrated interfaces (SD card slot, USB ports), it is possible to load new firmware without any special programming knowledge.

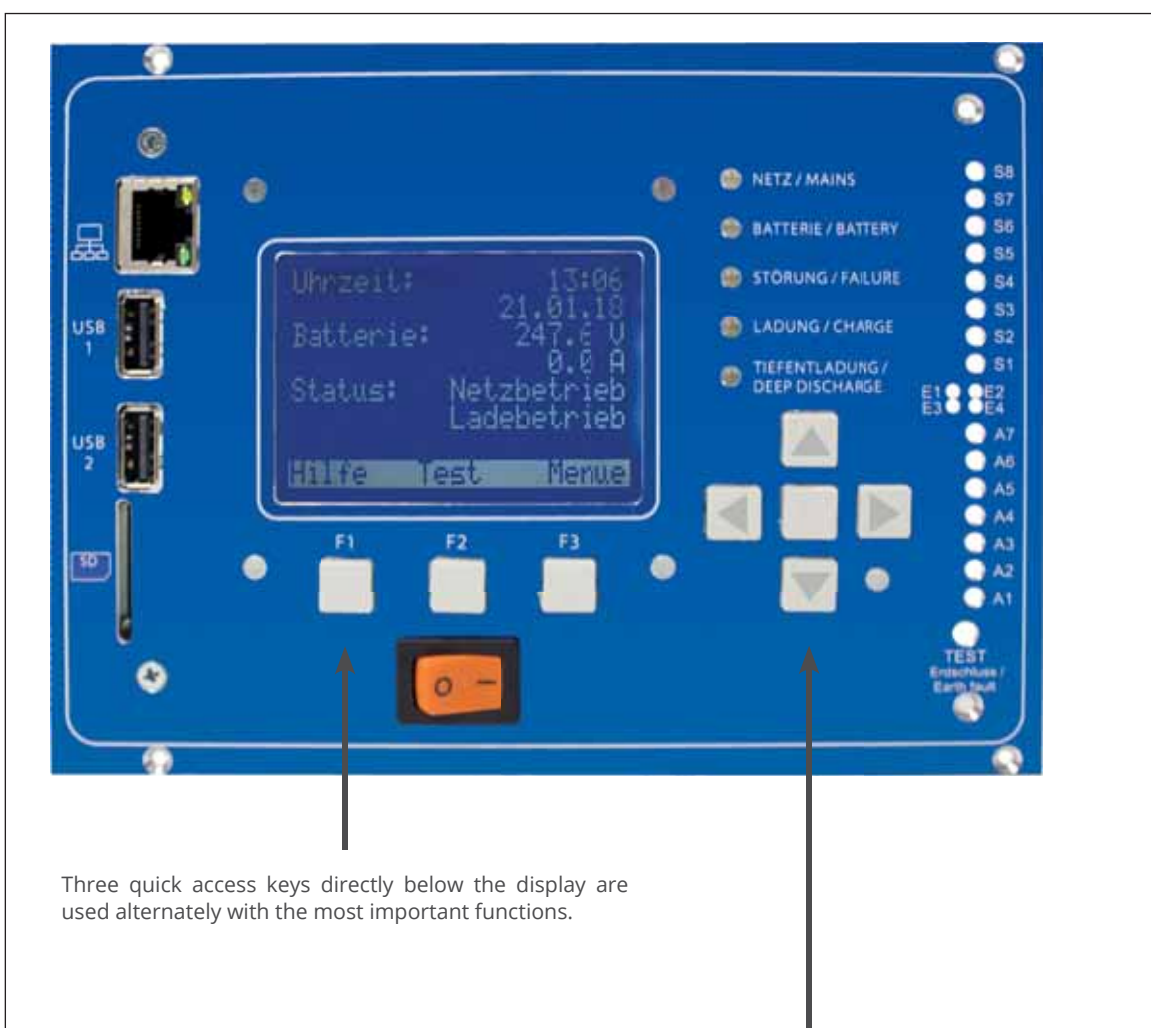


The Ethernet interface integrated in the control unit enables the system to be completely configured and monitored via a web interface.

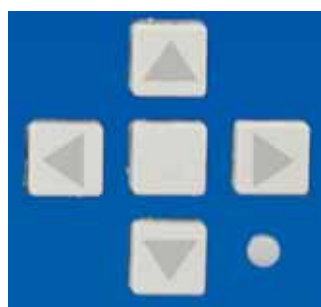
The system can be checked by the manufacturer in the event of service. For this it is necessary to integrate the system into an existing network with an internet connection.



The integrated USB ports offer the option of a standard USB keyboard for configuration of the system via LCD, connection of an external printer (PCL6) and firmware update using a USB stick.



Three quick access keys directly below the display are used alternately with the most important functions.



Even without an external input or control device, navigation through the menu structure of the system software is no problem thanks to the 4-way navigation buttons.

The Web-Interface of the multiControl *plus* series



The innovative Web-Interface of the multiControl plus series enables information on the system status to be queried with the well-known Internet browsers.

The selectable system status shows information on the current system status, contact details, the result of the last function test and an overview of the circuits.



Individually stored building floor plans make it easier to find faulty lights.

Each installed luminaire can be placed using „drag & drop“ and displayed graphically with type and operating mode.

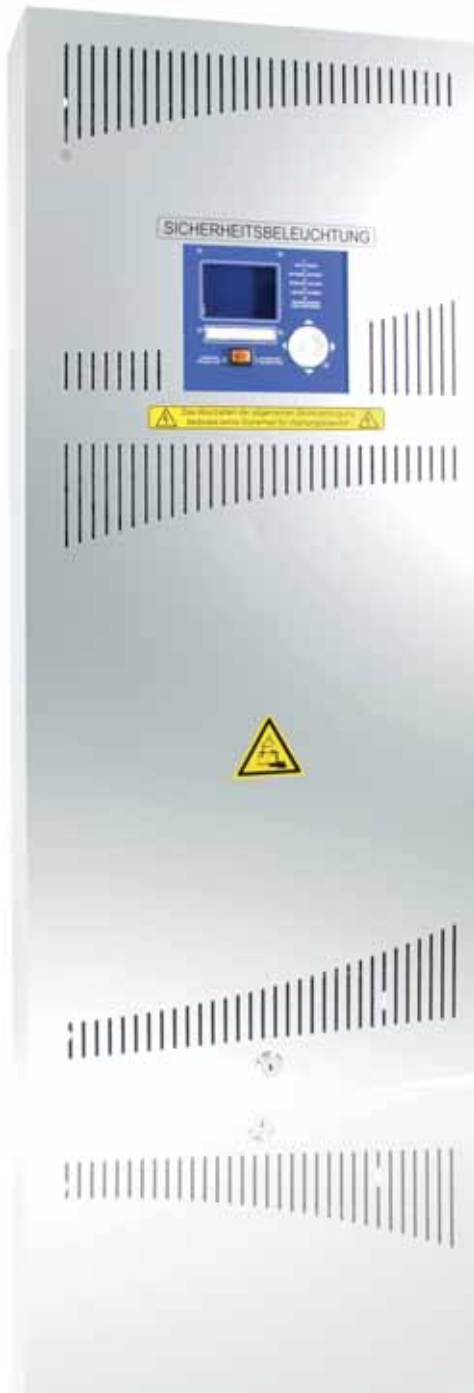
The plans for the building can be saved as a file directly in the NLSR or, in the case of larger data volumes, on a connected NAS drive.

When using the DCM12E circuit module, it is possible to switch our luminaires individually and without additional cables in the circuit.

The DCM12E circuit module is designed for use in systems of the multiControl *plus* series (except myControl plus).

The circuit parameters (number of luminaires, operating mode and switching commands) are configured via the Web-Interface.





myControl plus – decentralized power supply system with limited output

The myControl plus is a decentralized power supply system with limited output (low power system) up to a maximum of 500 W. The reduction of the electronics to a motherboard offers an optimal price / performance ratio.

This system is equipped with 4 circuits, with each circuit switching independently and being fused bipolar.

Various switching states can be implemented with the circuits via switch query modules or network monitors. A SAM with 4 inputs is integrated, 15 additional BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via potential-free contacts is integrated in the myControl plus. The myControl plus also has a freely programmable voltage input.

A CCIF is integrated to monitor a potential-free network monitor loop for interruption and / or termination.

A supply and monitoring of a 24V DC fan is available for the ventilation of optional E30 fire protection distributor housings.

The switchover mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

myControl *plus*

Low Power System

myControl *plus*

Low Power System

FACTS

Version:	Wall housing
Cabinet:	Steel sheet / Alu.-cover
Dimensions (HxWxD):	900 x 450 x 125mm
Dimensions „E30“ (HxWxD):	1228 x 728 x 295mm
Protection category:	IP20 („E30“: IP50)
Insulation class:	I
Mains connection:	230 V AC (±10%) 50/60 Hz
Switched mode:	230 V AC / 216 V DC ±15%
Battery:	216 V DC 18x 12 V / 5,2 Ah
Permissible temp.:	10° to 35°C
max. connected load AC:	800 VA
max. connected load DC:	500 W / 1h 210 W / 3h 90 W / 8h

Features at a glance:

- Power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- automatic test facility according to DIN EN 62034
- Combined switching type for maintained, non-maintained and switched maintained luminaires
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Management and error display of up to 20 lights each circuit
- 4 circuits of max. 250 VA
- 1 auxiliary circuit max. 150 VA (maintained or non-maintained mode)
- Maximum connected load (AC operation) of 800 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of plants via Ethernet (TCP / IP) optionally possible
- Web interface for visualization and configuration

integrated light switch query module SAM:

- 4x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

integrated IO module:

- 3x relay output, 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 1x galvanically isolated switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

integrated CCIF - Critical Circuit Interface Module

- Monitoring of a potential-free network monitor loop for interruption and termination of the line



Version	Order number	Battery power	Mains circuits	max. luminaires
myControl <i>plus</i> 5 incl. Battery 5,2 Ah	MY5	1h: 500 W, 2,32 A 3h: 210 W, 0,93 A 8h: 90 W, 0,37 A	4	80
myControl <i>plus</i> 5N networkable incl. Battery 5,2 Ah	MY5N	1h: 500 W, 2,32 A 3h: 210 W, 0,93 A 8h: 90 W, 0,37 A	4	80



microControl plus – decentralized power supply system with limited output

The microControl plus is a decentralized power supply system with limited output (low power system) up to a maximum of 500 W and service-friendly modular plug-in technology.

This system can be equipped with up to 6 circuits, each of which switches independently and is fused bipolar.

Various switching states can be implemented with the circuits via switch query modules or network monitors. A SAM with 8 inputs is integrated, 15 additional BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via potential-free contacts is integrated in the microControl plus. The microControl plus also has four freely programmable voltage inputs. The connection to the building management system via Modbus or BACnet is possible via another interface.

A CCIF is integrated to monitor a potential-free network monitor loop for interruption and / or termination.

A supply and monitoring of a 24V DC fan is available for the ventilation of optional E30 fire protection distributor housings.

Switched mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

microControl *plus*

Low Power System

microControl *plus*

Low Power System



FACTS

Version:	Wall housing
Cabinet:	Steel sheet RAL 7035
Dimensions (HxWxD):	660 x 350 x 230mm
Dimensions „E30“ (HxWxD):	918 x 711 x 365mm
Protection category:	IP20 („E30“: IP50)
Insulation class:	I
Mains connection:	230 V AC (±10%) 50/60Hz
Switched mode:	230 V AC / 216 V DC ±15%
Battery:	216 V DC 18x 12 V / 5,2 Ah
Permissible temp.:	10° to 35° C
max. connected load AC:	1682 VA
max. connected load DC:	500 W / 1h 200 W / 3h 80 W / 8h

Features at a glance:

- Power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- automatic test facility according to DIN EN 62034
- Combined switching type for maintained, non-maintained and switched maintained light
- Service-friendly modular 19 “slide-in technology
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Management and error display of up to 20 lights each circuit
- 6 circuits of max. 650 VA
- 1 auxiliary circuit max. 150 VA
- Maximum connected load (AC operation) of 1682 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of systems possible via Ethernet (TCP / IP)
- Web interface for visualization and configuration



integrated light switch query module SAM:

- 8x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

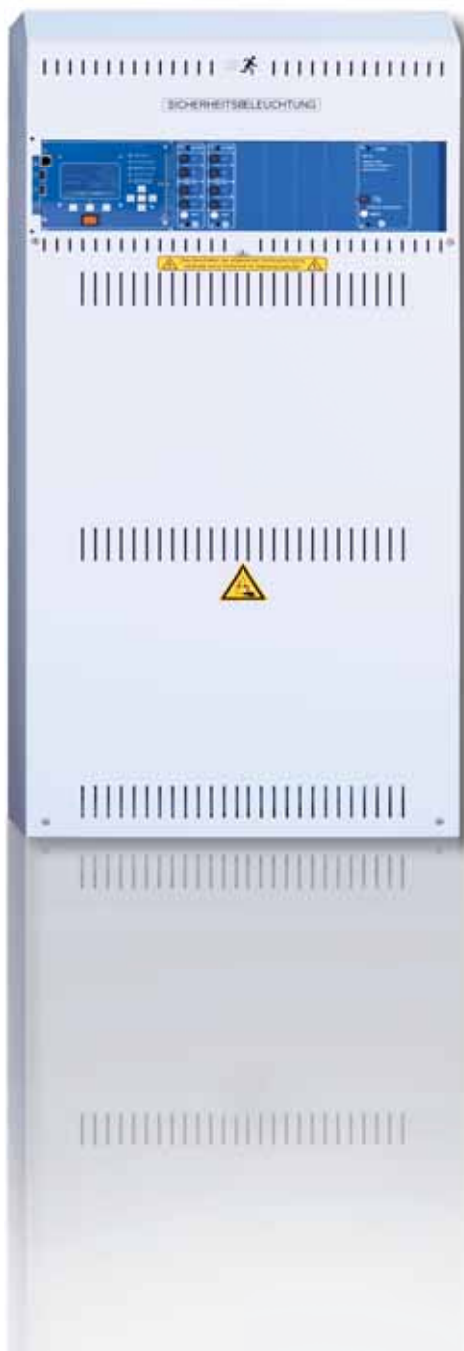
integrated IO module:

- 7x relay output, 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 4x galvanically isolated switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

integrated CCIF - Critical Circuit Interface Module

- Monitoring of a potential-free network monitor loop for interruption and termination of the line

Version	Order number	Mains circuits	max. luminaires
microControl <i>plus</i> 102	MI102	2	40
microControl <i>plus</i> 104	MI104	4	80
microControl <i>plus</i> 106	MI106	6	120



miniControl plus – decentralized power supply system with limited output

The miniControl plus is a decentralized power supply system with limited output (low power system) up to a maximum of 1500 W and service-friendly modular plug-in technology.

This system can be equipped with up to 12 circuits, each switching independently and being fused bipolar.

Various switching states can be implemented with the circuits via switch query modules or network monitors. A SAM with 8 inputs is integrated, 15 additional BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via potential-free contacts is integrated in the miniControl plus. The miniControl plus also has four freely programmable voltage inputs. The connection to the building management system via Modbus or BACnet is possible via another interface.

A CCIF is integrated to monitor a potential-free network monitor loop for interruption and / or termination.

A supply and monitoring of a 24V DC fan is available for the ventilation of optional E30 fire protection distributor housings.

Switched mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

miniControl *plus*

Low Power System

miniControl *plus*

Low Power System



FACTS

Version:	Wall housing
Cabinet:	Steel sheet RAL 7035
Dimensions (HxWxD):	1100 x 500 x 230mm
Dimensions „E30“ (HxWxD):	1388 x 861 x 365mm
Protection category:	IP20 („E30“: IP50)
Insulation class:	I
Mains connection:	230 V AC (±10%) 50/60Hz
Switched mode:	230 V AC / 216 V DC ±15%
Battery:	216 V DC 18x 12 V / 17 Ah 10° to 35° C
Permissible temp.:	10° to 35° C
max. connected load AC:	1682 VA
max. connected load DC:	1500 W / 1h 500 W / 3h 300 W / 8h

Features at a glance:

- Power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- automatic test facility according to DIN EN 62034
- Combined switching type for maintained, non-maintained and switched maintained light
- Service-friendly modular 19 “slide-in technology
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Management and error display of up to 20 lights each circuit
- 12 circuits of max. 650 VA
- 1 auxiliary circuit max. 150 VA
- Maximum connected load (AC operation) of 1682 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of systems possible via Ethernet (TCP / IP)
- Web interface for visualization and configuration

integrated light switch query module SAM:

- 8x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

integrated IO module:

- 7x relay output, 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 4x galvanically isolated switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

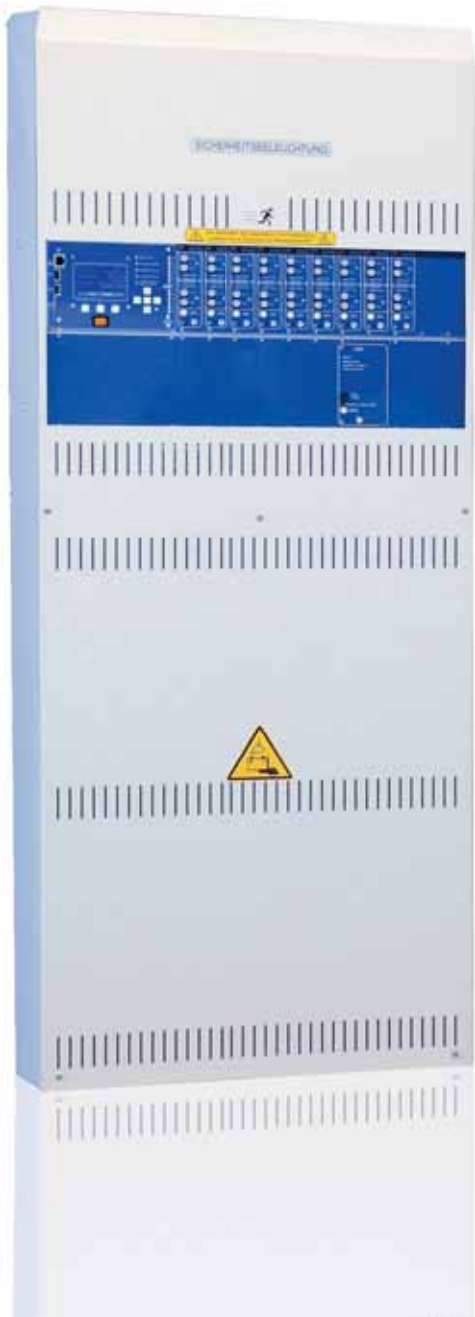
integrated CCIF - Critical Circuit Interface Module

- Monitoring of a potential-free network monitor loop for interruption and termination of the line



Version	Order number	Mains circuits	max. luminaires
miniControl <i>plus</i> 102	MN102	2	40
miniControl <i>plus</i> 104	MN104	4	80
miniControl <i>plus</i> 106	MN106	6	120
miniControl <i>plus</i> 108	MN108	8	160
miniControl <i>plus</i> 110	MN110	10	200
miniControl <i>plus</i> 112	MN112	12	240

Also available with BAT-LOGG®:
Making batteries smart!



miniControl XL plus – decentralized power supply system with limited output

The miniControl XL plus is a decentralized power supply system with limited output (low power system) up to a maximum of 1500 W and service-friendly modular plug-in technology.

This system can be equipped with up to 32 circuits, each of which switches independently and is fused bipolar.

Various switching states can be implemented with the circuits via switch query modules or network monitors. A SAM with 8 inputs is integrated, 15 additional BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via potential-free contacts is integrated in the miniControl XL plus. The miniControl XL plus also has four freely programmable voltage inputs. The connection to the building management system via Modbus or BACnet is possible via another interface.

A CCIF is integrated to monitor a potential-free network monitor loop for interruption and / or termination.

A supply and monitoring of a 24V DC fan is available for the ventilation of optional E30 fire protection distributor housings.

Switched mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

miniControl XL *plus*

Low Power System

miniControl XL *plus*

Low Power System



FACTS

Version:	Wall housing
Cabinet:	Steel sheet RAL 7035
Dimensions (HxWxD):	1472,5 x 570 x 230mm
Dimensions „E30“ (HxWxD):	1828 x 908 x 395mm
Protection category:	IP20 („E30“: IP50)
Insulation class:	I
Mains connection:	230 V AC (±10%) 50/60Hz
Switched mode:	230 V AC / 216 V DC ±15%
Battery:	216 V DC 18x 12 V / 17 Ah
Permissible temp.:	10° to 35° C
max. connected load AC:	2810 VA
max. connected load DC:	1500 W / 1h 500 W / 3h 300 W / 8h

Features at a glance:

- Power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- automatic test facility according to DIN EN 62034
- Combined switching type for standby, steady light and switched steady light
- Service-friendly modular 19 “slide-in technology
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Management and error display of up to 20 lights each circuit
- 32 circuits of max. 860 VA
- Maximum connected load (AC operation) of 2810 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of systems possible via Ethernet (TCP / IP)
- Web interface for visualization and configuration

integrated light switch query module SAM:

- 8x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

integrated IO module:

- 7x relay output, 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 4x galvanically isolated switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

integrated CCIF - Critical Circuit Interface Module

- Monitoring of a potential-free network monitor loop for interruption and termination of the line

Version	Order number	Mains circuits	max. luminaires
miniControl XL <i>plus</i> 102	MNXL102	2	40
miniControl XL <i>plus</i> 104	MNXL104	4	80
miniControl XL <i>plus</i> 106	MNXL106	6	120
miniControl XL <i>plus</i> 108	MNXL108	8	160
...
miniControl XL <i>plus</i> 132	MNXL132	12	640

Also available with BAT-LOGG®:
Making batteries smart!



midiControl plus – Central battery system

The midiControl plus is a central battery system up to a maximum of 5700 W and service-friendly modular slide-in technology.

This system can be equipped with up to 32 circuits, each of which switches independently and is fused bipolar.

Various switching states can be implemented with the circuits via switch query modules or network monitors. A SAM with 8 inputs is integrated, 15 additional BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via floating contacts is integrated in the midiControl plus. The midiControl plus also has four freely programmable voltage inputs. The connection to the building management system via Modbus or BACnet is possible via another interface.

A CCIF is integrated to monitor a potential-free network monitor loop for interruption and / or termination.

Switched mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

With up to two 2.5A chargers and battery housings up to a maximum battery size of 55 Ah, an output of 5700W is possible for one hour.

midiControl *plus*

Central Battery System

mediControl *plus*

Central Battery System



FACTS

Version:	Tower housing
Cabinet:	Steel sheet RAL 7035
Dimensions (HxWxD):	1950 x 600 x 450mm
Protection category:	IP20
Insulation class:	I
Mains connection:	3x 230 V AC (±10%) 50/60Hz
Switched mode:	230 V AC / 216 V DC ±15%
Battery:	216 V DC max. 18x 12 V / 55 Ah
Permissible temp.:	10° to 35° C
max. connected load AC:	7340 VA
max. connected load DC*:	5700 W / 1h 2604 W / 3h 1264 W / 8h

* Battery-dependent, the values given correspond to 55 Ah

Features at a glance:

- Central power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- automatic test facility according to DIN EN 62034
- Combined switching type for maintained, non-maintained and switched maintained light
- Service-friendly modular 19 "slide-in technology
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Management and error display of up to 20 lights each circuit
- 32 circuits of max. 860 VA
- Maximum connected load (AC operation) of 7340 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of systems possible via Ethernet (TCP / IP)
- Web interface for visualization and configuration

Integrated light switch query module SAM:

- 8x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

Integrated IO module:

- 7x relay output, 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 4x galvanically isolated switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

Integrated CCIF - Critical Circuit Interface Module

- Monitoring of a potential-free network monitor loop for interruption and termination of the line

Version	Order number	Charger	Mains circuits	max. luminaires
mediControl <i>plus</i> 102	MD102	1	2	40
mediControl <i>plus</i> 104	MD104	1	4	80
...
mediControl <i>plus</i> 132	MD132	1	32	640
mediControl <i>plus</i> 202	MD202	2	2	40
mediControl <i>plus</i> 204	MD204	2	4	80
...
mediControl <i>plus</i> 232	MD232	2	32	640

Also available with BAT-LOGG®:
Making batteries smart!



multiControl plus – Central battery system

The multiControl plus is a central battery system up to a maximum of 43200 W and service-friendly modular slide-in technology.

This system can be equipped with up to 96 circuits, each of which switches independently and is fused bipolar.

Various switching states can be implemented with the circuits via switch query modules or network monitors. Up to 16 BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via potential-free contacts is integrated in the multiControl plus. The multiControl plus also has two programmable voltage inputs connected to the terminal. The connection to the building management system via Modbus or BACnet is possible via another interface.

The monitoring of a potential-free network monitor loop for interruption is integrated. The monitoring of the network monitor loop for clumping / closing is optionally possible.

Switched mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

With up to ten 2.5A chargers as standard and battery sets connected in parallel, a maximum output of 43200W is possible for one hour.

Up to 32 systems or substations can be connected to the multiControl plus and monitored.

By using sub-distributors of type MCVU and MCVU-E, circuits of the multiControl plus can be outsourced based on the fire compartment, thereby reducing the fire load and the installation material.

multiControl *plus*

Central Battery System

multiControl *plus*

Central Battery System



FACTS

Version:	Tower- / Surface or wall housing
Cabinet:	Steelsheet RAL 7035
Dimensions:	see systems list
Protection category:	IP20 (optional IP21, IP54, E30)
Insulation class:	I
Mains connection:	3 x 230V AC (± 10%) 50/60Hz
Switched mode:	230 V AC / 216 V DC ±15%
Battery:	216 V DC, Up to three strings of 18 x 12V lead acid batteries
permissible Temp.:	10°C to 35°C
Cable feed:	from Top (from below on request)

Features at a glance:

- Central power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- automatic test facility according to DIN EN 62034
- Combined switching type for maintained, non-maintained and switched maintained light
- Service-friendly modular 19 "slide-in technology
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Management and error display of up to 20 lights each circuit
- 96 circuits of max. 1300 VA
- Maximum connected load (AC operation) of 47777 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of systems possible via Ethernet (TCP / IP)
- Web interface for visualization and configuration

Optional light switch query module SAM:

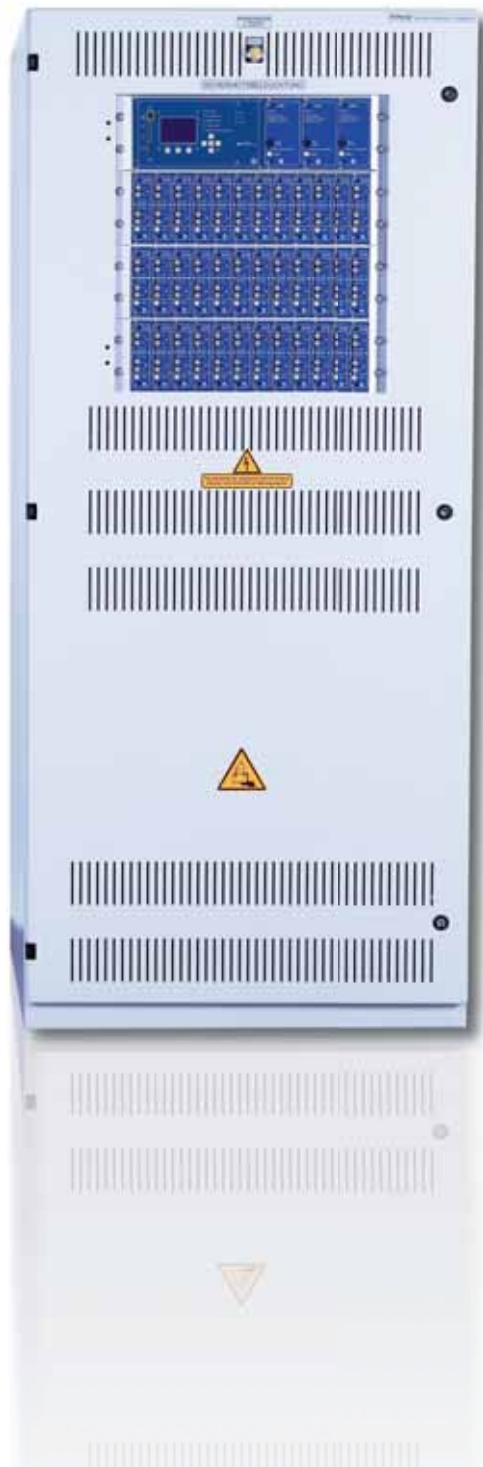
- 8x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

Integrated IO module:

- 7x relay output, 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 4x galvanically isolated switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

Integrated monitoring of a mains monitor loop

- Monitoring of a potential-free mains monitor loop for interruption and termination of the line







multiControl *plus*

Central Battery System



Extract from the system list - further configurations are possible

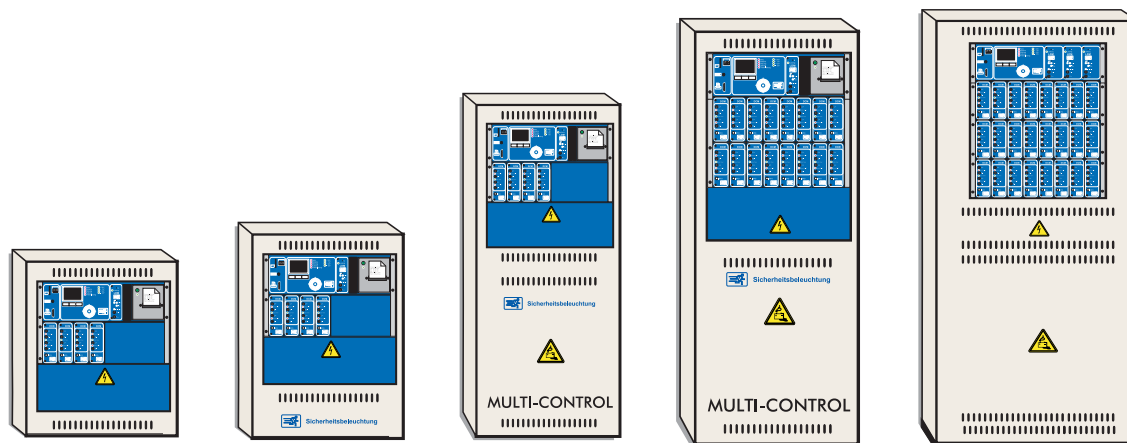
Version	Order number	Charger	Cabinet HxWxD	max. circuits	max. DCM
 Combi device incl. central unit and battery compartment up to 17Ah, AC-Feeding 1x, 2x or 3x 230V, 50/60Hz					
multiControl <i>plus</i> 12/2,5A Combi 1000	MCK112	2,5A	1000 x 600 x 400	12	6
multiControl <i>plus</i> 24/2,5A Combi 1000	MCK124	2,5A	1000 x 600 x 400	24	12
multiControl <i>plus</i> 36/2,5A Combi 1000	MCK136	2,5A	1000 x 600 x 400	36	18
 Combi device incl. central unit and battery compartment up to 45Ah, AC-Feeding 1x, 2x or 3x 230V, 50/60Hz					
multiControl <i>plus</i> 12/2,5A Combi 1500	MCG112	2,5A	1500 x 600 x 450	12	6
multiControl <i>plus</i> 24/2,5A Combi 1500	MCG124	2,5A	1500 x 600 x 450	24	12
multiControl <i>plus</i> 36/2,5A Combi 1500	MCG136	2,5A	1500 x 600 x 450	36	18
 Surface- / Wall housing, without battery compartment, incl. charger AC-Feeding 1x, 2x or 3x 230V, 50/60Hz					
multiControl <i>plus</i> 900 12/2,5A	MCW112	2,5A	900 x 600 x 450	12	6
multiControl <i>plus</i> 900 24/2,5A	MCW124	2,5A	900 x 600 x 450	24	12
multiControl <i>plus</i> 900 36/5,0A	MCW236	5,0A	900 x 600 x 450	36	18
multiControl <i>plus</i> 900 36/7,5A	MCW336	7,5A	900 x 600 x 450	36	18
multiControl <i>plus</i> 900 48/7,5A	MCW348	7,5A	900 x 600 x 450	48	24
 Tower Housing incl. central unit, without battery compartment, incl. charger, AC-Feeding 1x, 2x or 3x 230V, 50/60Hz					
multiControl <i>plus</i> 1800 12/7,5A	MCS312	7,5A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 12/10,0A	MCS412	10,0A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 12/12,5A	MCS512	12,5A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 12/15,0A	MCS612	15,0A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 12/17,5A	MCS712	17,5A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 12/20,0A	MCS812	20,0A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 12/22,5A	MCS912	22,5A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 12/25,0A	MCS1012	25,0A	1800 x 600 x 450	12	6
multiControl <i>plus</i> 1800 24/20,0A	MCS824	20,0A	1800 x 600 x 450	24	12
multiControl <i>plus</i> 1800 24/25,0A	MCS1024	25,0A	1800 x 600 x 450	24	12
multiControl <i>plus</i> 1800 36/10,0A	MCS436	10,0A	1800 x 600 x 450	36	18
multiControl <i>plus</i> 1800 36/20,0A	MCS836	20,0A	1800 x 600 x 450	36	18
multiControl <i>plus</i> 1800 36/25,0A	MCS1036	25,0A	1800 x 600 x 450	36	18
multiControl <i>plus</i> 1800 48/12,5A	MCS548	12,5A	1800 x 600 x 450	48	24
multiControl <i>plus</i> 1800 48/25,0A	MCS1048	25,0A	1800 x 600 x 450	48	24
multiControl <i>plus</i> 1800 60/20,0A	MCS860	20,0A	1800 x 600 x 450	60	30
multiControl <i>plus</i> 1800 72/15,0A	MCS672	15,0A	1800 x 600 x 450	72	36
multiControl <i>plus</i> 1800 72/25,0A	MCS1072	25,0A	1800 x 600 x 450	72	36
multiControl <i>plus</i> 1800 96/15,0A	MCS696	15,0A	1800 x 600 x 450	96	48

Further system configurations on request (e.g. additional loaders, MCABUS, etc.)

* **Attention:** When connecting substations / sub-distributors or installing optional modules (SAM24M), please contact our technical department in advance (additional space may be required in the cabinet)!

This can reduce the max. number of possible circuits or the number of charger modules!

Cabinets



Typ	MCW	MCK	MCG	MCS	MCX
Cabinet	Wall housing	Tower-/ Wall housing	Tower housing	Tower housing	Tower housing
Dimensions in mm	900 x 600 x 450	1000 x 600 x 400	1500 x 600 x 450	1800 x 600 x 450	1850 x 800 x 600
Cable feed	from Top (from below on request)				
max. charging current	7,5 A	2,5 A	2,5 A	25 A	10 A
max. mains circuits	48	36	48	96	60
Mains connection	3x 230 V, 50/60 Hz				

Also available with BAT-LOGG®:
Making batteries smart!



MDC – Central battery system

The MDC is a central battery system up to a maximum of 43200 W and service-friendly modular slide-in technology.

This system is equipped with separate two-pole fused circuits. The system is switched via AC / DC contactor switches. The combined operation of continuous and standby lights (mixed operation), individual light monitoring and current monitoring of individual circuits is not possible.

Various switching states can be implemented with the contactor changeovers via switch query modules or network monitors. Up to 16 BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via potential-free contacts is integrated in the MDC. The MDC also has two programmable voltage inputs connected to the terminal. The connection to the building management system via Modbus or BACnet is possible via another interface.

The monitoring of a potential-free network monitor loop for interruption is integrated. The monitoring of the network monitor loop for clumping / closing is optionally possible, depending on the requirements for the overall system or selectively for each contactor changeover.

Switched mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

With up to ten 2.5A chargers as standard and battery sets connected in parallel, a maximum output of 43200W is possible for one hour.

Up to 32 systems or substations can be connected to the MDC and monitored.

MDC

Central Battery System

FACTS

Version:	Tower- / Wall housing
Cabinet:	Steelsheet RAL 7035
Dimensions:	see systems list
Protection category:	IP20 (optional IP21, IP54, E30)
Insulation class:	I
Mains connection:	3 x 230V AC (± 10%) 50/60Hz
Switched mode:	230 V AC / 216 V DC ±15%
Battery:	216 V DC, 18x 12 V maintenance free closed lead acid battery
permissible Temp.:	10°C to 35°C
Cable feed:	from Top (from below on request)

Features at a glance:

- Central power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- Service-friendly modular 19 "slide-in technology
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Maximum connected load (AC operation) of 47777 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of systems possible via Ethernet (TCP / IP)
- Web interface for visualization and configuration

Optional switch query module SAM24M:

- 8x switch input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC mode
- 2 circuit types (gDS, MB) programmable

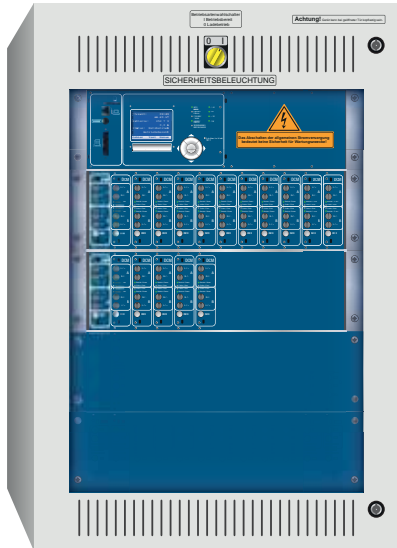
Integrated IO module:

- 7x relay output (3x on terminal), 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 4x galvanically (2x on terminal) separate switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

Integrated monitoring of a network monitor loop

- Monitoring of a potential-free network monitor loop for interruption

Version	Order number	Charger	Cabinet
Combi device with central unit and battery compartment 1500mm incl. charger, battery compartment up to 45Ah, AC-Feeding 1x, 2x or 3x 230V, 50/60Hz			
MDC220 / 2,5A Combi 1500 without DBU	MDG1	2,5A	1500 x 600 x 450
Surface- / Wall housing with central unit, without battery compartment incl. charger, AC-Feeding 3x 230V, 50/60Hz			
MDC220 / 2,5A ES900 without DBU	MDW1	2,5A	900 x 600 x 450
MDC220 / 5A ES900 without DBU	MDW2	5,0A	900 x 600 x 450
MDC220 / 7,5A ES900 without DBU	MDW3	7,5A	900 x 600 x 450
Tower housing with central unit, without battery compartment, incl. charger, AC-Feeding 3x 230V, 50/60Hz			
MDC220 / 2,5A ES1800 without DBU	MDS1	2,5A	1800 x 600 x 450
MDC220 / 5A ES1800 without DBU	MDS2	5,0A	1800 x 600 x 450
MDC220 / 7,5A ES1800 without DBU	MDS3	7,5A	1800 x 600 x 450
MDC220 / 10A ES1800 without DBU	MDS4	10,0A	1800 x 600 x 450
MDC220 / 12,5A ES1800 without DBU	MDS5	12,5A	1800 x 600 x 450
MDC220 / 15A ES1800 without DBU	MDS6	15,0A	1800 x 600 x 450
MDC220 / 17,5A ES1800 without DBU	MDS7	17,5A	1800 x 600 x 450
MDC220 / 20A ES1800 without DBU	MDS8	20,0A	1800 x 600 x 450



multiControl plus Substation

The multiControl plus substation is a system for connection to multiControl plus type main systems, whereby it serves to increase the number of circuits of an overall system and / or to reduce installation effort / material without its own battery.

The energy supply (AC / DC voltage) is realized by an outgoing substation in the main system.

This system can be equipped with up to 96 circuits, each of which switches independently and is fused bipolar.

Various switching states can be implemented with the circuits via switch query modules or network monitors. Up to 16 BUS modules can be connected to the system via the BUS interface.

An IO module for forwarding the system status to an external display unit or a building management system via potential-free contacts is integrated in the multiControl plus substation. The multiControl plus substation also has two programmable voltage inputs connected to the terminal. The connection to the building management system via Modbus or BACnet is possible via another interface.

The monitoring of a potential-free network monitor loop for interruption is integrated. The monitoring of the network monitor loop for clumping / closing is optionally possible.

Switched mode enables the connection of our luminaires listed in the catalog, as well as commercially available luminaires, which are designed for supply by an AC and DC voltage.

By using sub-distributors of type MCVU and MCVU-E, circuits of the multiControl plus substation can be outsourced based on the fire section, thereby reducing the fire load and the installation material.



microControl plus Substation

The compact substation with up to 6 circuits, based on the microControl plus, for connection to main systems of the multiControl plus type.

The range of functions corresponds to that of the microControl plus. The maximum connected load is 1500W.

multiControl *plus*

Substations

FACTS

Version:	Wall housing
Cabinet:	Steelsheet RAL 7035
Dimensions:	see systems list
Protection category:	IP20 (optional IP21, IP54, E30)
Insulation class:	I
Mains connection:	3 x 230V AC (± 10%) 50/60Hz
Switched mode:	230 V AC / 216 V DC ±15%
permissible Temp.:	0°C to 35°C
Cable feed:	from Top (from below on request)

Features at a glance:

- Central power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- automatic test facility according to DIN EN 62034
- Combined switching type for standby, steady light and switched steady light
- Service-friendly modular 19 "slide-in technology
- Electronic test book for recording all data over a period of > 5 years
- multilingual menu navigation, e.g. German English
- Management and error display of up to 20 lights each circuit
- 96 circuits of max. 1300 VA
- Maximum connected load (AC operation) of the entire system consisting of main system, substation (s) and sub-distributor (-n) of 47777 VA
- Status information of the system in plain text as well as status LEDs
- Interface for external modules SAM24, MC-LM, MCT15 via RS485BUS
- up to 6 switching inputs per circuit
- Networking of systems possible via Ethernet (TCP / IP)
- Web interface for visualization and configuration

Optional light switch query module SAM:

- 8x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

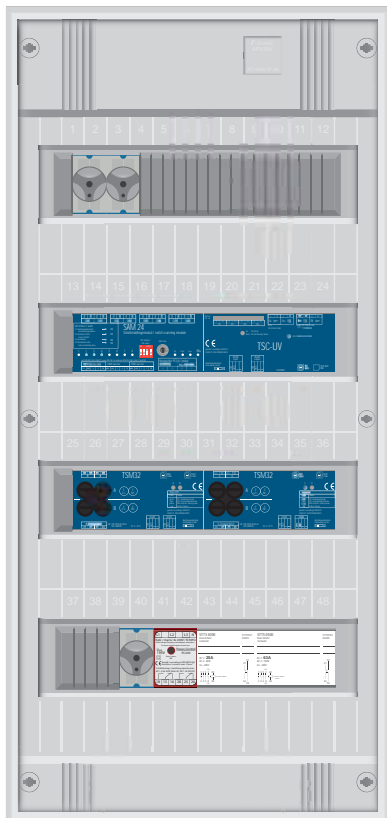
Integrated IO module:

- 7x relay output, 230 V AC, 6 A / 30 V DC, 6A, floating changeover contact
- 4x galvanically isolated switching input (200 - 255 V AC or 24 - 255 V DC), reverse polarity-tolerant, function programmable

Integrated CCIF - Critical Circuit Interface Module

- Monitoring of a potential-free network monitor loop for interruption and termination of the line

Version	Bestell-Nr.	Cabinet	max. Kreise	max. DCM
multiControl <i>plus</i> Substation UCW012	UCW012	550 x 600 x 450mm	12	6
multiControl <i>plus</i> Substation UCW024	UCW024	550 x 600 x 450mm	24	12
multiControl <i>plus</i> Substation UCW036	UCW036	900 x 600 x 450mm	36	18
multiControl <i>plus</i> Substation UCW048	UCW048	900 x 600 x 450mm	48	24
multiControl <i>plus</i> Substation UCW060	UCW060	900 x 600 x 450mm	60	30
multiControl <i>plus</i> Substation UCW072	UCW072	900 x 600 x 450mm	72	36
multiControl <i>plus</i> Substation UCW084	UCW084	900 x 600 x 450mm	84	42
multiControl <i>plus</i> Substation UCW096	UCW096	900 x 600 x 450mm	96	48



The MCUV-E is a system for connecting to main systems of the multiControl plus series, whereby it is used to outsource circuits and reduce installation effort / material without its own battery.

The energy supply (AC/DC voltage) is realized through an outgoing sub-distributor in the main system.

The energy is supplied in single-wire technology by an AC / DC switchover in the multiControl plus main system.

If the main system works in mains operation, the MCUV-E is supplied with AC voltage. The MCUV-E is supplied with DC voltage during battery or test operation of the main system.

In contrast to conventional systems with two supply lines (AC line and DC line), only one supply line (AC / DC line) is required, with which further savings in installation material can be achieved.

Each sub-distributor has four separate CCIFs, which means that four network monitor loops can be monitored individually on each MCUV-E.

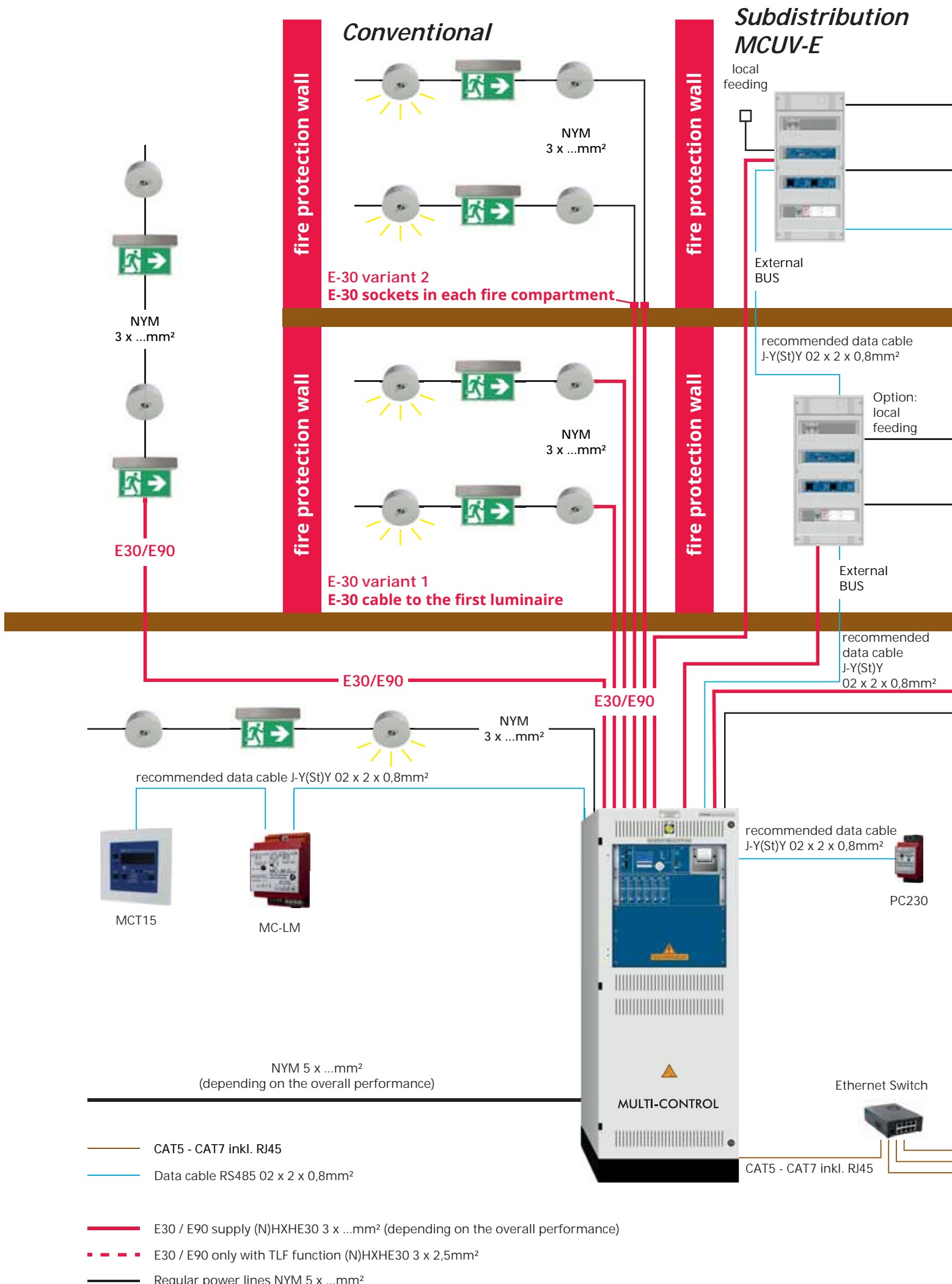
An additional supply for energy supply from a local general light distributor is optionally available. This enables a tenant-related energy supply for the lights connected to the MCUV-E to be implemented. When the system is ready for operation, the luminaires are supplied by feeding the local general light distributor. The luminaires are only supplied by the main system if the general lighting distributor fails or if the main system has priority emergency or test operation.

multiControl *plus*

Subdistribution - Single conductor technology MCUV-E

Version	Order number	max. Mains circuits
MCUV-E02	UV multiControl plus ZBS, TSC-UV, 1x TSM32	2
MCUV-E02-LE	UV multiControl plus ZBS, TSC-UV, 1x TSM32, local feed	2
MCUV-E02-LE-SAM	UV multiControl plus ZBS, TSC-UV, 1x TSM32, local feed, incl. SAM24	2
MCUV-E04	UV multiControl plus ZBS, TSC-UV, 2x TSM32	4
MCUV-E04-LE	UV multiControl plus ZBS, TSC-UV, 2x TSM32, local feed	4
MCUV-E04-LE-SAM	UV multiControl plus ZBS, TSC-UV, 2x TSM32, local feed, incl. SAM24	4
MCUV-E06	UV multiControl plus ZBS, TSC-UV, 3x TSM32	6
MCUV-E06-LE	UV multiControl plus ZBS, TSC-UV, 3x TSM32, local feed	6
MCUV-E06-LE-SAM	UV multiControl plus ZBS, TSC-UV, 3x TSM32, local feed, incl. SAM24	6

...further configurations on request



Conventional

**Subdistribution
MCUV-E**

fire protection wall

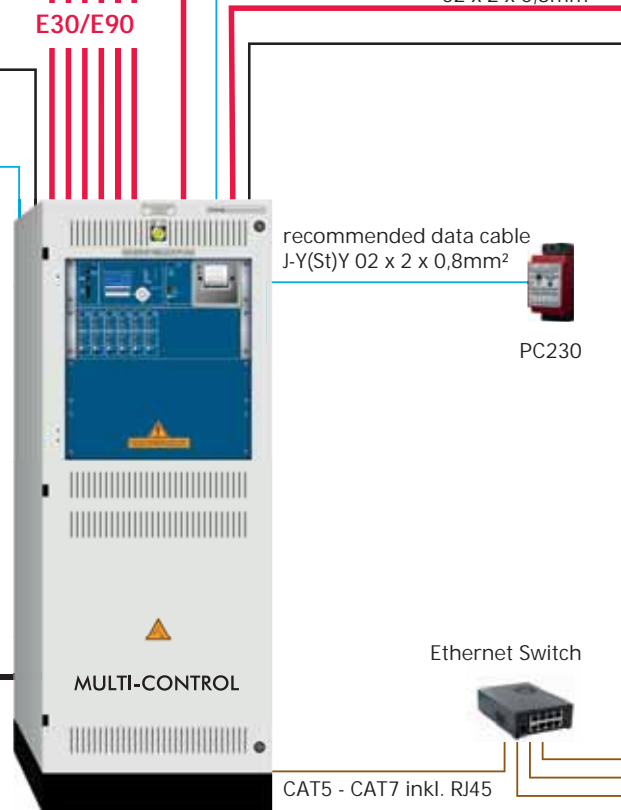
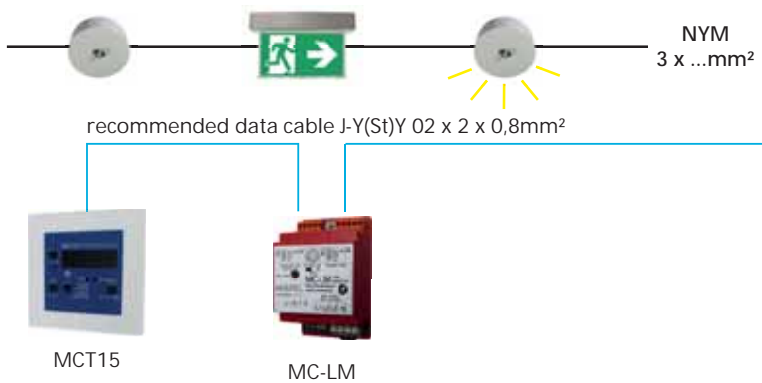
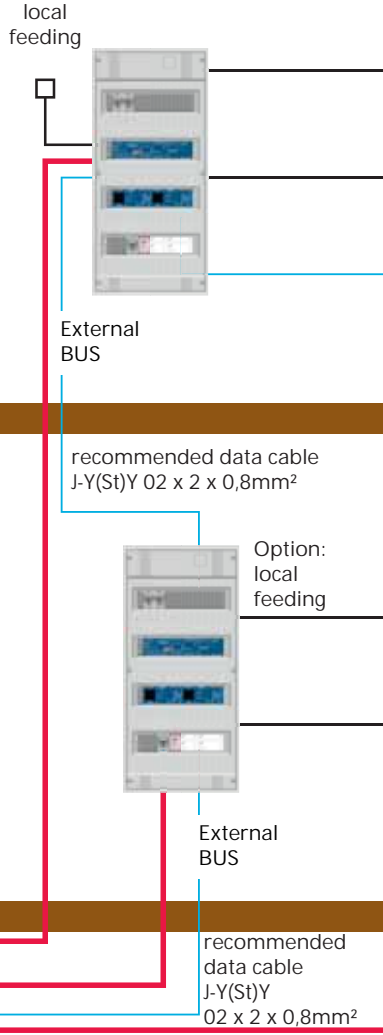
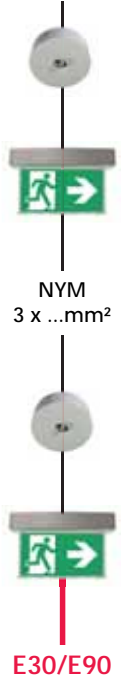
fire protection wall

fire protection wall

fire protection wall

E-30 variant 2
E-30 sockets in each fire compartment

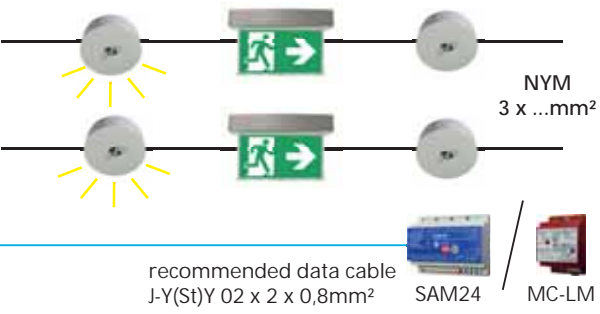
E-30 variant 1
E-30 cable to the first luminaire



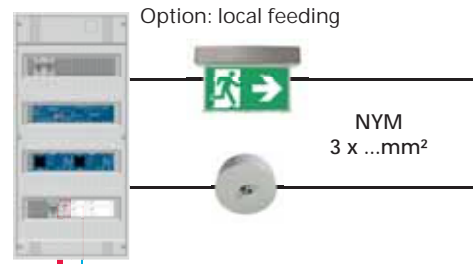
NYM 5 x ...mm²
(depending on the overall performance)

- CAT5 - CAT7 inkl. RJ45
- Data cable RS485 02 x 2 x 0,8mm²
- E30 / E90 supply (N)HXHE30 3 x ...mm² (depending on the overall performance)
- - - E30 / E90 only with TLF function (N)HXHE30 3 x 2,5mm²
- Regular power lines NYM 5 x ...mm²

Substation / -distribution MCVU-E



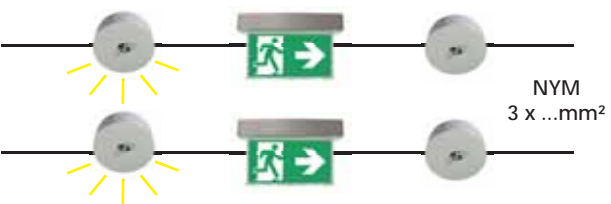
fire protection wall



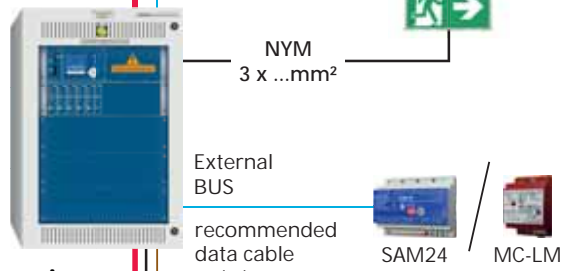
**Subdistributor
(also in E30)**

External BUS
recommended data cable
J-Y(St)Y 02 x 2 x 0,8mm²

1. OG



fire protection wall



**Substation
(also in E30)**

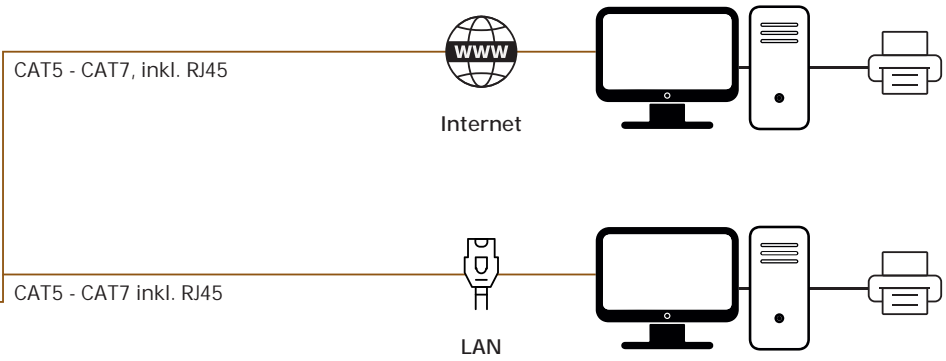
EG

E30/E90
NYM 5 x ...mm² (depending on the overall performance)
CAT5 - CAT7, inkl. RJ45



USB Centronics — Drucker

Visualization
No software installation necessary, integrated web server. Access worldwide possible.



Note: The cross sections given are recommendations. The voltage drop and the switch-off conditions must be observed.



The MCUV is a system for connecting to main systems of the multi-Control plus type, whereby it is used to outsource circuits and reduce the amount of installation work and materials without its own battery.

The energy supply (AC / DC voltage) is realized through an outgoing sub-distributor in the main system.

Power is supplied by separate cables for the mains and battery voltage.

Switching from mains to battery voltage takes place separately in each circuit module.

Each sub-distributor is equipped with a UV controller on which an integrated mains monitoring system monitors the mains voltage at the MCUV.

multiControl *plus*

Subdistributor MCUV

FACTS

Version:	Wall housing
Dimensions:	see systems list
Protection category:	IP20 (optional IP21, IP54, E30)
Insulation class:	I
Energieanschluss:	230 V AC ($\pm 10\%$) 50/60Hz / 216 V DC
Switched mode:	230 V AC / 216 V DC $\pm 15\%$
permissible Temp.:	0°C to 35°C
Cable feed:	from Top (from below on request)

Features at a glance:

- Power supply system according to DIN EN 50171 for safety lighting systems according to DIN EN 50172 and systems according to DIN VDE 0100-718
- Max. 48 circuits of max. 1300 W.
- Status information of the system via StatusLEDs
- Data terminals for further wiring to other MCV systems
- up to 6 switching inputs per circuit

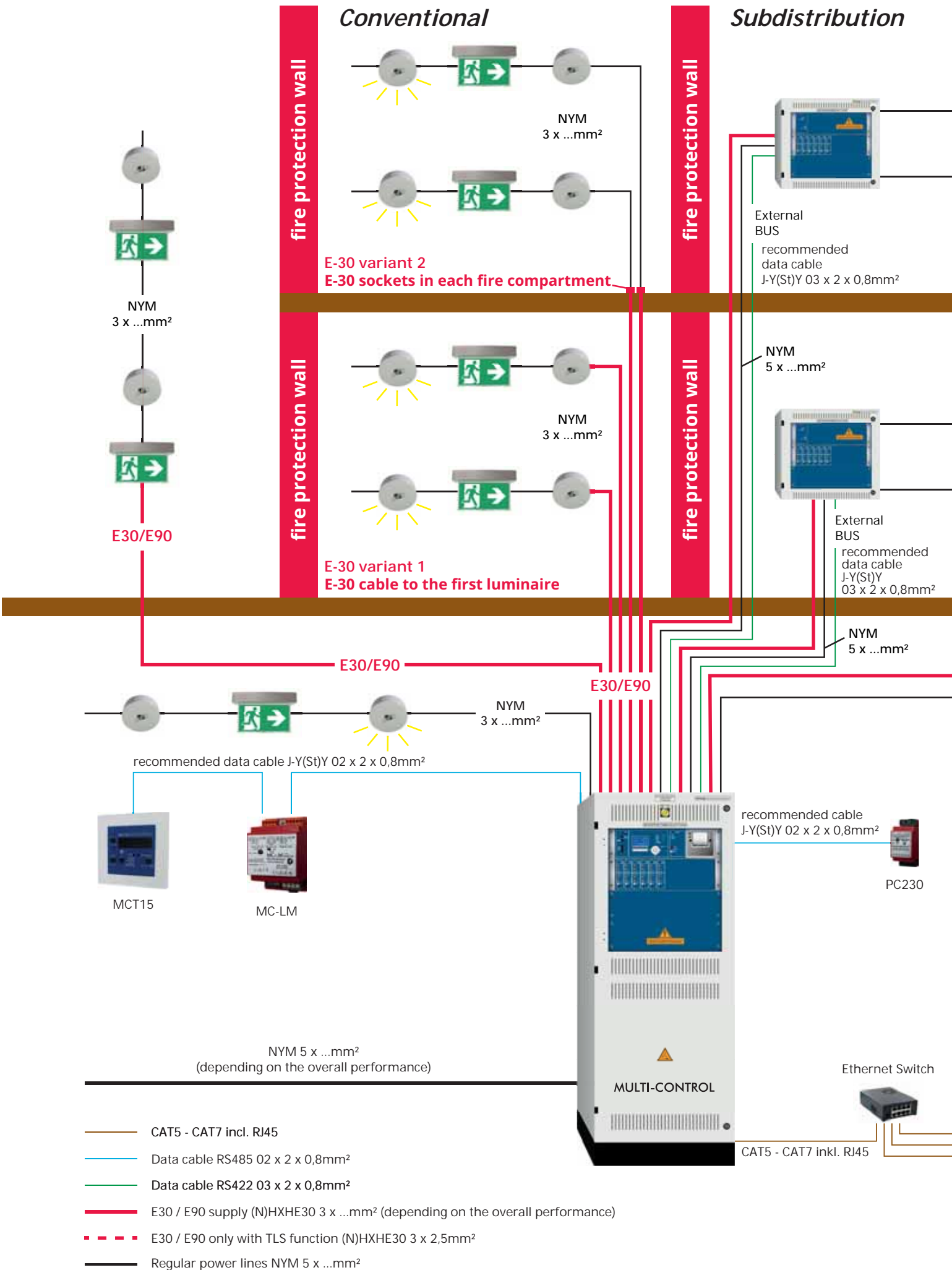
Optional light switch query module SAM24M:

- 8x switching input on terminal (200 - 255 V AC or 24 - 255 V DC) for switching the circuits in AC operation
- 3 circuit types (sw. maintained, maintained, non-maintained) programmable

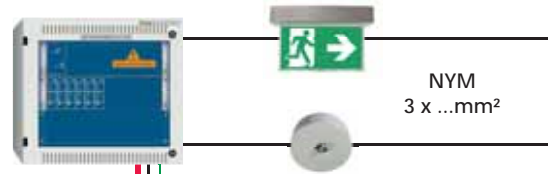
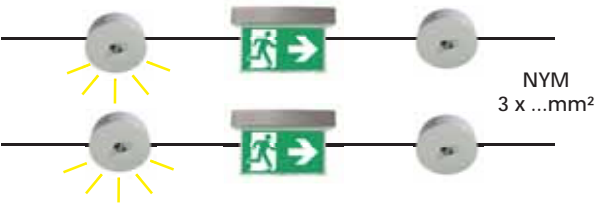
Version	Bestell-Nr.	Cabinet HxBxT in mm	Kreise	max. DCM
multiControl plus UV, UV-C	MCUV12	500x400x250	max. 12	6
multiControl plus UV, UV-C	MCUV12E30	678x581x345	max. 12	6
multiControl plus UV, UV-C	MCUV24	550x600x450	max. 24	12
multiControl plus UV, UV-C	MCUV24E30	1050x650x341	max. 24	12
multiControl plus UV, UV-C	MCUV36	900x600x450	mx. 36	18
multiControl plus UV, UV-C	MCUV36E30	1150x760x575	max. 36	18
multiControl plus UV, UV-C	MCUV48	900x600x450	max. 48	24

Conventional

Subdistribution



Substation / -distribution

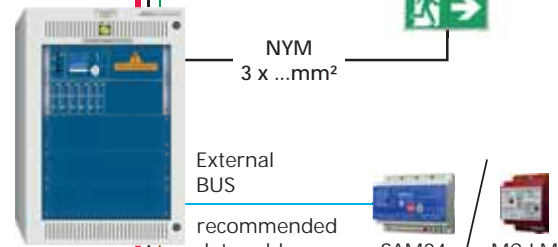
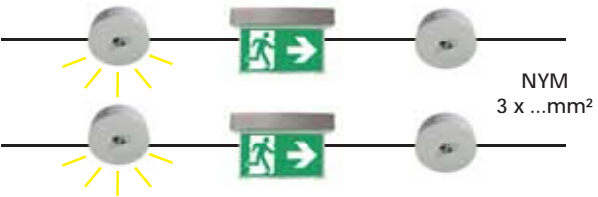


fire protection wall

**Subdistributor
(also in E30)**

External BUS
recommended data cable
J-Y(St)Y 03 x 2 x 0,8mm²

1. OG



fire protection wall

**Substation
(also in E30)**

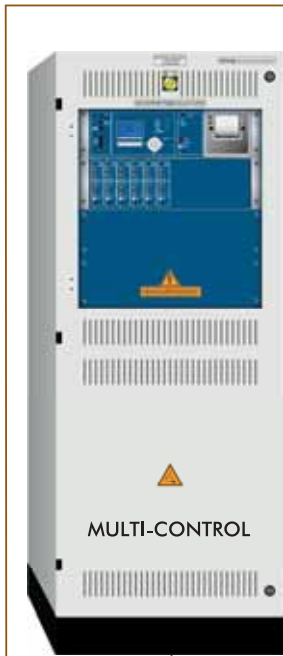
NYM 5 x ...mm²
E30/E90

External BUS
recommended data cable
J-Y(St)Y 02 x 2 x 0,8mm²

EG

E30/E90 NYM 5 x ...mm² (depending on the overall performance)

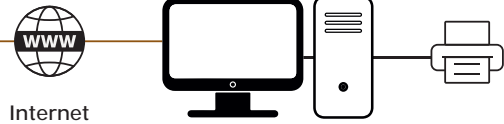
CAT5 - CAT7, inkl. RJ45



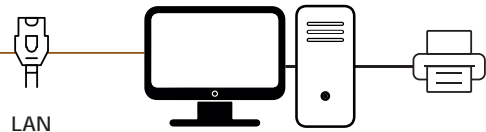
USB Centronics Printer

Visualization
No software installation necessary, integrated web server. Access worldwide possible.

CAT5 - CAT7, inkl. RJ45



CAT5 - CAT7 inkl. RJ45



Note: The cross sections given are recommendations. The voltage drop and the switch-off conditions must be observed.

RELATED ACCESSORIES BY SYSTEM TYPE

	myControl plus	microControl plus	miniControl plus	miniControl XL plus	midiControl plus	multiControl plus
SAM24	X	X	X	X	X	X
MC-LM	X	X	X	X	X	X
MCT15	X	X	X	X	X	X
PC230	X	X	X	X	X	X
DCM32		x	x	x	x	x
DCM42				x	x	x
DCM62						x
DCM12E		x	x	x	x	x
(zus.) RSM						x
CCIF						X
CCIF-RSM						X*
SAM24M						X*
zus. IOM						X*
BAT-LOGG				X	X	X
MCABUS						X*
MCABUV						X*
UVKOP						X*
ABUV-E60						X*
ABUV-E100						X*
ABUV-E						X*
IES-5P	X	X	X	X	X	X
IES-8P				X	X	X
MC-MODBUS1				X	X	X
MC-MODBUS2		X	X			
MC-MODBUS-RTU						X
MCBACNET1				X	X	X
MCBACNET2		X	X			
MC-COMCON		X	X	X	X	X
MC-XML	X	X	X	X	X	X
MI-WLAN	X	X	X	X	X	
MC-WLAN						X
MC-MSERV	X	X	X	X	X	X
MC-MSERVM				X	X	X
MCBD04E				X	X	X
BDEXT		X	X			
APIP54	X	X	X	X	X	X*
E30	X	X	X	X		X
PLX	X	X	X	X	X	X
LUINT120						X
LUAN1/2/3/4						X
SSD				X	X	X
SSIB						X
TFST						X*
ZSU						X
ABKL						X
APSI						X
PC230E					X	X
DBU25						X*
DBU40						X*
DBU60						X*
DBU75						X*
DBU90						X*
DBU100						X*
DBU150						X*
DBU200						X*
NE16						X*
...						X*
NE63						X*

	MDC	multiControl plus Substation	microControl plus Substation	multiControl plus Subdistributor	multiControl plus Subdistributor Single conductor technology	*) Remarks
SAM24	X	X	X		X	
MC-LM	X	X	X		X	
MCT15	X	X	X		X	
PC230	X	X	X		X	
DCM32		x	x	x		
DCM42		x		x		
DCM62		x		x		
DCM12E		x	x	x		
(zus.) RSM	x	x				
CCIF	X	X				
CCIF-RSM	X					in comb. w. RSM
SAM24M	X	X*		X (not MCUV12)		not E30
zus. IOM	X	X*				not E30
BAT-LOGG	X					
MCABUS	X					not E30
MCABUV		X*				not E30
UVKOP		X*				not E30
ABUV-E60		X*				not E30
ABUV-E100		X*				not E30
ABUV-E		X*				not E30
IES-5P	X	X	X			
IES-8P	X	X				
MC-MODBUS1	X	X				
MC-MODBUS2			X			
MC-MODBUS-RTU	X	X				
MCBACNET1	X	X				
MCBACNET2			X			
MC-COMCON	X	X	X			
MC-XML	X	X	X			
MI-WLAN			X			
MC-WLAN	X	X				
MC-MSERV	X	X	X			
MC-MSERVM	X	X				
MCBD04E	X	X				
BDEXT						
APIP54	X*	X	X			
E30	X	X	X	X	X	
PLX	X	X	X			
LUINT120	X	X				
LUAN1/2/3/4	X					
SSD	X	X				
SSIB	X	X				
TFST	X*	X*		X*		not E30
ZSU	X					
ABKL	X	X		X*		not E30
APSI	X	X		X*		not E30
PC230E	X	X				
DBU25	X					in comb. w. RSM
DBU40	X					in comb. w. RSM
DBU60	X					in comb. w. RSM
DBU75	X					in comb. w. RSM
DBU90	X					in comb. w. RSM
DBU100	X					in comb. w. RSM
DBU150	X					in comb. w. RSM
DBU200	X					in comb. w. RSM
NE16	X					in comb. w. RSM
...	X					in comb. w. RSM
NE63	X					in comb. w. RSM

Circuit modules



DCM32 / DCM42 / DCM-E



DCM62



TSM32

The **DCM circuit module**, in service-friendly 19" plug-in technology, is used for the voltage supply and monitoring of safety and escape sign luminaires. The circuit module is equipped with two circuits, each with a separate fuse. Each circuit has its own AC / DC switchover.

The **TSM32 circuit module**, in a compact cabinet for mounting on mounting rails, is used for power supply and monitoring of safety and escape sign luminaires. The circuit module is equipped with two circuits, each with a separate fuse. The AC / DC switchover takes place centrally in the main system.

Each circuit module offers the possibility of implementing individual luminaire monitoring of up to 20 luminaires and / or self-calibrating circuit monitoring per circuit.

The operation of continuous light, standby light and switched continuous light is possible. The circuit module monitors the connected luminaires or the circuit for: luminaire faults, current faults and circuit faults. A status query of the module on the system display is possible. The DCM has two status LEDs for status display, the TSM32 a multi-mobile status LED.

Circuit modules of type DCM12E additionally have the function of switching individual lights.

The following circuit modules are available for different output powers:

Typ	Fusing	maximum Load
DCM12E	2x F5A	2x 250 W
DCM 32	2x F5A	2x 650 W
DCM 42	2x F6,3A	2x 860 W
DCM 62	2x FF10A	2x 1300 W
TSM32	2x F5A	2x 650 W

The **relay switching module RSM** is used to control up to two contactor switches, for the energy supply of safety and escape sign luminaires, primarily in systems of the MDC type.

The RSM has two separate contacts for switching the contactor changeovers. In addition, a separate CCIF is integrated for each contactor changeover.

Further switching options are available via SAM24 or MC-LM, e.g. switched continuous light or network monitor functions.

Different run-on and supply times can be programmed separately for each contactor changeover.

The RSM has a multi-colored status LED for status display.



The **LDM25 charging module**, in service-friendly 19" plug-in technology, is used to charge battery sets in power supply systems in accordance with the applicable European and national standards.

The LDM25 has its own charge control and works with an IUTQ characteristic according to EN 50272-2.

Optimal battery life is ensured by taking current, voltage and ambient temperature into account.

The charging current of the LDM25 can be configured to 0.5 A, 1.0 A or 2.5 A depending on the system requirements.

The charging voltage of the LDM25 can be configured depending on the battery type (NICd; OGI / OPzS / OPzV or OGIV), regardless of the charging current.

The LDM25 has four status LEDs for status display.



IO-Module, Light switch query module



The **IO module** for forwarding system states to an external display unit or building management system via 7 potential-free contacts. In addition, 4 potential-free polarity-tolerant switching inputs are integrated.

The IO module has status LEDs for status display.



The **switch query module SAM24** is used to transmit voltage levels of general lighting to safety lighting systems of the multiControl plus series.

The evaluation of up to 8 switching inputs enables the additional switching of safety and escape sign luminaires of the safety lighting system together with the general light. An integrated 3-phase network monitor input enables the monitoring of a general light distributor.

Applying a 230 V AC voltage to U / BUS COM-boost (L3 / N of the network monitor input) prepares the BUS voltage for the module itself and all subsequent modules in the BUS. This makes it possible to compensate for losses in the BUS voltage.

The COM1 output is used for through-wiring the RS485BUS. An additionally generated RS485BUS can be tapped at the COM2 output of the SAM24. Independent of the COM1 output, an additional spur line can be implemented to connect modules to the BUS.

The SAM24 has status LEDs for status display.

Note: The connection of multiControl plus sub-distributors of type MCVU-E is only permitted at output COM1 of SAM24.

The **CCIF module** (critical circuit interface module) is designed for use in devices of the type multiControl plus and MDC and ensures reliable monitoring of a network monitor loop in connection with network monitor modules of the type PowerControl PC230.

The emergency mains operation (mod. Standby) is triggered in the event of an interruption or clumping / short-circuiting of the network monitor loop and is signaled in the system's LCD with a „critical circuit“.

Cables to maintain the function for the network monitor loop are not necessary.



The **three-phase line monitoring PC230** is used to monitor AV networks (power supply for general lighting).

A maximum of 3 phases + neutral conductors can be monitored with the PC230. The switching threshold for the detection of a power failure or a power fluctuation is 85% of the nominal power UNENN.

Two potential-free changeover contacts are used to connect to the safety lighting system.

The PC230 has a status LED for status display.



The **MC-LM bus mains monitor** (multiControl plus - Line Monitor V2) is used to monitor AV networks (power supply for general lighting).

The MC-LM is connected to safety lighting systems of the multiControl plus series via a secure RS485BUS and does not require a data line to maintain its function.

A maximum of 3 phases + neutral conductor can be monitored with the MC-LM. The switching threshold for the detection of a power failure or a power fluctuation is 85% of the nominal power UNENN.

From version V2, a potential-free relay contact enables cross-system switching, for example.

The MC-LM has a multi-colored status LED for status display.



The **MC-FLM** is a module for monitoring a local AV network and switching luminaires / lighting groups. Each MC-FLM forms its own lighting group and enables the lighting of this group to be switched together, e.g. together with the general light.

An integrated network monitor and switching input enable switching of the lights / lighting group.
The MC-FLM and the lighting group are powered by the circuit module of the safety lighting system.

The MC-FLM has a multi-colored status LED for status display.



Control panel

The **MCT15 (S / U / US) remote panel** is used for the decentralized display of states of safety lighting systems of the multiControl plus series.

The corresponding status of the system is displayed optically and acoustically. The visual display is via plain text and LED. If faults occur, there is also an acoustic message.

This remote panel is optionally available with a button (MCT15 / MCT15U) or key switch (MCT15S / MCT15US) as a mode selector switch. There are also cabinet variants for surface mounting (MCT15 / MCT15S) and flush mounting (MCT15U / MCT15US) to choose from.

In plain text, the display provides information about the following status information of the safety light system:

- Battery voltage
- Mains voltage
- Battery ambient temperature
- System errors and much more

A multi-colored status LED and a red error LED signal the following system states:

- System ready for operation / loading operation
- Battery / mains operation
- Continuous light on / off
- System error

In the event of a fault, an acoustic signal sounds.



	MCT-15/MCT-15S	MCT-15U / MCT-15SU
Dimensions in mm	117 x 117 x 26 (H x W x D)	Cut-out 120x120mm

Connection to the building management system

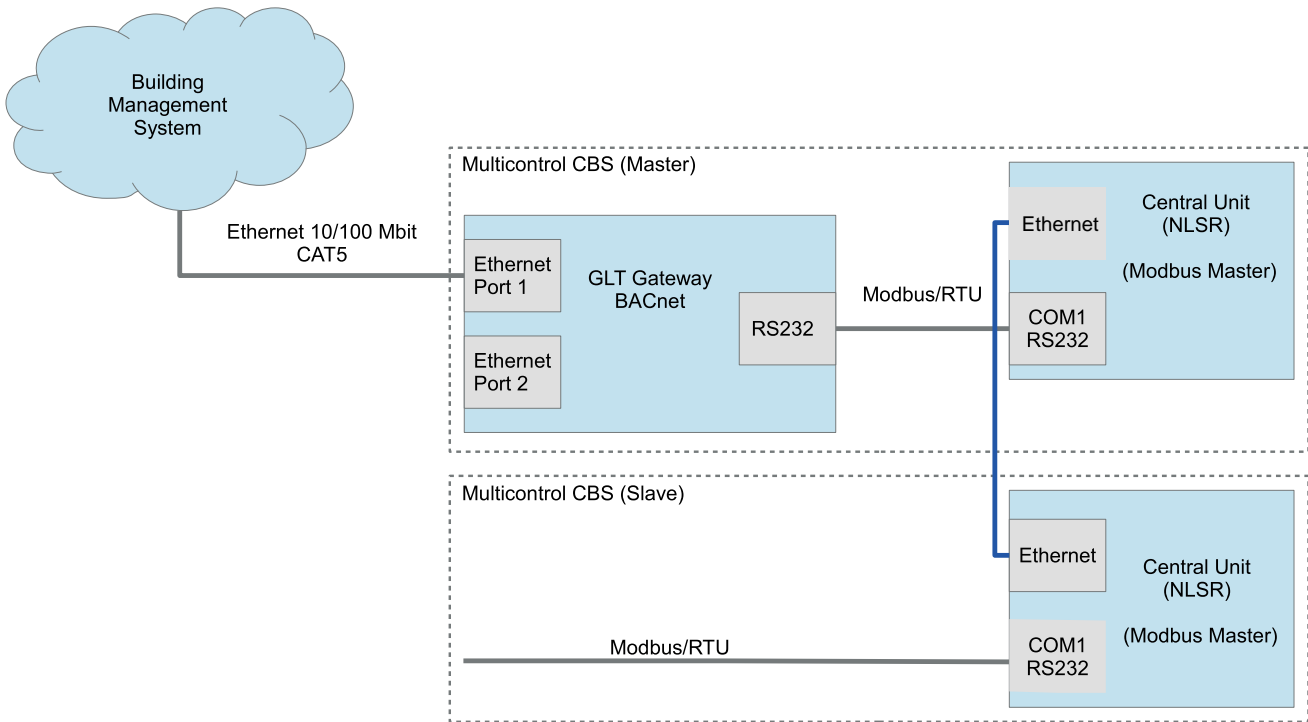
The **multiControl BMS gateway** supports the Modbus or BACnet protocols for connection to a building management system.

All typical BACnet features, such as the BBC profile for standardized BACnet building controllers, are supported.

Depending on the desired depth, the information from the multiControl plus can be programmed down to the luminaire level. Read out e.g. Luminaire errors for each luminaire, circuit errors for each circuit (earth fault, fuse, current monitoring), condition of the system (BAS, collective fault, etc.), error messages from the station (error memory), measured values (mains, battery, etc.).

If several systems are networked, it is also possible to equip only the main system with a complete BMS gateway and, in parallel, to query the substations with limited information depth.

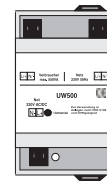
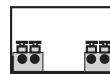
Customer-specific programming is possible on request.



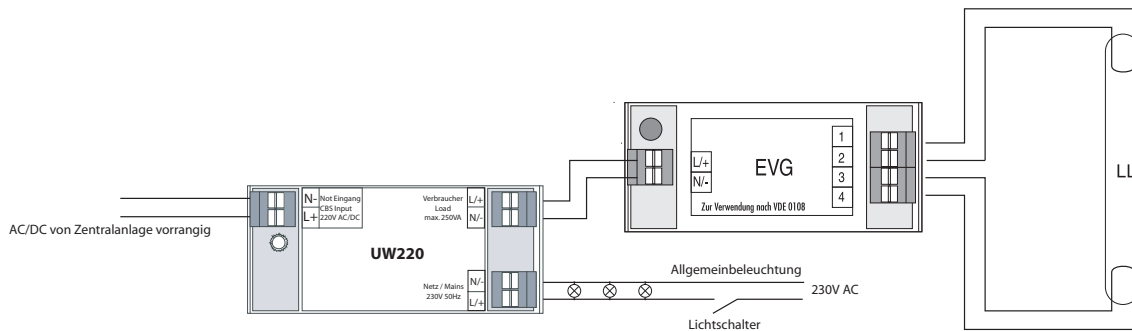
Luminaire modules



Power down switch **UW220** or **UW500** for the operation with inverter devices (electronic ballast with 1 feeding AC/DC) at central power supply systems about 2 incoming wires. Max. switchover performance 250 or 500VA. Alternation voltage can be switched about the light switch of the room light as well as the AC/DC-voltage about the central supply power system. Time-delayed emergency entry with previous disconnection of the main input.



Connection UW



The **luminaire monitor unit DCBLU05** is intended for application with the emergency lighting systems of multiControl plus series.

The monitoring unit DCBLU05 can be used for application of single light queries for emergency lighting systems of the types listed above.

The DCBLU05 is able to monitor DC-compatible ballasts or lamps with output powers ranging from 3 – 200VA.

Depending on the switching mode of the circuit the DCBLU05 may be used in maintained or non-maintained mode.

Dimensions: H=20mm, W=30mm, L=79mm.

The **MU05** module is an addressable controller for use in a safety luminaire. This controller offers all switching modes and can operate a single luminaire survey. Consumers can be monitored without an auxiliary line. The general advantages are:

- compact design
- consumers load 4 up to 200 VA
- 2,5 mm² connectors with bypass connection
- local power supply monitoring
- S S' disable external dimming voltage

The power supply monitor allows connected luminaires being operated in maintained and non-maintained mode. In case of a general mains failure all luminaires are switched on.

The MU05 is designed to work with power supply systems of the multiControl plus series.

Dimensions: H=22mm, W=29mm, D=142mm.

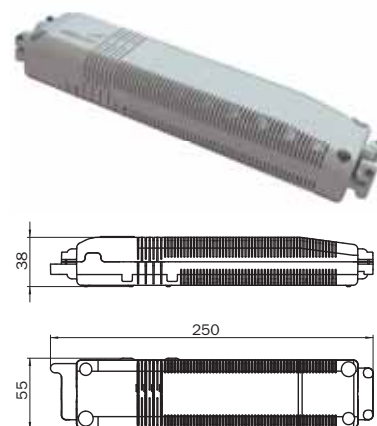


The **housing UH1** is a universal plastic housing for accommodating the luminaire modules LPU, MLED, MU05 and NT24.

The UH1 can easily be installed through a standard ceiling cut with 74mm in a cavity ceiling. The installation depth required minimum amounts to only 100mm, because the rear part of the housing can be bent up to an angle of 45°.

UH1 allows a terminal for connection of 2.5 mm² wires to install. Strain reliefs are provided on both ends of the housing.

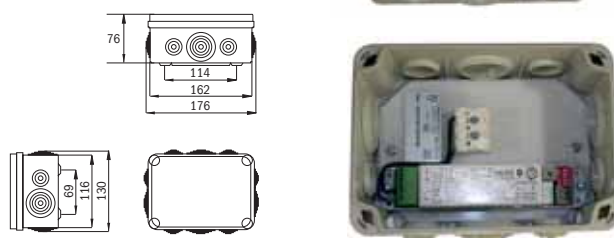
For concrete installation, we recommend the recessed boxes HaloX-0 + HaloX-40 from Kaiser.




The **MU05-Box** is a plastic housing that holds the luminaire monitoring module MU05. The housing is designed in IP65 and holds the necessary terminal connectors in addition to the luminaire module.

Thus, a use of the luminaire monitoring device MU05 in humid mounting situations is possible.


Dimensions: 176 x 130 x 76mm



Luminaire modules



The image shows a rectangular electronic switching power supply module, model MLED500. It features a white plastic housing with a green terminal block at the bottom and a red terminal block at the top. The front panel is white with black text and symbols, including a CE mark and a power button. The text on the panel includes technical specifications and safety information in both German and English.

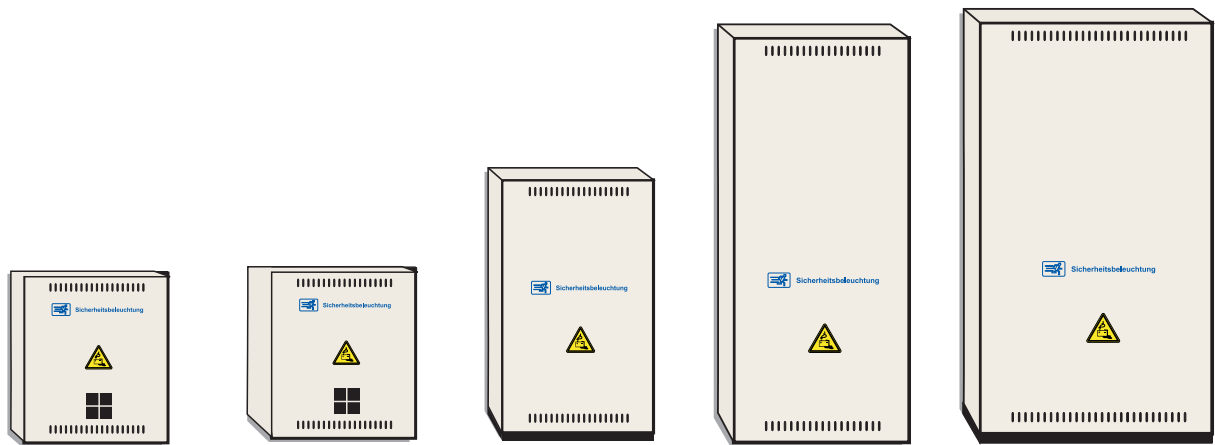


The logo consists of the letters 'LED' in a stylized font, with the number '24' to its right, all enclosed in a hexagonal shape.

The MLED500 is an electronic switching power supply with integrated individual light monitoring, light management function, mains monitoring, dimmer and flashing functions. All switching modes are possible. The mains monitor allows the operation of connected luminaires in non-maintained mode in a maintained circuit. In case of a mains failure all lights are switched on automatically. LED illuminants with a max. output of 8W can be used as consumers.

The MLED500 is also capable of dimming the lights to 30% or 50% (cinema mode) in mains operation and to execute a flashing function in emergency operation (e.g. underground car park).

The MLED500 is suitable for use with emergency lighting systems of the multiControl plus series.



Cabinet	BATT90	BATT60	BATT11	BATT18	BATT20
Cabinet	Wall or Tower housing, door stop left	Wall or Tower housing, door stop left	Wall or Tower housing, door stop left, incl. 50mm socket	Tower housing, door stop left	Tower housing, door stop left, incl. 50mm socket
Stahlblechgehäuse	RAL 7035, IP20	RAL 7035, IP20	RAL 7035, IP20	RAL 7035, IP20	RAL 7035, IP20
Abmessungen in mm	900 x 600 x 450	900 x 600 x 600	1100 x 600 x 450	1800 x 600 x 450	1850 x 800 x 600
Kabeleinführung	Top insertion	Top insertion	Top insertion	Top insertion	Top insertion
Bestellnummer Oder number	BATT90	BATT60	BATT11	BATT18	BATT20
Optional:	Door stop right Socket 100mm Socket 200mm	Door stop right Socket 100mm Socket 200mm	-	Door stop right Socket 100mm Socket 200mm	-

The integrated ventilation slots are designed for the maximum possible battery capacity.

Batteries – OGiV LP

In case of emergency the safety and rescue sign luminaires are powered by maintenance free acid batteries of type OGiV in all emergency light systems. These are designed according to DIN EN 50272-2 and DIN EN 50171.

The designed lifetime of these batteries is in 20° C ambient temperature 12 years.



Output for OGiV batteries (calculated with a set of 18 batteries)

Typ	OGiV 1236 LP	OGiV 1252 LP	OGiV 1270 LP	OGiV 1290 LP	OGiV 12120 LP	OGiV 12170 LP	OGiV 12260 LP	OGiV 12280 L	OGiV 12330 LP	OGiV 12400 LP	OGiV 12450 LP	OGiV 12550 LP
Battery capacity Ah	3,6	5	7	9	12	17	26	28	33	40	45	55
Output max. 1h in W*	468 (374)	864 (691)	893 (715)	1.134 (907)	1.674 (1.339)	2.430 (1.944)	3.240 (2.592)	3.146 (2.514)	4.136 (3.309)	5.044 (4.035)	5.648 (4.519)	7.353 (5.883)
Output max. 3h in W*	198 (158)	346 (276)	355 (284)	501 (401)	674 (539)	944 (755)	1.501 (1.201)	1.544 (1.236)	1.642 (1.313)	2.117 (1.693)	2.376 (1.901)	3.256 (2.604)
Output max. 8h in W*	88 (70)	130 (104)	164 (131)	205 (164)	287 (230)	423 (339)	653 (523)	711 (569)	783 (626)	872 (697)	1.051 (841)	1.580 (1.264)

Number of cabinets needed for a set (18 pcs) of batteries of the entire capacity

MC-Cabinet 1000mm	1	1	1	1	1	1	-	-	-	-	-	-
MC-Cabinet 1500mm	1	1	1	1	1	1	1	1	1	1	1	-
Battery cabinet BATT90 900 x 600 x 450mm	1	1	1	1	1	1	1	1	1	1	1	1
Battery cabinet BATT60 900 x 600 x 600mm	1	1	1	1	1	1	1	1	1	1	1	1
Battery cabinet BATT11 1100 x 600 x 450mm	1	1	1	1	1	1	1	1	1	1	1	1
Battery cabinet BATT18 1800 x 600 x 450mm	1	1	1	1	1	1	1	1	1	1	1	1
Battery cabinet BATT20 1850 x 800 x 600mm	1	1	1	1	1	1	1	1	1	1	1	1

Required air circulation per battery set (calculated for power charging of the batteries)

Air stream with technical ventilation at least (m³/h)	0,2	0,3	0,4	0,4	0,6	0,8	1,2	1,3	1,5	1,8	2,0	2,4
Profile of the air inlet pipe with natural ventilation (cm²)	5,6	8,4	11,2	11,2	16,8	22,4	33,6	36,4	42	50,4	56	67,2

* Performance ratings with 25% aging Reserve in parantheses

OGiV 12600 LP	OGiV 12650 LP	OGiV 12750 LP	OGiV 12800 LW	OGiV 12800 LPL	OGiV 12900 LP	OGiV 121000 LP	OGiV 121200 LPS	OGiV 121200 LP	OGiV 121340 LP	OGiV 121500 LP	OGiV 122000 LPE	OGiV 122000 LP	OGiV 122600 LP
60	65	75	80	80	90	100	120	120	134	150	200	200	260
7.420 (5.936)	7.852 (6.281)	9.094 (7.275)	9.288 (7.430)	9.558 (7.646)	10.260 (8.208)	12.744 (10.195)	14.364 (11.491)	15.660 (12.528)	16.200 (12.960)	18.360 (14.688)	24.624 (19.699)	26.892 (21.514)	29.016 (23.213)
3.262 (2.609)	3.359 (2.687)	4.104 (3.283)	4.104 (3.283)	4.212 (3.370)	4.666 (3.732)	5.238 (4.190)	5.746 (4.596)	6.318 (5.054)	7.366 (5.892)	7.700 (6.160)	9.979 (7.983)	11.988 (9.590)	12.834 (10.267)
1.440 (1.152)	1.540 (1.232)	1.814 (1.452)	1.998 (1.598)	1.912 (1.529)	2.128 (1.702)	2.462 (1.970)	2.700 (2.160)	2.808 (2.246)	3.175 (2.540)	3.532 (2.825)	4.752 (3.802)	5.400 (4.320)	6.228 (4.982)
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	1	-	-	-	-	-	3	3	3	-	-	-
1	-	1	1	-	-	-	-	2	-	-	-	3	-
-	-	-	-	-	-	-	-	3	3	3	-	-	-
1	1	1	1	1	1	1	1	2	2	2	3	3	3
1	1	1	1	1	1	1	1	1	1	1	1	1	2
2,6	2,9	3,3	3,5	3,5	3,9	4,4	5,2	5,2	5,8	6,5	8,7	8,7	11,3
72,8	81,2	92,4	98	98	109,2	123,2	145,6	145,6	162,4	182	243,6	243,6	316,4

OGiV LP – Technical specifications

OGiV Long-Life-Baureihe (Design Life bis zu 12 Jahre)

RPower® Typ	Voltage	Capacity	Dimensions (*= incl. Poles)			Weight	Pol	Connector
	V	Ah	L	W	H*	kg	Terminal	
OGiV1252LP	12	5,2	90	70	107	1,95	6,3mm	2,5 mm ²
OGiV1270LP	12	6,9	151	65	100	2,37	6,3mm	2,5 mm ²
OGiV1290LP	12	8,8	151	65	100	2,78	6,3mm	2,5 mm ²
OGiV12120LP	12	11,8	151	98	101	3,67	6,3mm	2,5 mm ²
OGiV12170LP	12	16,8	181	77	167	5,5	M5	6 mm ²
OGiV12260LP	12	25,6	166	175	125	9,2	M5	6 mm ²
OGiV12280L	12	29,7	165	125	175	9,1	M5	6 mm ²
OGiV12330LP	12	33,6	195	130	168	11	M6	16 mm ²
OGiV12400LP	12	42,2	197	165	170	13,8	M6	16 mm ²
OGiV12450LP	12	47,2	197	165	170	14,6	M6	16 mm ²
OGiV12550LP	12	61,0	229	138	213	17,2	M6	16 mm ²
OGiV12600LP	12	62,0	258	166	215	20,7	M6	16 mm ²
OGiV12650LP	12	67,2	350	167	179	22,4	M6	16 mm ²
OGiV12750LP	12	81,0	258	166	215	22,5	M6	16 mm ²
OGiV12800LW	12	84,0	260	168	214	22,4	M6	16 mm ²
OGiV12800LPL	12	84,0	350	167	179	22,5	M6	16 mm ²
OGiV12900LP	12	93,4	306	169	216	26,5	M6	16 mm ²
OGiV121000LP	12	106,0	330	171	222	32	M8	25 mm ²
OGiV121200LPS	12	124,9	330	171	222	32,5	M8	25 mm ²
OGiV121200LP	12	127,2	410	176	224	36	M8	25 mm ²
OGiV121340LP	12	140,8	341	173	287	39,5	M8	25 mm ²
OGiV121500LP	12	157,6	482	170	240	44,8	M8	25 mm ²
OGiV122000LP	12	208,8	522	238	223	67,5	M8	25 mm ²
OGiV122000LPE	12	208,2	522	238	223	59,1	M8	25 mm ²
OGiV122600LP	12	262,0	521	269	223	71	M8	25 mm ²

Batteries – OGiV FT

In case of emergency the safety and rescue sign luminaires are powered by maintenance free acid batteries of type OGiV in all emergency light systems. Front terminal (FT) batteries have the advantage that they are - installed in a suitable cabinet - are accessible from the front. This simplifies the installation and service considerably.

The designed lifetime of these batteries is in 20° C ambient temperature 12 years.



Output for OGiV batteries (calculated with a set of 18 batteries)

Typ	OGiV 12550 FT	OGiV 12800 FT	OGiV 121000 FTP	OGiV 121500 FTP
Battery capacity Ah	55	80	100	150
Output max. 1h in W*	7.182 (5.746)	9.688 (7.750)	13.284 (10.627)	18.144 (14.515)
Output max. 3h in W*	3.056 (2.445)	4.093 (3.275)	5.929 (4.743)	8.770 (7.016)
Output max. 8h in W*	1.436 (1.149)	1.955 (1.564)	2.525 (2.020)	3.607 (2.886)

Number of cabinets needed for a set (18 pcs) of batteries of the entire capacity

Combi cabinet MCX 1850 x 800 x 600mm	1	1	1	1
Battery cabinet BATT18 1800 x 600 x 450mm	1	-	-	-
Battery cabinet BATT20 1850 x 800 x 600mm	1	1	1	1

Required air circulation per battery set (calculated for power charging of the batteries)

Air stream at least (m ³ /h)	2,4	3,5	4,4	6,5
Profile of the air inlet pipe (cm ²)	67,2	98,0	123,2	182,0

* Performance ratings with 25% aging Reserve in parantheses

OGiV FT – Technical specifications

OGiV Front-Terminal-Series (Designlife up to 12 years and more)

RPower® Typ	Voltage	Capacity	Dimensions (* = incl. Poles)			Weight	Pol	Position
	V	Ah	L	W	H*	kg	Terminal	
OGiV12550FT	12	58,2	277	106	222	17,3	M6	E
OGiV12800FT	12	79,4	564	114	187	26	M6	E
OGiV121000FTP	12	105	508	110	231	32,5	M8	E
OGiV121500FTP	12	157	548	105	316	45,5	M8	E



A



B



C



D



E



F

Batteries – OGiV HP

- Excellent high current discharge performance
- Flame retardant according to UL94-V0
- Reduced internal resistance and oversized inner cell connectors
- long service life in stand-by operation
- Impact- and break-proof plastic case made of ABS
- electrolyte is bound in fiberglass fabric (AGM = Absorbent Glass Mat Technology)
- maintenance-free operation in any position, except head first

Output for OGiV batteries (calculated with a set of 18 batteries)

Typ	OGiV 12930 HP	OGiV 121250 HP	OGiV 121600 HP	OGiV 122500 HP	OGiV 123000 HP	OGiV 123400 HP	OGiV 123500 HP	OGiV 123600 HP	OGiV 123900 HP	OGiV 124100 HP	OGiV 125000 HP	OGiV 126000 HP
Battery capacity Ah	28	35	58	80	94	110	126	140	150	156	200	230
Output max. 1h in W*	4.180 (3.344)	5.627 (4.501)	7.463 (5.970)	11.448 (9.158)	12.420 (9.936)	12.852 (10.282)	14.688 (11.750)	17.820 (14.256)	18.900 (15.120)	19.548 (15.638)	24.300 (19.440)	28.080 (22.464)
Output max. 3h in W*	1.760 (1.408)	2.369 (1.895)	3.142 (2.513)	4.820 (3.856)	5.229 (4.183)	5.411 (4.329)	6.184 (4.947)	7.502 (6.002)	7.957 (6.366)	8.230 (6.584)	10.230 (8.184)	11.822 (9.457)
Output max. 8h in W*	827 (661)	1.113 (890)	1.476 (1.181)	2.265 (1.812)	2.457 (1.965)	2.542 (2.034)	2.905 (2.324)	3.525 (2.820)	3.739 (2.991)	3.867 (3.093)	4.807 (3.845)	5.555 (4.444)

Number of cabinets needed for a set (18 pcs) of batteries of the entire capacity

Combi cabinet MCX 1850 x 800 x 600mm	1	1	1	-	-	-	-	-	-	-	-	-
Battery cabinet BATT18 1800 x 600 x 450mm	1	1	1	1	1	1	2	2	2	2	3	3
Battery cabinet BATT20 1850 x 800 x 600mm	1	1	1	1	1	1	1	1	1	1	1	1

Required air circulation per battery set (calculated for power charging of the batteries)

Air stream at least (m³/h)	1,3	1,6	2,6	3,5	4,1	4,8	5,5	6,1	6,5	6,8	8,7	10
Profile of the air inlet pipe (cm²)	36,4	44,8	72,8	98,0	114,8	134,4	154	170,8	182	190,4	243,6	280

* Performance ratings with 25% aging Reserve in parantheses

OGiV Premium High-Power-Series (Design Life up to 12 Jahre)

RPower® Typ	Voltage	Capacity	Dimensions (* = incl. Poles)			Weight	Pol	Position
	V	Ah	L	W	H*	kg	Terminal	
OGiV12930HP	12	28	165	125	175	9,6	M5	D
OGiV121250HP	12	35	195	130	168	11,5	M6	C
OGiV121600HP	12	58	229	138	213	17	M6	C
OGiV122500HP	12	80	258	166	215	24,5	M6	C
OGiV123000HP-M8	12	94	306	169	215	28,5	M8	C
OGiV123400HP-M8	12	110	330	171	220	31,5	M8	C
OGiV123500HP-M8	12	126	410	176	224	36,5	M8	C
OGiV123600HP-M8	12	140/126	341	173	287	39,5	M8	C
OGiV123900HP-M8	12	150	341	173	287	41	M8	C
OGiV124100HP	12	156	482	170	240	45	M8	C
OGiV125000HP	12	200	530	209	220	58	M8	C
OGiV126000HP	12	230	522	238	223	67	M8	C



A



B



C



D



E



F

Batteries – OPzV

RPower® OPzV range of valve regulated lead-acid stationary batteries combine the benefits of recombination technology (i. e. virtually no maintenance due to very low gas emissions) plus the advantages of conventional vented batteries with positive tubular plates (i. e. long life and excellent cycling capability).

RPower® OPzV valve regulated lead-acid batteries are the ideal energy source for many different standby applications.

Output for OGIv batteries (calculated with a set of 18 batteries)								
Typ	12V OPzV 20LW	12V OPzV 30LW	12V OPzV 40LW	12V OPzV 50LW	12V OPzV 75LW	12V OPzV 100LW	12V OPzV 120LW	12V OPzV 145LW
Battery capacity Ah	21,2	31,8	42,4	53,0	79,6	106	127,2	153,8
Output max. 1h in W*	1.987 (1.590)	2.981 (2.385)	3.975 (3.180)	5.063 (4.050)	7.595 (6.076)	9.937 (7.950)	11.925 (9.540)	14.364 (11.491)
Output max. 3h in W*	1.018 (815)	1.528 (1.222)	2.037 (1.629)	2.560 (2.048)	3.841 (3.073)	5.092 (4.074)	6.111 (4.888)	7.387 (5.910)
Output max. 8h in W*	477 (382)	716 (572)	954 (763)	1.220 (976)	1.793 (1.434)	2.385 (1.908)	2.862 (2.290)	3.456 (2.765)
Number of cabinets needed for a set (18 pcs) of batteries of the entire capacity								
Combi cabinet MCX 1850 x 800 x 600mm	1	1	1	-	-	-	-	-
Battery cabinet BATT18 1800 x 600 x 450mm	1	1	1	1	1	1	2	3
Battery cabinet BATT20 1850 x 800 x 600mm	1	1	1	1	1	1	1	1
Required air circulation per OPzV battery set (calculated for power charging of the batteries)								
Air stream at least (m ³ /h)	1	1,4	1,9	2,3	3,5	4,6	5,5	6,7
Profile of the air inlet pipe (cm ²)	28	39,2	42,4	64,4	98	128,8	154	187,6

OPzV – Technical specifications

- High temperature proof
- Up to 10 years Designlife at 30°C
- Low self-discharge
- Up to 18 month storage possible after recharge
- Sealed and maintenance free
- Highest number of cycles through the use of armor plate technology
- Low water loss when charged by GEL technology
- 20 years of design life
- Unbeatable price / performance ratio
- Extended warranty for 5 years



OPzV Long-Life-Series W (Design Life up to 20 years)

RPower® Typ	Voltage	Capacity	Dimensions (incl. Poles)			Weight	Pol	Position
	V	Ah	L	W	H*	kg	Terminal	
12V1OPZV20LW	12	21,2	198	166	169	12,5	M6	D
12V1OPZV30LW	12	31,8	260	168	215	16,5	M6	C
12V2OPZV40LW	12	42,4	260	168	215	20,5	M6	C
12V2OPZV50LW	12	53,0	260	168	215	21	M6	C
12V3OPZV75LW	12	79,6	330	173	235	31	M6	C
12V3OPZV100LW	12	106,0	409	176	223	36,5	M8	C
12V4OPZV120LW	12	127,2	483	170	240	45,5	M8	C
12V5OPZV145LW	12	153,8	532	207	224	56	M8	E



A



B



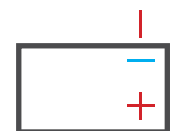
C



D



E



F

BAT-LOGG® – Battery Monitoring for Central Battery Systems

Regularly monitoring the battery condition helps to detect defects in time in order to replace defective batteries before they cause damage to the remaining ones.

But let's face it: Nobody likes to tamper with a multitude of batteries in narrow space. That's reason enough to consider introducing an automatic monitoring system, especially as the amendment standard EN 50171 requires that battery conditions be checked every 5 minutes... e.g. using BAT-LOGG®!

BAT-LOGG® is an automatic monitoring system for batteries which checks and logs the status of each single battery block in a system in short time intervals. By doing so, BAT-LOGG® not only contributes to the safety and reliability of the system, but also helps to reduce maintenance efforts and costs. BAT-LOGG® was specifically designed for easy installation in narrow locations, and is also extremely cost-saving thanks to its minimalist design.

How it works

BAT-LOGG® Sensor modules measure the voltage and temperature of each battery. Each module is simply connected to the poles of a battery and glued to the battery case in order to measure its temperature reliably.

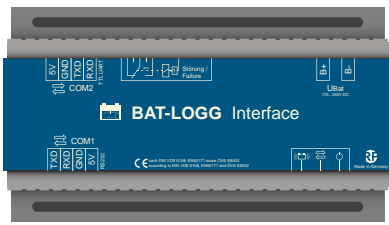
The measurement data is transmitted over the power line to a BAT-LOGG® Interface module. The module checks all measurement values and generates an error message if one or more of them lie outside the preset limits. Further, a potential-free relay contact notifies of any error event (collective fault).

The control unit of the power supply system retrieves all measurement data and error messages via a serial communication port and stores them. Messages and data regarding each battery, including current measurement values and data log, can be viewed using the system's LCD panel and Web-Interface.

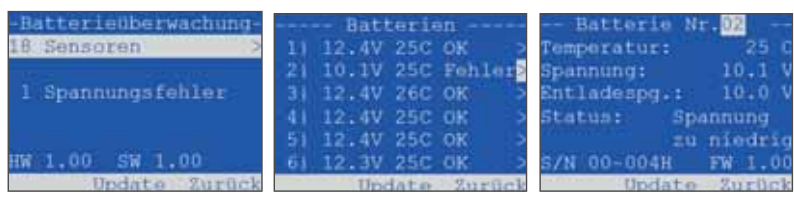
Monitors and stores voltage and temperature
without additional wiring



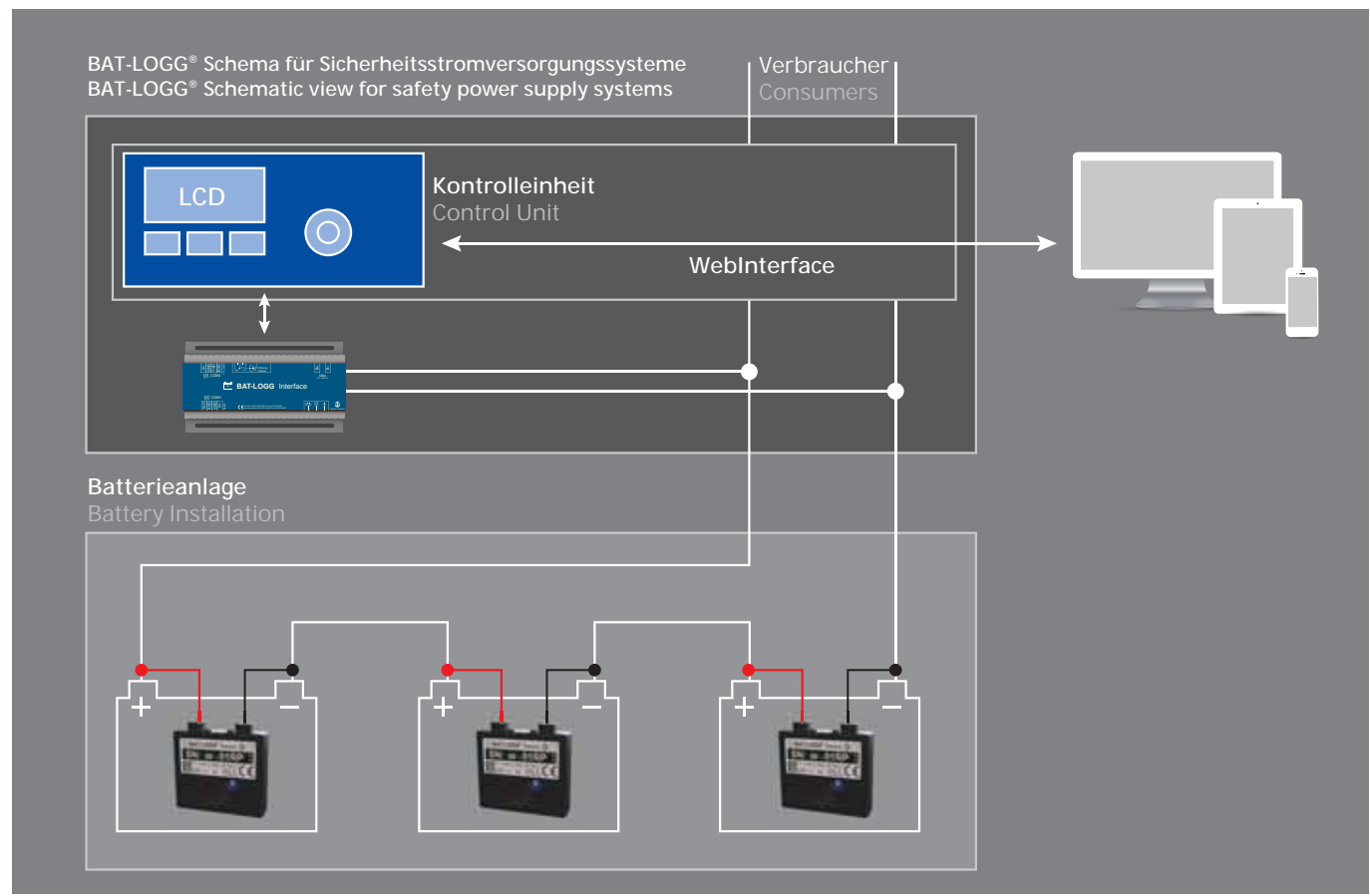
BAT-LOGG® Sensor
(Dimensions: 38x34x10mm)



BAT-LOGG® Interface
(DIN rail module: 156x86x58mm)



Measurement data display



BAT-LOGG® System specifications

Monitored battery type	Lead-acid batteries with 12V block voltage (nominal)
Maximum system voltage	800V DC
Voltage measurement range (accuracy)	9.0 ... 16.0 V (± 0.1 V)
Temperature measurement range (accuracy)	0°C ... 60°C (± 3 °C)
Max. number of sensors supported	max. 160 BAT-LOGG® Sensor modules
Measured values	<ul style="list-style-type: none"> • battery voltage • battery temperature ¹⁾ • discharging voltage ²⁾
Measuring frequency	once per 15-20 seconds
Data logging functions ³⁾	<ul style="list-style-type: none"> • once a day, minimum and maximum value of voltage and temperature over the last 24 hours, and status information on each battery • upon each test: measurement values taken before and after the test, including discharging voltage of each battery
Monitoring functions	<ul style="list-style-type: none"> • display of all measurement values ³⁾ • display of the daily data log and test-related data ³⁾ • notification issued <ul style="list-style-type: none"> • on data transfer and communication failure • on over-/undervoltage in any battery • on excessive voltage deviation from average • on over-/undertemperature in any battery • on excessive temperature deviation from average
Other functions	<ul style="list-style-type: none"> • operation hour counter for each battery • histogram analysis for assessment of the operation conditions of each battery ⁴⁾

BAT-LOGG® Sensor

Operating voltage	12V (nominal) from lead-acid battery
LED indicator	measurement activity + battery voltage ⁵⁾
Measurements (W x H x D)	38mm x 34mm x 10mm
Protection marking acc. DIN EN 60529	IP 40
Protection class acc. IEC 61140	II
Flammability of housing material acc. UL94	V-0
Connection / mounting	<ul style="list-style-type: none"> • connection to battery poles with 6mm Faston connectors ⁶⁾ • glue to battery housing ⁷⁾
Connection cable	double-isolated, short-circuit proof cable, length: approx. 28cm ⁸⁾
Average current consumption	< 0,2mA (1,76Ah/year)
Mounting location requirements	degree of pollution rated 1 or 2 acc. EN 50178

BAT-LOGG® Interface

Operating voltage	216V DC or 230V AC (nominal)
Supported number of batteries	max. 160 BAT-LOGG® Sensor modules
Interfaces	<ul style="list-style-type: none"> • 2 serial COM communication interfaces for data exchange • single-pole switchover relais contact for collective fault indication
LED indicators	<ul style="list-style-type: none"> • collective fault (red) • COM-communication (green) • measurement data receival (green) • power on (green)
Measurements (W x H x D)	157mm x 85mm x 60mm (DIN hatrail module, 31 HP)
Mounting location requirements	<ul style="list-style-type: none"> • degree of pollution rated 1 acc. EN 50178 • for nominal system voltages > 216 V DC, an additional protection cover is required

Annotations: 1) Measured on the outer side of each battery. 2) Lowest voltage measured in each discharging cycle. 3) Functions available only in connection with emergency lighting systems of type midiControl and multiControl running firmware version 1.7.9 or higher. Full functionality is available through the Web-Interface of the system; part of the functionality is not available in the LCD menu for technical reasons. 4) Separately counting the operating hours for which voltage and temperature were inside pre-defined ranges (six voltage and six temperature ranges); these values allow for a verification of the thermal conditions and the charging/discharging operation of each battery. 5) LED flashing signals the carrying-out of a measurement and the transmission of the measured values. LED flashing twice: battery voltage is > 10,8V; LED flashing once: battery voltage is ≤ 10,8V. 6) Connecting tabs for M5/6/8 screw poles are included with the modules. 7) Double-sided adhesive strips are included with the modules. 8) Cable with Faston connector, connected to the module.

Benefits from using BAT-LOGG®

The BAT-LOGG® system can be installed quickly and inexpensively. Through automatic measuring, it saves valuable working time during the regular on-site inspection, and guarantees traceable measurement data without gap over each battery's entire period of use.

Other benefits: Less on-site operations, no more routine measurements, reduced time for traveling and maintenance, reduced operational hazards (such as electric shock), price advantage for the end user.



System dimensioning

The table below helps you selecting the correct system configuration: First, find the total number of circuits of your system in the leftmost column. The column „System Type“ shows you the matching system types. Now, in the column corresponding to the required Supply Time (1h/3h/8h), look for the row showing a battery power (value in Watts to the left of the slash*) greater than or equal to the required total DC power consumption of the planned system. The value to the right of the slash now gives the number of charger modules the system must have**, while the right-most column shows you the Battery Type required***.

* Maximum actual total DC power consumption of the planned system.

** The number of charger modules given ensures that the batteries will be re-charged to 80% of their nominal capacity within 12 hours according to EN 50171

*** This battery type selection takes into account 25% of additional reserve as required by EN 50171. System Types and Battery types can only be combined as given in the table. Thus, even for a smaller number of circuits, a bigger system type might be required.

Mains circuits	System typw	Supply time			Battery
		1h	3h	8h	
≤ 4	myControl plus	691 W / 1 LDM	276 W / 1 LDM	104 W / 1 LDM	OGiV 1252 LP
≤ 6	microControl plus	691 W / 1 LDM	276 W / 1 LDM	104 W / 1 LDM	OGiV 1252 LP
≤ 12 (≤ 32)	miniControl (XL) plus	715 W / 1 LDM	284 W / 1 LDM	131 W / 1 LDM	OGiV 12170 LP
≤ 32	midiControl plus	2.592 W / 1 LDM	1.201 W / 1 LDM	523 W / 1 LDM	OGiV 12260 LP
		2.514 W / 1 LDM	1.236 W / 1 LDM	569 W / 1 LDM	OGiV 12280 L
		3.309 W / 1 LDM	1.313 W / 1 LDM	626 W / 1 LDM	OGiV 12330 LP
		4.035 W / 1 LDM	1.693 W / 1 LDM	697 W / 2 LDM	OGiV 12400 LP
		4.519 W / 1 LDM	1.901 W / 1 LDM	841 W / 2 LDM	OGiV 12450 LP
		5.883 W / 1 LDM	2.604 W / 2 LDM	1.264 W / 2 LDM	OGiV 12550 LP
≤ 96	multiControl plus	5.936 W / 2 LDM	2.609 W / 2 LDM	1.152 W / 2 LDM	OGiV 12600 LP
		6.281 W / 2 LDM	2.687 W / 2 LDM	1.232 W / 2 LDM	OGiV 12650 LP
		7.275 W / 2 LDM	3.283 W / 2 LDM	1.452 W / 2 LDM	OGiV 12750 LP
		7.430 W / 2 LDM	3.283 W / 2 LDM	1.598 W / 3 LDM	OGiV 12800 LW/LPL
		8.208 W / 2 LDM	3.732 W / 2 LDM	1.702 W / 3 LDM	OGiV 12900 LP
		10.195 W / 2 LDM	4.190 W / 3 LDM	1.970 W / 3 LDM	OGiV 121000 LP
		11.491 W / 3 LDM	4.596 W / 3 LDM	2.160 W / 4 LDM	OGiV 121200 LPS
		12.960 W / 3 LDM	5.892 W / 3 LDM	2.540 W / 4 LDM	OGiV 121340 LP
		14.688W / 3 LDM	6.160 W / 4 LDM	2.825 W / 4 LDM	OGiV 121500 LP
		21.514 W / 4 LDM	9.590 W / 5 LDM	4.320 W / 6 LDM	OGiV 122000 LP
		29.016 W / 5 LDM	12.834 W / 6 LDM	6.228 W / 7 LDM	OGiV 122600 LP

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