

# The Beghelli Group

Beghelli Präzisa GmbH has developed to become one of the leading enterprises in the market segment of emergency lighting. During this time it sets the pace of the market by way of innovative technology and functional design.

Beghelli Präzisa is since 2001 a member of the Beghelli Group. The group comprises more than 10 companies in Europe, America, and Asia. The activities of the Beghelli group focus on the development, manufacturing and sales of products for general and emergency lighting, industrial and commercial security systems, and other commercial products.



## Our products

Our product portfolio comprises exit sign and emergency luminaires, self-contained power packs, group and central battery systems, exit sign and emergency luminaires for external power supply, as well as monitoring and control systems. The high standards of our luminaires, devices, and systems reflect our expertise in the field of functional and cost-effective emergency lighting. This is backed by ongoing new developments and improvements. Thereby, the integration of new technologies and materials ensures a quick response to varying market requirements. The result is a continuous flow of innovative products, features, and styles.

Examples to be mentioned are the emergency luminaires „MetricaLED” with faceted reflectors optimised for LEDs and Autotest monitoring system. In particular the series LOGICA and LOGICA FM offer outstanding lighting results and operate either as a stand alone unit with Autotest features or as part of a system with the Centraltest functions. The connection between the luminaires and the control modules may be a DALI compatible bus wiring or a wireless communication based on LOGICA FM modules.



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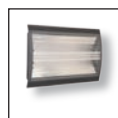


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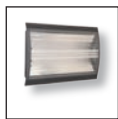


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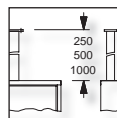
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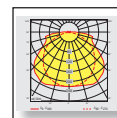
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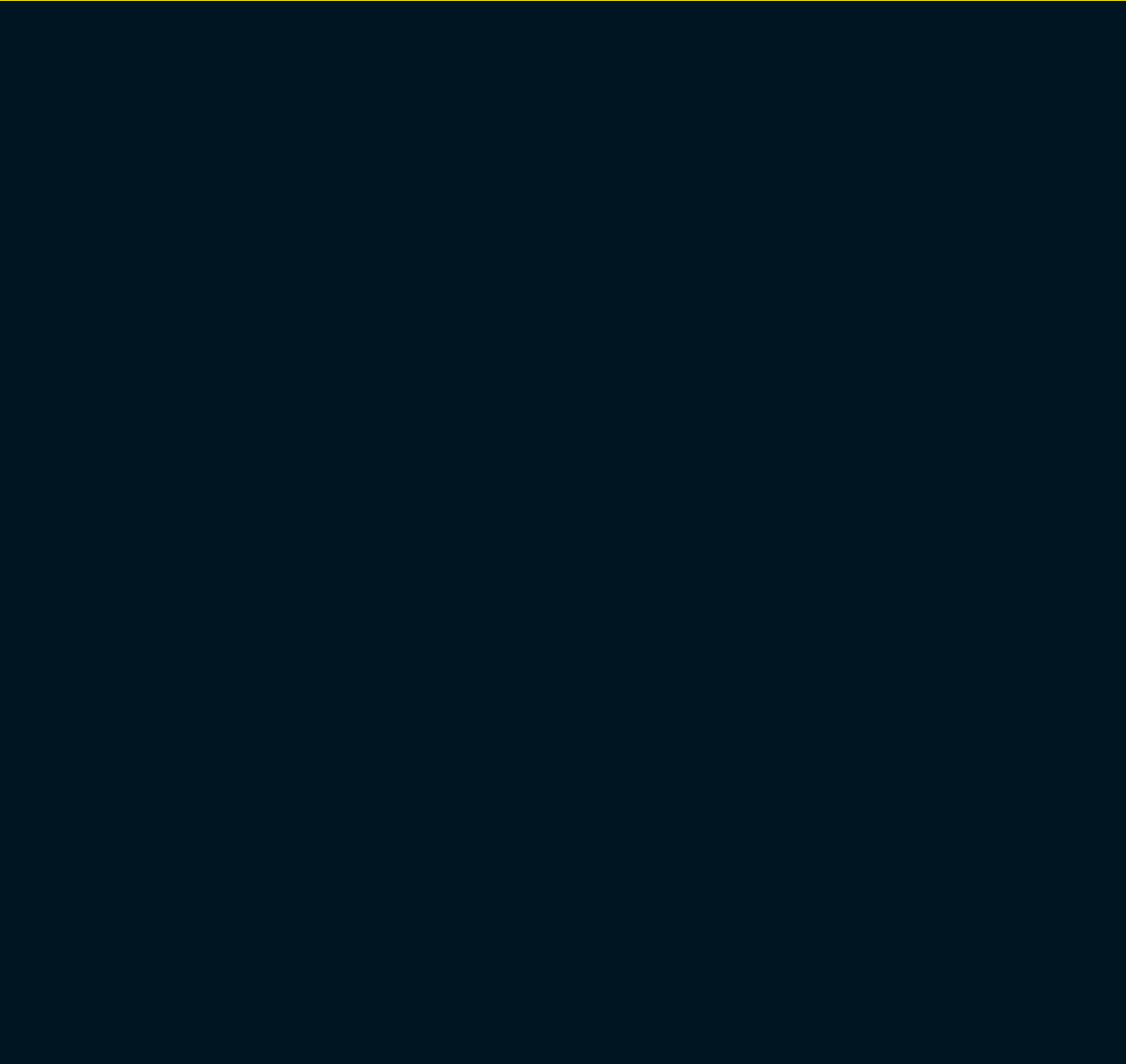
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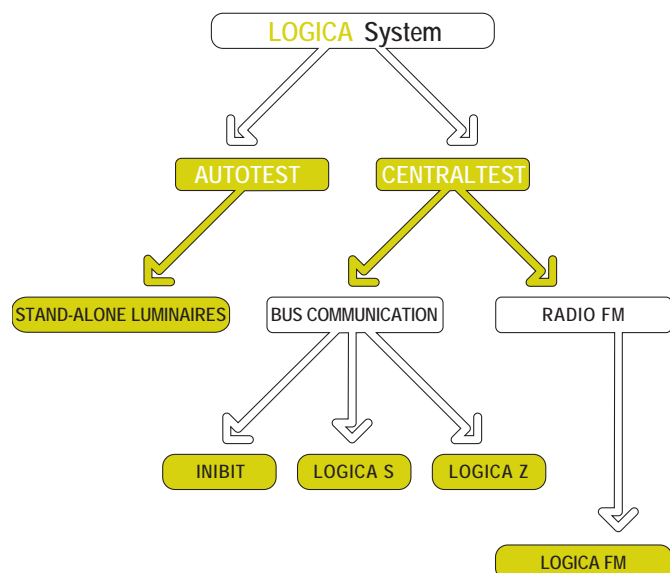




# Monitoring and control modules

# LOGICA monitoring and control system

LOGICA is a modular system for cost-effective monitoring and control of self contained emergency lighting installations. It is designed to ensure the protective function of emergency lighting installations. Moreover, the LOGICA system ensures the testing of the emergency lighting system as according to different local or national regulations. LOGICA can be installed as an auto test and central test system.



## Autotest

In the auto test mode, exit sign, emergency luminaires, as well as power packs are self-contained components of the emergency lighting installation without any connection to remote monitoring and control equipment. The duration can be set to 1 h or 3 h by coding at the luminaire or at the device. All luminaires or devices can be operated in maintained or non-maintained mode. An integrated test functionality automatically executes function tests on a weekly basis and duration tests every 6 months. A multicolour LED signals the operation mode (mains or battery mode, charging, switching to battery mode blocked or test triggering blocked) or irregularities (lamp, battery or charging fault).

## Centraltest

In the central test mode, monitoring and control of the emergency lighting installation is centralised. For this purpose, exit sign, emergency luminaires, or power packs are connected either to a LOGICA-S monitoring and control station or to an INIBIT control module. Data or telecommunication networks enable to implement a monitoring and control system for emergency lighting systems from several buildings. Communication between the exit sign, emergency luminaires, or power packs and the LOGICA-S monitoring and control station is based on a DALI-compatible bus. This can also be used to control the luminaires of the general lighting installation featuring a DALI interface. The connection to LOGICA-S monitoring and control station is via a double-wire cable or by radio.

As a maximum, 127 exit sign, emergency luminaires, or power packs with a LOGICA interface can be connected to a single LOGICA-S monitoring and control station or to a single INIBIT control module. For details please contact your local sales office. The LOGICA-S control station can be connected to a PC by using the RS232/RS485 interface. The LOGICA-S module can also control general lighting luminaires with the DALI interface. For centralised monitoring and control in large-scale buildings, it is possible to connect up to 30 LOGICA-S units with a LOGICA-Z central monitoring and control station. The LOGICA-Z central monitoring and control station can also be connected directly to a monitoring PC. For the PC, the LOGICA-Monitoring software is available. Moreover, a link to LON or Ethernet or integration into a building management system is possible.

All exit sign, emergency luminaires, or power packs with the LOGICA interface have a unique identification number. It is no longer needed to manually set the address at the luminaire or device. LOGICA-S monitoring and control modules detect this unique identification number and automatically register the address. Supplied labels with the identification number (figure and bar code) enable to link the luminaires address with the identification number for the documentation.

# LOGICA-S and LOGICA-Z monitoring and control modules

## Monitoring and control parameters

- Program the duration (1h or 3h) individually for each luminaire/device.
- Program the specification (maintained or non-maintained mode) individually for each luminaire/device.
- Automatically allocate all exit sign, emergency luminaires, or power packs featuring a LOGICA interface to the control group ALL and LOGICA.
- Allocate exit sign, emergency luminaires, or power packs featuring a LOGICA interface to any of the control groups from 1 to 16.
- Allocate exit sign, emergency luminaires, or power packs featuring a LOGICA interface to the LOGICA monitoring group.
- Allocate exit sign and emergency luminaires or power packs featuring a LOGICA interface to the monitoring groups 1 or 2.
- Automatically allocate all general lighting luminaires featuring a DALI interface to the control groups ALL and DALI.
- Allocate general lighting luminaires featuring a DALI interface to any of the control groups from 1 to 16.
- Programme up to 16 different lighting scenarios with different switch and dim functions.
- Allocate control groups to lighting scenarios.
- Manually activate scenarios at the LOGICA central unit or via four control circuits.

## Monitoring functions

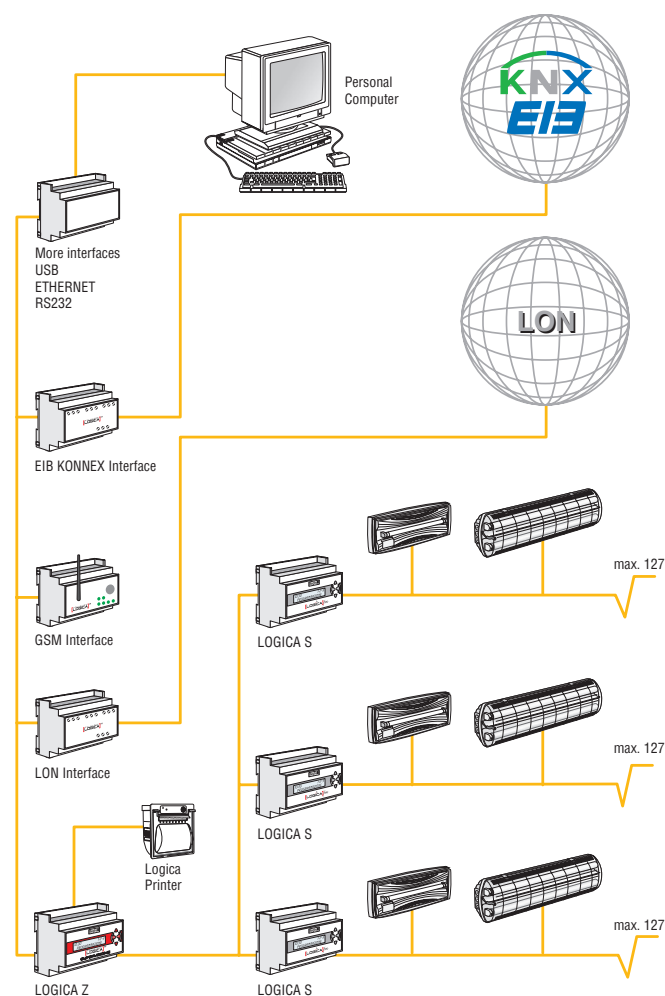
- Parameters for function and duration tests.
- Automatic triggering of function and duration tests: simultaneously for the LOGICA monitoring group or time-staggered for the monitoring groups 1 and 2.
- Manual triggering of function and duration tests separately for each exit sign, emergency luminaire or power pack, or for the monitoring groups LOGICA, 1 or 2.
- Manual control of the emergency mode suppression.

## Control functions

- Manual control of emergency and general lighting in mains mode, individually or within the control groups ALL, LOGICA, DALI and 1 to 16.
- Manual dimming of the emergency and general lighting in mains mode, individually or within the control groups ALL, LOGICA, DALI and 1 to 16.

## Signalling functions

- Operating conditions of the emergency lighting.
- Irregularities of the emergency lighting system.
- Tests of the emergency lighting system.
- Storage of test results for 2 years (LOGICA-Z).



# Advantages of automatic control, monitoring and recording

The European norm EN 50172 requires a continuous test report to be completed by a person nominated by the owner of the plant. This test report has to be available at any time for authorised persons.

The norm requires a weekly functional test by simulation of battery operation for the whole installation. In addition an annual duration test has to be executed. All test results have to be recorded in the test report. This can be done manually or by an automatic test equipment according to EN 62034.

The following options may be chosen:

## 1) Manual tests and recording of results

The weekly functional test requires either switching off the mains and checking the function of every fitting by an authorised person or pushing the test switch on every fitting, provided the fittings are equipped with. The annual duration test requires to switch off the mains for the test period.

The entry into the test report is being done manually.

## 2) Automatic tests and manual test report recording (AUTOTEST)

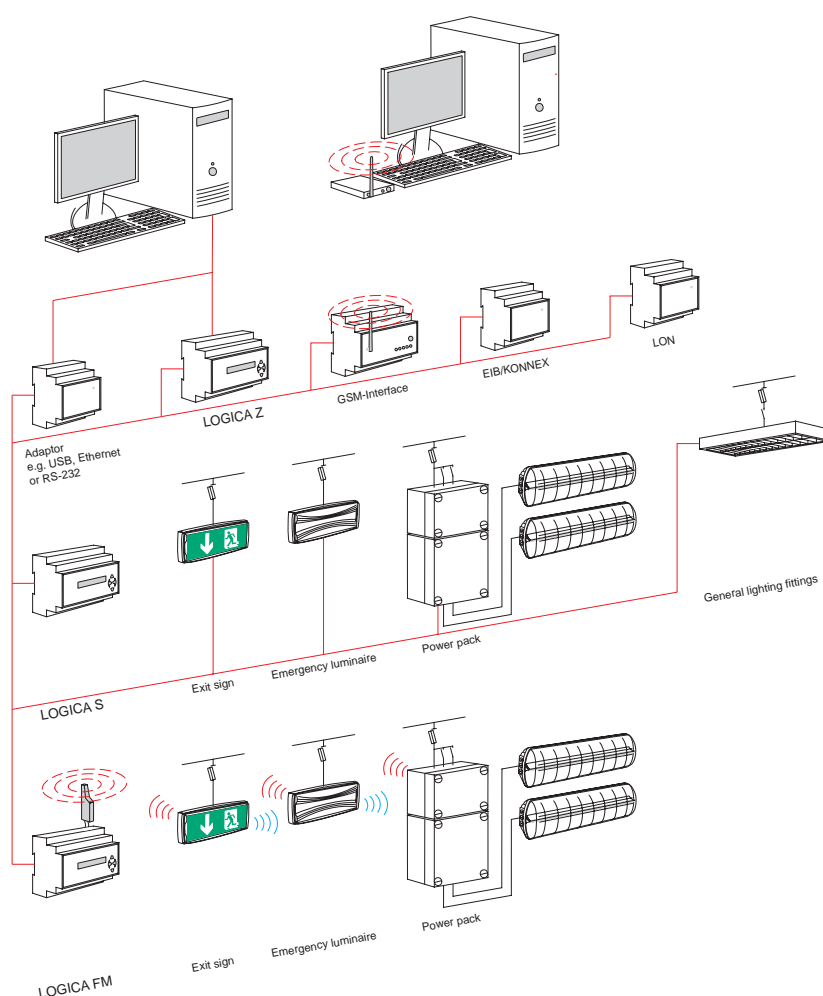
The fittings have an automatic test function and the results of the tests are shown by either several different LEDs or by one multicolour LED.



The entry into the test report is being done manually.

## 3) Automatic tests and recording of the results (CENTRALTEST)


The fittings have an automatic test function and report the results to a central control and monitoring module. This central module initiates all tests and stores the results for a minimum of 2 years.

The communication between the fittings and the central module may be either through a bus wire (2 wires DALI compatible) or via radio communication.



The installation of a LOGICA  module enables the wireless control and monitoring of all luminaires and appliances within the LOGICA  product range.


## Long distance range with low transmission power


The radio signal of the LOGICA  system operates with very low power (< 10 mW) which excludes electro-magnetic disturbance of any other system operating in the vicinity of LOGICA FM.


The transmission power of the FM signal equals to 1% of the power of a mobile phone and the operating frequency is approx. 2,4 GHz.

All products of the LOGICA FM range are compliant with the recommendation of the European Union ERC/REC 70-03.



## Automatic search for the best connection

During the first start of the system the LOGICA  central module receives identification signals and stores the addresses from all fittings and appliances.

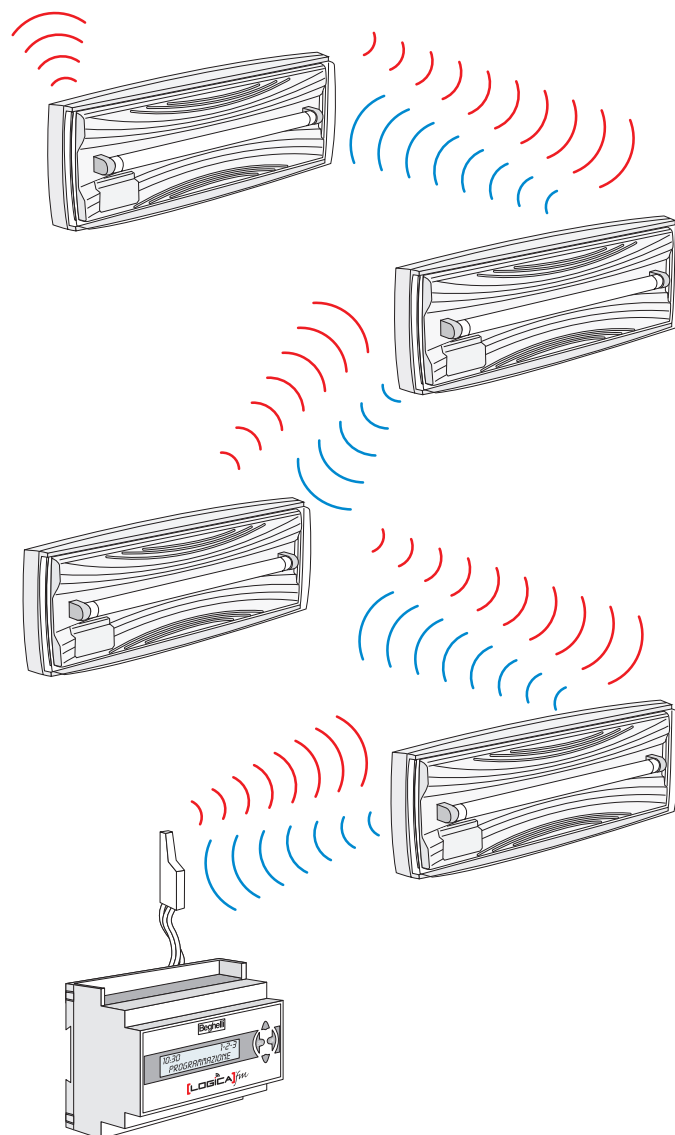
LOGICA  is a self-learning system that keeps the connection to all fittings and appliances via the shortest possible distance.

The signal-repetition system developed by Beghelli ensures long distance range even with low transmission power. The result is a perfect quality of the signals and the communication between all LOGICA  components via the best route.

## Infinite number of luminaires

The LOGICA  central module is able to monitor and control up to 992 luminaires or appliances. By combining a PC with LOGICA VISUAL software and numerous LOGICA  central modules the number of fittings and appliances is almost unlimited.

Every luminaire and every appliance transmits the signal without any loss or deterioration.



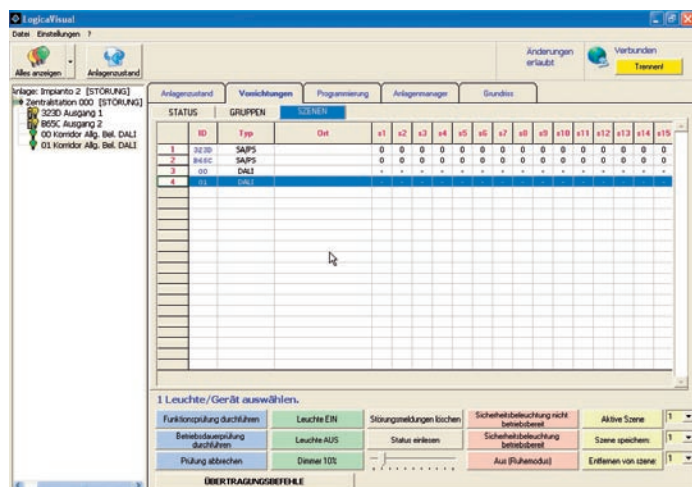
LOGICA FM central module





# Logica Visual

The LOGICA Monitoring software enables centralised monitoring and control of complex emergency lighting systems, e.g. for large buildings or enterprises with many buildings at a single or several sites.



Communication to a PC running the LOGICA Monitoring software can be realised by:

- LOGICA-S plus interface RS232/RS485 or
- LOGICA-S plus LOGICA-Z
- or wireless by connecting a GSM- Interface to LOGICA-S or LOGICA-Z.

## Input and output of monitoring and control parameters

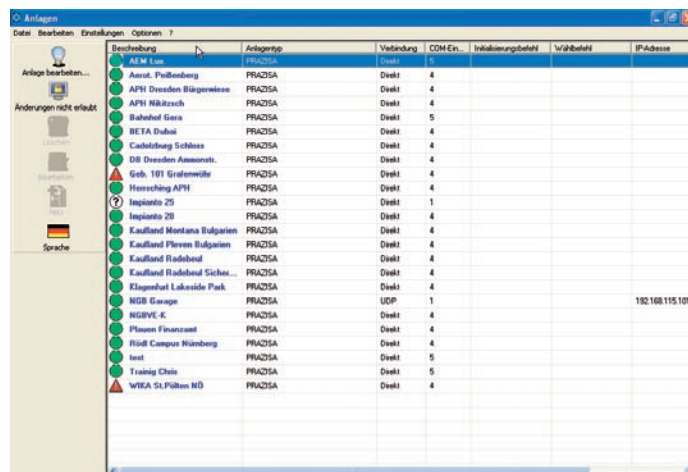
- Numerically and graphically allocation of exit sign, emergency luminaires, or power packs to locations on building plans and luminaire/device lists.
- Import of building plans as dxf or dwg format files.
- Program the duration (1h or 3h) separately for each luminaire/device.
- Program the specification (maintained or non-maintained mode) separately for each luminaire/device.
- Program the parameters for function and duration tests.
- Allocation of exit sign, emergency luminaires, or power packs featuring a LOGICA interface to the control groups 1 to 16 without.
- Allocation of exit sign and emergency luminaires or power packs featuring a LOGICA interface to monitoring groups 1 or 2.
- Allocation of general lighting luminaires featuring a DALI interface to the control groups 1 to 16.
- Program up to 16 different lighting scenarios with different switch and dim control functions.
- Allocation of control groups to lighting scenarios.

## Monitoring functions

- Manual triggering of function and duration tests separately for each exit sign, emergency luminaire or power pack, or for the monitoring groups LOGICA, 1 or 2.
- Manual control of the emergency mode suppression

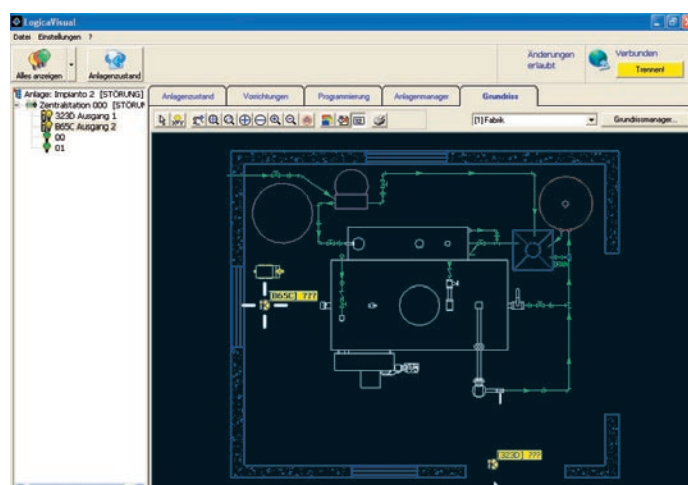
## Control functions

- Manual control of emergency and general lighting in mains mode, individually or within the control groups ALL, LOGICA, DALI and 1 to 16.
- Manual dimming of the emergency and general lighting in mains mode, individually or within the control groups ALL, LOGICA, DALI and 1 to 16.
- Manually activate scenarios at the module or via four control inputs



## Visualisation functions

- Numerically and graphically indicate operational conditions and irregularities of exit sign and emergency luminaires/power packs:
- Luminaire/device configurations
- Operating mode (mains/battery mode)
- Emergency mode suppression (on/off)
- Maintained mode (on/off)
- Dimming (%)
- Irregularities (charging/battery/lamp)
- Tests
- Indicate operational conditions and irregularities in online mode



## GSM-Interface

Module for communication between LOGICA-Z or LOGICA-S monitoring and control modules and a PC running the LOGICA Monitoring software. Connection via the GSM network.

Technical details see pages 110 - 117

### Technical data

Mounting: DIN-rail (9 modules)  
Body: Plastic

Protection: IP 20  
Electrical class: II

• Dimensions (mm) •		
L	B	H
160	75	90



Order code	Duration	Battery type	Battery voltage	Battery capacity
FB16306	1 h	NiCd battery	7,2 V	0,75 Ah

## LON-Bus-Interface

Module for communication with a building management system via LON bus.

Control of: Maintained mode ON/OFF, function test triggering.

Signalling of: Emergency mode suppression ON/OFF, mains mode, battery mode, mains failure on main distribution board (phase L1, L2, and L3), mains failure on sub distribution board, group fault, charge fault, battery fault, luminaire fault, bus fault, deep discharge.

Technical details see pages 110 - 117

• Dimensions (mm) •		
L	B	H
105	75	90



### Technical data

Mounting: DIN-rail (6 modules)  
Body: Plastic

Protection: IP 20  
Electrical class: II



Order code  
FB12140

## USB/RS485 Interface

Module used to connect a group or central battery system with a PC running the MULTI-CONTROL monitoring software.

Technical details see pages 110 - 117

• Dimensions (mm) •		
L	B	H
150	75	26



### Technical data

Mounting: DIN rail  
Body: Metal

Electrical class: II



Order code  
FB16319



## Ethernet/RS485 Interface

Interface for connection of a PC running the software LOGICA VISUAL to an Ethernet.

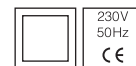
Technical details see pages 110 - 117

### Technical data

Body: Plastic

Electrical class: II

	• Dimensions (mm) •		
	L	B	H
	87	56	30



Order  
code

FB12135



## EIB Logica

Interface for connection to a building management system via EIB/KONNEX. Control of: Maintained mode ON/OFF, function test triggering.

Signalling of: Emergency mode suppression ON/OFF, mains mode, battery mode, mains failure on main distribution board (phase L1, L2, and L3), mains failure on sub distribution board, group fault, charge fault, battery fault, luminaire fault, bus fault, deep discharge.

Technical details see pages 110 - 117

### Technical data

Mounting: DIN-rail (6 modules)

Body: Plastic

Protection: IP 20

Electrical class: II

	• Dimensions (mm) •		
	L	B	H
	160	75	90



Order  
code

FB12140



## Logica-Printer

Printer module which connects with LOGICA-S monitoring and control station or with LOGICA-Z central monitoring and control station to print:

- Irregularity reports
- Results of function tests
- Results of duration tests

Technical details see pages 110 - 117

### Technical data

Paper type: Thermopaper

Paper width: 58 mm

Mounting: DIN-rail (6 modules)

Body: Plastic

Protection: IP 20

Electrical class: I

	• Dimensions (mm) •		
	L	B	H
	85	53	85



Order  
code

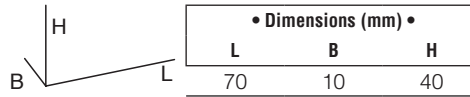
FB16302

## Logica FM

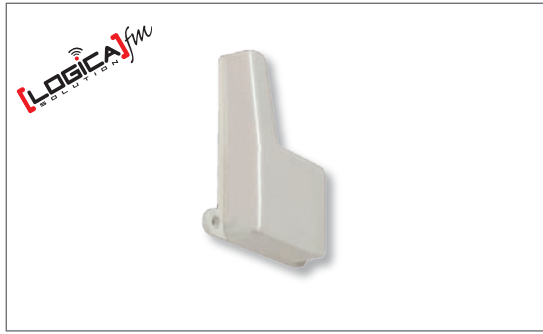
Module for wireless communication between exit sign, emergency luminaires, or power packs, and a LOGICA-S-FM monitoring and control station. Accommodated within the luminaires/devices (for luminaires/devices with plastic body) or attached to the luminaires/devices (for luminaires/devices with metallic body). Connection to luminaires/devices via cable with plug-type connector (cable length: 250 mm).

Technical details see pages 110 - 117

Important: not suitable for installation in luminaires with metal body



230V  
50Hz  
CE



### Technical data

Mounting: Surface mounting or installation in luminaires

Body: Plastic

Protection: IP 20

Electrical class: I



Order

code

FB16304

## Logica Visual

Software for centralised control and monitoring of complex emergency lighting installations. Communication between the PC and the monitoring and control module LOGICA-S via USB/RS485 interface or GSM interface via telecommunication network or via LOGICA-Z module.



Order

code

SWB16310

SOFTWARE LOGICA VISUAL



## Logica Z

Module for central monitoring and control of max. 31 LOGICA-S monitoring and control modules. Logica -Z is able to control max. 991 luminaires. All functional and duration tests are stored for 2 years in an integrated test report. Communication with LOGICA-S modules via a twin-wire screened cable. Parameter input and indication via front panel with 2x16 character display and 4 control buttons.

Interface: RS232 interface for PC connection. RS 485 interface for connection with the LOGICA-PRINTER, RS485/USB2.0 interface or GSM interface LOGICA-GSM.

Technical details see pages 110 - 117

### Technical data

Mounting:

DIN-rail (9 modules)

Body material:

Plastic

Protection:

IP 20

Electrical class: I

	• Dimensions (mm) •		
	L	B	H
	160	75	90

230V  
50Hz  
CE



Order code	Duration	Battery type	Battery voltage	Battery capacity
FB16305	1 h	NiCd battery	7,2 V	0,75 Ah



## Logica S

Module for monitoring and control of max. 128 exit signs, emergency luminaires, or power packs featuring a LOGICA interface, or general lighting luminaires with DALI interface. Connection via twin-wire cable (LOGICA-S) or via radio (LOGICA-FM).

Parameter input and indication via front panel with 2x16 character display and 4 control buttons.

Control inputs: 4 switching inputs, isolated.

Interface RS485: connection of LOGICA-PRINTER or LOGICA-Z module.

Connection to a PC via interface RS485/RS232 or RS 485/USB2.0.

Technical details see pages 110 - 117

### Technical data

Mounting:

DIN-rail (9 modules)

Body material:

Plastic

Protection:

IP 20

Electrical class: I

	• Dimensions (mm) •		
	L	B	H
	160	75	90

230V  
50Hz  
CE



Order code	Duration	Battery type	Battery voltage	Battery capacity
FB16300	1 h	NiCd battery	7,2 V	0,75 Ah





## Logica FM

Module for wireless communication between max. 990 exit sign, emergency luminaires/power packs or fittings with DALI interface of the general lighting installation. AUTO-addressing of all fittings with individual identity code by radio communication. General lighting fittings communicate with LOGICA-FM with the DALI-FM module.

Parameter input and indication via front panel with 2x16 character display and 4 control buttons.

Control inputs: 4 switching inputs, isolated.

Interface RS485: connection of LOGICA-PRINTER or LOGICA-Z module. Connection to a PC via interface RS485/232 or RS 485/USB2.0.

Technical details see pages 110 - 117

### Technical data

Mounting:

DIN-rail (9 modules)

Body material:

Plastic

Protection:

IP 20

Electrical class: I

• Dimensions (mm) •		
L	B	H
160	75	90



Order code	Duration	Battery type	Battery voltage	Battery capacity
FB16303	1 h	NiCd battery	7,2 V	0,75 Ah

## INIBIT

Module to control max. 127 exit sign and emergency luminaires/power packs featuring a LOGICA interface. Connection via a twin-wire cable.

Technical details see pages 110 - 117



### Technical data

Mounting:

DIN-rail (9 modules)

Body material:

Plastic

Protection:

IP 20

Electrical class: I

• Dimensions (mm) •		
L	B	H
160	75	90



Order code	Duration	Battery type	Battery voltage	Battery capacity
FB16301	5 h	NiCd battery	7,2 V	0,75 Ah





# **Exit sign and emergency luminaires**



## Arcus V

Description: Emergency luminaire in elegant style with convex body. Front surface designed as a pane, projecting on all sides. Light distribution by mirror reflector and transparent cover with longitudinal prisms.  
Special features: Architectural look, sleek design, wide beam light distribution, high light output ratio, also available as exit sign luminaire.

Technical details see pages 110 - 117

### Technical data

Mounting:

Wall or ceiling mounted

Body:

Die-cast aluminium and extruded aluminium, anthracite  
RAL 9007

Diffuser:

Polycarbonate with longitudinal prisms

Reflector:

Specular aluminium

Mains supply:

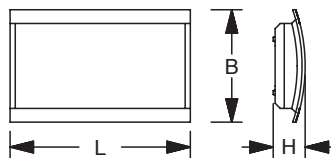
198 V - 254 V / 50 Hz

Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode



W	• Dimensions (mm) •		
	L	B	H
8	348	217	62



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
N90287L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB90287	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
NB90288	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		

Standard type supplied with test switch

# Design

Description: Emergency luminaire in functional style, consisting of semi-circular sections and flat end caps. Light distribution by mirror reflector and transparent cover with longitudinal prisms.

Special features: Functional look, extremely sleek design, wide beam light distribution, high light output ratio, also available as an exit sign luminaire.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Wall or ceiling mounted

### Body:

Sheet steel, white RAL 9003<sup>1)</sup>

### Diffuser:

Plastic with longitudinal prisms

### Reflector:

Specular aluminium

### Mains supply:

198 V - 254 V / 50 Hz

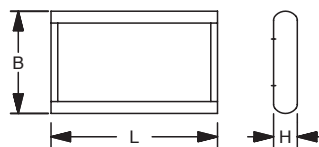
### Ambient temperature:

0 to + 40 °C

### Specification:

Maintained or non maintained mode

1) Design with aluminium body available on request



W	• Dimensions (mm) •		
	L	B	H
8	386	237	55



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NM90548L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NM90548	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
NM90549	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		

Standard type supplied with test switch





## Kubus

Description: Emergency luminaire, consisting of flat sections with folded corners. Light distribution by mirror reflector and cover with longitudinal prisms. Special features: Functional look, also available as exit sign luminaire.

Technical details see pages 110 - 117

### Technical data

#### Mounting:

Wall or ceiling mounted

#### Body:

Sheet steel, white RAL 9003<sup>1)</sup>

#### Diffuser:

Plastic with longitudinal prisms

#### Reflector:

Specular aluminium

#### Mains supply:

198 V - 254 V / 50 Hz

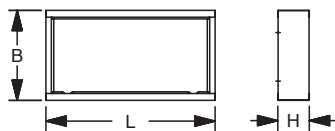
#### Ambient temperature:

0 to + 40 °C

#### Specification:

Maintained or non maintained mode

1) Design with aluminium body available on request



W	• Dimensions (mm) •		
	L	B	H
8	376	200	70



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NM90678L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NM90678	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
NM90679	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		

Standard type supplied with test switch

# Intos

Description: Emergency luminaire in industrial design with recessed box and opal diffuser fixed in white painted frame. Light distribution by aluminium reflector and opal diffuser. Single face exit signs available.

Special features: Designed for industrial areas, robust, shock proof.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Recessed wall or ceiling mounting

### Body:

Sheet steel white RAL 9003

### Diffuser:

Clear acrylic with prisms

### Reflector:

Specular aluminium

### Mains supply:

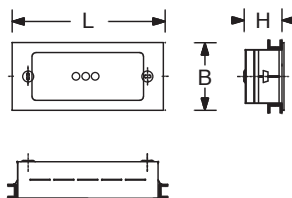
198 V - 254 V / 50 Hz

### Ambient temperature:

0 to + 40 °C

### Specification:

Maintained or non maintained mode



W	• Dimensions (mm) •			Version
	L	B	H	
8	385	170	95	1-side



Accessories to be ordered separately		
Order code	Description	Article
<b>8W</b>		
E16266N	Exit sign pane	
E16267N	Exit sign pane	
E16268N	Exit sign pane	
E16265	Opal pane	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
N90400L	T5 8W	1h/3h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
N90400	T5 8W	1h	NiCd battery	4,8V	1,2 Ah	43%	x		
N90401	T5 8W	3h	NiCd battery	4,8V	2,2 Ah	33%	x		



## Crater

Description: Emergency luminaire in functional style, consisting of a round recessed or surface mounted box and specular aluminium reflector. Horizontal lamp orientation.

Special features: Functional look, emergency luminaires also available as general lighting luminaires.

Technical details see pages 110 - 117

### Technical data

Mounting:

Recessed or ceiling mounting

Body material:

Steel sheet, white (RAL 9003)

Reflector:

Specular aluminium

Mains supply:

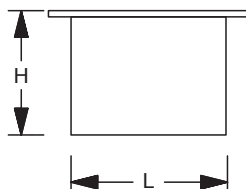
198 V - 254 V / 50 Hz

Ambient temperature:

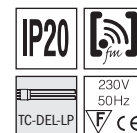
0 to + 40 °C

Specification:

Maintained or non maintained mode



W	• Dimensions (mm) •			
	L	B	H	
13	265	-	200	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Version for ceiling mounting									
N90062L	CFL 4 pin/4 lb 13 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	56% (1h) / 24% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Version for ceiling mounting									
N90062	CFL 4 pin/4 lb 13 W	1 h	NiCd battery	4,8 V	1,2 Ah	27%	x		
N90063	CFL 4 pin/4 lb 13 W	3 h	NiCd battery	4,8 V	2,2 Ah	20%	x		

Standard type supplied with test switch



W	• Dimensions (mm) •			
	L	B	H	
13	190	-	105	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Version for recessed ceiling mounting									
N90060L	CFL 4 pin/4 lb 13 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	56% (1h) / 24% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Version for recessed ceiling mounting									
N90060	CFL 4 pin/4 lb 13 W	1 h	NiCd battery	4,8 V	1,2 Ah	27%	x		
N90061	CFL 4 pin/4 lb 13 W	3 h	NiCd battery	4,8 V	2,2 Ah	20%	x		

Standard type supplied with test switch

# MetricalLED

Description: Emergency lighting luminaire with optical system designed for wall installation. Sleek, elegant body of white polycarbonate with clear cover. Light distribution by faceted mirror reflector. Innovative powerful 1 Watt light source with very long lifetime (Power LED).

Special features: Attractive design combined with robust and shockproof body. Versions with IP 40 or IP 65 protection available.

Technical details see pages 110 - 117

## Technical data

Mounting:

Wall mounting

Body material:

Polycarbonate white

Cover:

Clear polycarbonate

Reflector:

Polycarbonate aluminised and welded with the cover

Mains supply:

198V – 254V / 50Hz

Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode



R-Watt	• Dimensions (mm) •			LED lumens
	L	B	H	
8	355	179	57	2 x 30 lm
18	355	179	57	2 x 58 lm
24	355	179	57	2 x 71 lm



Fitting supplied complete with		
Order code	Description	Article
8/18/24RW		
FB12941	Exit signs (set with all 3 films)	

Accessories to be ordered separately		
Order code	Description	Article
8/18/24RW		
FB12943	Kit for recessed installation	
FB3908	Wire guard	

Order code	Lamp	Reference power	Duration	Battery type	Battery voltage	Battery capacity	Lumens	Standard	Auto-test	Central-test
IP40										
NB12908	LED 2x1W	8RW	1h	NiCd HT	6,0V	0,75Ah	60 lm		x	
NB12909	LED 2x1W	8RW	3h	NiCd HT	7,2V	1,7Ah	60 lm		x	
NB12924	LED 2x1W	18RW	1h	NiCd HT	6,0V	0,75Ah	116 lm		x	
NB12925	LED 2x1W	18RW	3h	NiCd HT	7,2V	1,7Ah	116 lm		x	
NB12932	LED 2x1W	24RW	1h	NiCd HT	4,8V	1,7Ah	142 lm		x	
NB12933	LED 2x1W	24RW	3h	NiCd HT	7,2V	1,7Ah	142 lm		x	
IP65										
NB12910	LED 2x1W	8RW	1h	NiCd HT	6,0V	0,75Ah	60 lm		x	
NB12911	LED 2x1W	8RW	3h	NiCd HT	7,2V	1,7Ah	60 lm		x	
NB12926	LED 2x1W	18RW	1h	NiCd HT	6,0V	0,75Ah	116 lm		x	
NB12927	LED 2x1W	18RW	3h	NiCd HT	7,2V	1,7Ah	116 lm		x	
NB12934	LED 2x1W	24RW	1h	NiCd HT	4,8V	1,7Ah	142 lm		x	
NB12935	LED 2x1W	24RW	3h	NiCd HT	7,2V	1,7Ah	142 lm		x	



Technical data

**Mounting:**  
Surface and recessed wall mounting, surface and recessed ceiling mounting

**Body and diffuser:**  
Polycarbonate

**Reflector:**  
Polycarbonate specular aluminised

**Mains supply:**  
198 V - 254 V / 50 Hz

**Ambient temperature:**  
0 to + 40 °C

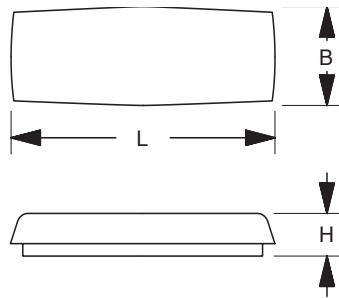
**Specification:**  
Maintained or non maintained mode

Logica

Description: Exit sign and emergency luminaire in a functional style, consisting of a body with convex contours and a flat transparent cover. Duration of emergency mode to be chosen between 1h and 3 hrs. Light distribution by mirror reflector from aluminised plastic with complex shape. Single sided exit route sign (surface and recessed mounting on ceiling and walls). Luminaires supplied with three exit sign films and recess box.

Special features: Functional look, wide beam light distribution, high light output ratio, suited for exit route signalling or exit route lighting, choice of surface or recessed mounting, surface mounting via quick fix adapter with integrated bubble level.

Technical details see pages 110 - 117



• Dimensions (mm) •			
W	L	B	H
8	406	147	63

Fittings are supplied complete with		
Order code	Description	Article
8W		
FB16909	Exit signs (set with all 3 films)	
FB12198	Kit for recessed installation	

Accessories to be ordered separately		
Order code	Description	Article
8W		
FB12194	Wire guard	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB16311	T5 8W	1h / 3h	NiCd	7,2V	2,2Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately



# Aestetica

Description: Exit sign and emergency luminaire in sleek design, consisting of a flat body and an oval transparent cover. Light distribution by white reflector. Single sided exit route sign (wall mounting). Luminaire supplied with three exit sign films.

Special features: Sleek design, suited for exit route signalling or exit route lighting.

Technical details see pages 110 - 117

## Technical data

Mounting:

Wall or ceiling mounting

Body:

White polycarbonate

Diffuser:

Transparent polycarbonate

Reflector:

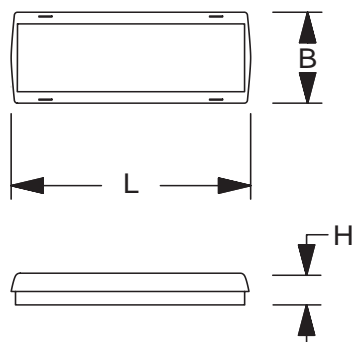
White polycarbonate

Mains supply:

198 V - 254 V / 50 Hz

Ambient temperature:

0 to + 40 °C



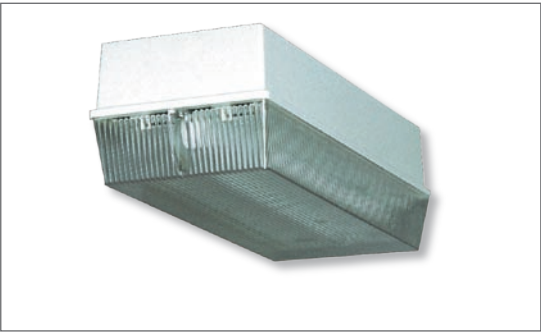
W	• Dimensions (mm) •		
	L	B	H
8	336	135	47



Fittings are supplied complete with		
Order code	Description	Article
8W		
FB16905	Exit signs (set with all 3 films)	

Accessories to be ordered separately		
Order code	Description	Article
8W		
FB3908	Wire guard	

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
For maintained mode									
NB16206	T5 8W	1h	NiCd battery	4,8V	1,2 Ah	43%	x		
NB16207	T5 8W	3h	NiCd battery	4,8V	2,2 Ah	33%	x		
For Non maintained mode									
NB16208	T5 8W	1h	NiCd battery	4,8V	1,2 Ah	43%	x		
NB16209	T5 8W	3h	NiCd battery	4,8V	2,2 Ah	33%	x		



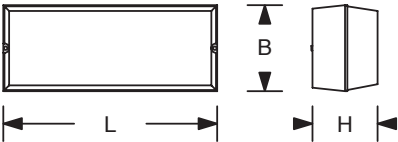
# Indus

Description: Emergency luminaire in industrial style with flat body and prismatic diffuser. Light distribution by white reflector. Installation on ceiling, wall or wall bracket.  
Special features: Industrial design, robust and shockproof.

Technical details see pages 110 - 117

**Technical data**

Mounting:  
Ceiling, wall or wall bracket  
Body:  
Polycarbonate white  
Cover:  
Prismatic polycarbonate  
Reflector:  
White polycarbonate  
Mains supply:  
198V – 254V / 50Hz  
Ambient temperature:  
0 to + 40 °C  
Specification:  
Maintained or non maintained mode



W	• Dimensions (mm) •			Version
	L	B	H	
8	368	148	112	1-side

T5

IP54

26m

230V  
50Hz

Accessories to be ordered separately		
Order code	Description	Article
8W		
F95029	Wall bracket	
F95032	Wire guard	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB90918L	T5 8W	1h/3h	NiCd	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB90918	T5 8W	1h	NiCd	4,8V	1,2 Ah	43%	x		
NB90919	T5 8W	3h	NiCd	4,8V	2,2 Ah	33%	x		

Standard type supplied with test switch

# Pratica Tuttovetro

Description: Exit sign and emergency luminaire in an industrial style, consisting of a flat body and a rectangular transparent cover. Light distribution by white reflector. Single sided exit route sign (wall mounting). Luminaire supplied with three exit sign films.

Special features: Industrial look, improved degree of protection to IP65 by auxiliary box. Suited for exit route signalling or exit route lighting. Quick fix adapter for IP40 version.

Technical details see pages 110 - 117

## Technical data

Mounting:

Wall or ceiling mounting

Body:

ABS plastic

Diffuser:

Transparent polycarbonate

Reflector:

White polycarbonate

Mains supply:

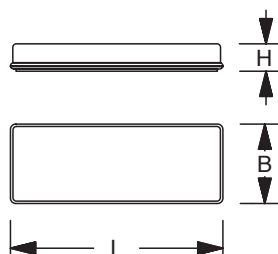
198 V - 254 V / 50 Hz

Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode



W	• Dimensions (mm) •		
	L	B	H
8	380	142	49



Fittings are supplied complete with		
Order code	Description	Article
8W		
FB16901	Exit signs (set with all 3 films)	

Accessories to be ordered separately	
Order code	Description
8W	
FB2734	IP-65 auxiliary box



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB16312	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB16100	T5 8W	1 h	NiCd battery	6,0 V	0,8 Ah	36%	x		
NB16101	T5 8W	3 h	NiCd battery	6,0 V	1,8 Ah	34%	x		



## Leader

Description: Emergency luminaire in industrial style, consisting of an oval body and diffuser. Transparent diffuser with longitudinal and lateral prisms. Light distribution by specular reflector of aluminised plastic with complex shape. Special features: Industrial look, optimal light distribution, high light output ratio, emergency luminaires also available for general lighting. Twin lamp fittings with one lamp operating in emergency mode are available on request.

Technical details see pages 110 - 117

### Technical data

Mounting:

Wall or ceiling mounting

Body:

Grey polycarbonate

Diffuser:

Transparent polycarbonate

Reflector:

Polycarbonate specular aluminised

Mains supply:

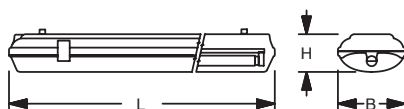
198 V - 254 V / 50 Hz

Ambient temperature:

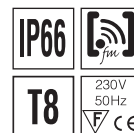
0 to + 40 °C

Specification:

Maintained or non maintained mode



W	• Dimensions (mm) •		
	L	B	H
18	670	170	95
36	1280	170	95
58	1580	170	95



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
N90090L	T8 18 W	1 h / 3 h	NiCd battery	7,2 V	2,2 Ah	56% / 19 %		x	x
N90092L	T8 36 W	1 h / 3 h	NiCd battery	7,2 V	2,2 Ah	28% / 9 %		x	x
N90094L	T8 58 W	1 h / 3 h	NiCd battery	7,2 V	2,2 Ah	18% / 6 %		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
N90090	T8 18 W	1 h	NiCd battery	6,0 V	4,0 Ah	30%	x		
N90091	T8 18 W	3 h	NiCd battery	6,0 V	4,0 Ah	16%	x		
N90092	T8 36 W	1 h	NiCd battery	6,0 V	4,0 Ah	25%	x		
N90093	T8 36 W	3 h	NiCd battery	6,0 V	4,0 Ah	12%	x		
N90094	T8 58 W	1 h	NiCd battery	6,0 V	4,0 Ah	17%	x		
N90095	T8 58 W	3 h	NiCd battery	6,0 V	4,0 Ah	9%	x		

# Strahler

Description: Emergency luminaire comprising a power pack box and 2 adjustable spotlights. To be installed free standing or on walls.  
Special features: Optimal exit route lighting in warehouses and temporary structures.

Technical details see pages 110 - 117

## Technical data

Mounting:

Free standing or wall mounting

Body:

Sheet steel grey (RAL 7032)

Mains supply:

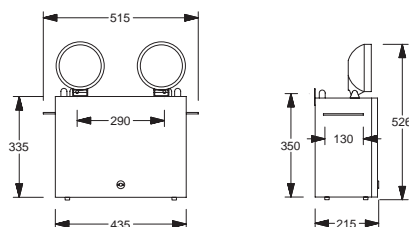
198 V - 254 V / 50 Hz

Ambient temperature:

0 to + 40 °C

Specification:

Non maintained mode



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen	Standard	Auto-test	Central-test
N90447L	2 x QT-Lp 20W	1h	Lead acid battery	12,0 V	6,5 Ah	2 x 210 lm		x	x
N90448L	2 x QT-Lp 20W	3h	Lead acid battery	12,0 V	24,0 Ah	2 x 210 lm		x	x
N90449L	2 x QT-Lp 55W	1h	Lead acid battery	12,0 V	24,0 Ah	2 x 1100 lm		x	x
N90450L	2 x QT-Lp 55W	3h	Lead acid battery	12,0 V	48,0 Ah	2 x 1100 lm		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen	Standard	Auto-test	Central-test
N90447	2 x QT-Lp 20W	1h	Lead acid battery	12,0 V	6,5 Ah	2 x 210 lm	x		
N90448	2 x QT-Lp 20W	3h	Lead acid battery	12,0 V	24,0 Ah	2 x 210 lm	x		
N90449	2 x QT-Lp 55W	1h	Lead acid battery	12,0 V	24,0 Ah	2 x 1100 lm	x		
N90450	2 x QT-Lp 55W	3h	Lead acid battery	12,0 V	48,0 Ah	2 x 1100 lm	x		

Standard type supplied with test switch



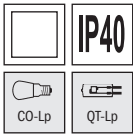
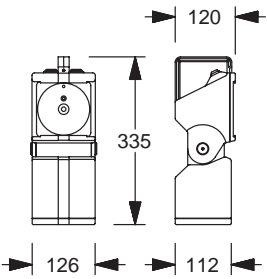
# Scout

Description: Portable emergency luminaire with adjustable spotlight. Lamp housing with one main lamp and one auxiliary lamp, switchable. Wall bracket available as accessory.  
Special features: Portable light source with choice of 2 light beams and 2 durations.

Technical details see pages 110 - 117

**Technical data**

Body:  
Grey polycarbonate  
Mains supply:  
198 V - 254 V / 50 Hz  
Ambient temperature:  
0 to + 40 °C  
Specification:  
Non maintained mode



Accessories to be ordered separately		
Order code	Description	Article
F97230	Wall bracket	

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen	Standard	Auto-test	Central-test
N97230	QT-Lp 10W / CO-Lp 1,2W	4h / 38h	NiCd battery	6,0 V	7,0 Ah	120 lm / 5 lm	x		

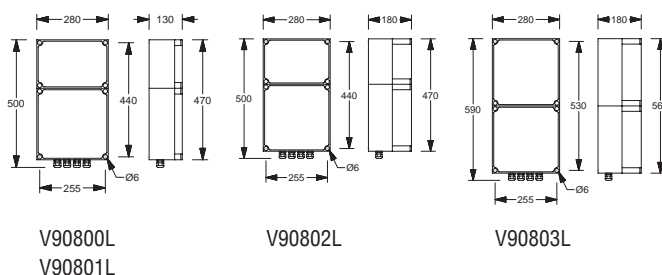
# NVG

Power pack to operate 1 or 2 luminaires with incandescent lamp, electronic/ magnetic transformer or electronic/magnetic ballast. Design with separate electronics and battery compartment. Installation remote from luminaire(s). Max. distance between power pack and luminaire = 500 m.

Special features: Use of general lighting luminaires as emergency luminaires. Emergency luminaires switchable from non-maintained to maintained mode via mains switches of the general lighting installation.

Note: Electronic gear must be suitable for DC and AC operation and for use in emergency lighting installations. Luminaires with magnetic gear must have low power factor circuits.

Technical details see pages 110 - 117



IP65

Electronic

IP32

Battery

## Technical data

Mounting:

Wall mounting

Body:

ABS-plastic

Mains supply:

198 V - 254 V / 50 Hz

Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode

## NVGE-W maximum lamp load

Order code	Duration	Ballast lumen factor (BLF)	Incandescent lamp	Fluorescent lamp electronic ballast	Ballast lumen factor (BLF)	Fluorescent lamp magnetic ballast
V90800L	1h	100%	20 W	1 x 13 W CFL	75%	1 x 18 W T8 1 x 18 W CFL
V90801L	1h	100%	60 W	1 x 58 W T8 2 x 18 W T8 1 x 54 W T5 2 x 28 W T5 1 x 55 W CFL 2 x 26 W CFL	75%	1 x 58 W T8 2 x 18 W T8 1 x 36 W CFL 2 x 26 W CFL
V90801L	3h	100%	20 W	1 x 18 W T8 1 x 14 W T5 1 x 18 W CFL	75%	1 x 18 W T8 1 x 18 W CFL
V90802L	1h	100%	100 W	1 x 70 W T8 2 x 38 W T8 1 x 80 W T5 2 x 39 W T5 1 x 80 W CFL 2 x 40 W CFL	75%	1 x 70 W T8 2 x 38 W T8 2 x 36 W CFL
V90802L	3h	100%	40 W	1 x 38 W T8 2 x 18 W T8 1 x 35 W T5 2 x 14 W T5 1 x 36 W CFL 2 x 18 W CFL	75%	1 x 36 W T8 2 x 15 W T8 1 x 28 W CFL 2 x 13 W CFL
V90803L	1h	100%	120 W	2 x 58 W T8 1 x 80 W T5 2 x 49 W T5 1 x 80 W CFL 2 x 55 W CFL	75%	2 x 58 W T8 1 x 36 W CFL 2 x 36 W CFL
V90803L	3h	100%	70 W	1 x 58 W T8 2 x 36 W T8 1 x 54 W T5 2 x 28 W T5 1 x 36 W CFL 2 x 26 W CFL	75%	1 x 58 W T8 2 x 30 W T8 1 x 36 W CFL 2 x 26 W CFL

**LOGICA**  
SOLUTION

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF) <sup>1)</sup>	Standard	Auto-test	Central-test
V90800L	See table	1h / 3h	Lead acid battery	12,0 V	6,5 Ah	25% / 50% / 75% / 100%		x	x
V90801L	See table	1h / 3h	Lead acid battery	12,0 V	13,0 Ah	25% / 50% / 75% / 100%		x	x
V90802L	See table	1h / 3h	Lead acid battery	12,0 V	24,0 Ah	25% / 50% / 75% / 100%		x	x
V90803L	See table	1h / 3h	Lead acid battery	12,0 V	40,0 Ah	25% / 50% / 75% / 100%		x	x

<sup>1)</sup> All power packs are equipped with DALI control input. This permits to adjust the ballast lumen factor to 25%, 50%, 75% or 100%.





## Inverter

Description: Conversion kit for the operation of 1 fluorescent tube in 1 luminaire with electronic or magnetic ballast. Separate electronic control unit and battery pack to be fitted within a luminaire.

Special features: Use of general lighting luminaires for emergency lighting. Mode to be selected from non-maintained to maintained mode by mains switches of the general lighting installation.

Technical details see pages 110 - 117

### Technical data

Mounting:

To be installed in luminaires

Body:

Plastic

Mains supply:

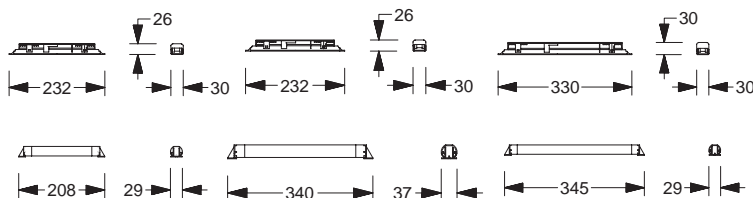
198 V - 254 V / 50 Hz

Ambient temperature:

- 5 to + 40 °C

Specification:

Maintained or non maintained mode



VB12488

VB12490

VB16309

VB12480

VB12482

IP20

Order code	Duration	Ballast lumen factor (BLF)	Lamp
VB12488	1h	30%	T5 14 W
		24%	T5 21 W
		20%	T5 24 W
VB12490	3h	30%	T5 14 W
		24%	T5 21 W
		20%	T5 24 W
VB12480	1h	30%	T8 18 W
		25%	T8 36 W
		17%	T8 58 W
VB12482	3h	16%	T8 18 W
		12%	T8 38 W
		9%	T8 58 W
VB16309	1h	42%	T5 21 W
		28%	T5 24 W
		22%	T5 28 W
		26%	T5 35 W
		22%	T5 39 W
		17%	T5 49 W
		18%	T5 54 W
		11%	T5 80 W

Allocation of lamp, duration and ballast lumen factor

Order code	Duration	Ballast lumen factor (BLF)	Lamp
VB16309	3h	14%	T5 21 W
		12%	T5 24 W
		11%	T5 28 W
		9%	T5 35 W
		8%	T5 39 W
		6%	T5 49 W
		6%	T5 54 W
		4%	T5 80 W
VB16309	1h	56%	T8 18 W
		28%	T8 36 W
		18%	T8 58 W
	3h	19%	T8 18 W
		9%	T8 36 W
		6%	T8 58 W
	1h	41%	CFL 24 W
		28%	CFL 36 W
		22%	CFL 40 W
		16%	CFL 55 W
		14%	CFL 24 W
	3h	9%	CFL 36 W
		8%	CFL 40 W
		6%	CFL 55 W

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SOLUTIONS

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
VB16309	T5 14W-80W								
	T8 18W-58W	1h / 3h	NiCd battery	7,2 V	2,2 Ah	See table		x	x
	CFL 4 pin/2 lb 24W-55W								

For Logica-FM fittings please order FM-module (FB16304) separately

VB12488	T5 14W-24W	1h	NiCd battery	4,8 V	1,7 Ah	See table	x		
VB12490	T5 14W-24W	3h	NiCd battery	6,0 V	4,0 Ah	See table	x		
VB12480	T8 18W-58W	1h	NiCd battery	6,0 V	4,0 Ah	See table	x		
VB12482	T8 18W-58W	3h	NiCd battery	6,0 V	4,0 Ah	See table	x		

# Arcus V

Description: Exit sign luminaire in elegant style with convex body. Front surface designed as a pane, projecting on all sides. Choice of single sided (wall mounting) or double sided (ceiling, pendant, suspended and bracket mounting) exit sign.

Special features: Architectural look, sleek design, long distance visibility, high light output ratio, also available as emergency luminaire.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Wall or ceiling mounting

### Body:

Die-cast aluminium and extruded aluminium, anthracite RAL 9007

### Diffuser:

Polycarbonate with longitudinal prisms

### Mains supply:

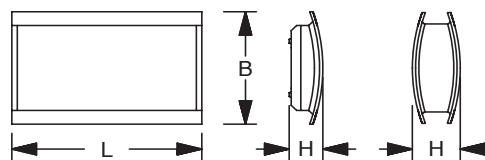
198 V - 254 V / 50 Hz

### Ambient temperature:

0 to + 40 °C

### Specification:

Maintained or non maintained mode



W	• Dimensions (mm) •			Version
	L	B	H	
8	348	217	62	1-side
8	348	217	89	2-side



Accessories to be ordered separately		
Order code	Description	Article
<b>8W</b>		
<b>E16282N</b>	Exit sign pane	
<b>E16283N</b>	Exit sign pane	
<b>E16284N</b>	Exit sign pane	
<b>E16302</b>	Opal pane	
<b>E16285</b>	Pane in body colour	
<b>F95104</b>	Adaptor for ceiling mounting	
<b>F95083</b>	Suspension profile 250 mm	
<b>F95084</b>	Suspension profile 500 mm	
<b>F95085</b>	Suspension profile 1000 mm	
<b>F95064</b>	Wall bracket	
<b>F95402</b>	Pendant rod 500 mm	
<b>F95403</b>	Wire suspension max. 1200 mm	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
<b>N90270L</b>	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

Double sided exit sign

<b>N90278L</b>	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x
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For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
<b>NB90270</b>	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
<b>NB90271</b>	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		
Double sided exit sign									
<b>NB90278</b>	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
<b>NB90279</b>	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		

Standard type supplied with test switch



## Design

Description: Exit sign luminaire in functional style, consisting of semi-circular sections and flat end caps. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign. Luminaires are supplied without panes, adaptor for ceiling mounting, pendant or bracket.

Special features: Architectural look, sleek design, choice of 2 visibility distances, also available as emergency luminaire.

Technical details see pages 110 - 117

### Technical data

Mounting:

Wall or ceiling mounting

Body:

Sheet steel, white RAL 9003 <sup>1)</sup>

Mains supply:

198 V - 254 V / 50 Hz

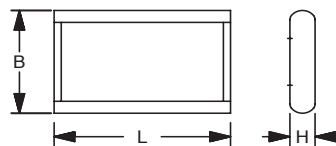
Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode

1) Design with aluminium body available on request



W	• Dimensions (mm) •		
	L	B	H
6	265	175	55
8	386	237	55



Accessories to be ordered separately			
Order code		Description	Article
<b>6W</b>	<b>8W</b>		
E16604N	E16608N	Exit sign pane	
E16605N	E16609N	Exit sign pane	
E16606N	E16610N	Exit sign pane	
E16607	E16611	Opal pane	
E16242	E16241	Pane in body colour	
F95057	F95057	Adaptor for ceiling mounting	
F95100	F95100	Suspension profile 250 mm	
F95101	F95101	Suspension profile 500 mm	
F95102	F95102	Suspension profile 1000 mm	
F95022	F95035	Wall bracket	
F95067	F95067	Wire suspended mounting	
F95400	F95400	Pendant rod 500 mm	
F95401	F95401	Wire suspension max. 1200 mm	
	F95032	Wire guard (wall mounting)	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
NM90544L	T5 6W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100% (1h) / 51% (3h)		x	x
NM90540L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x
Double sided exit sign									
NM90546L	T5 6W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100% (1h) / 51% (3h)		x	x
NM90542L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
NM90544	T5 6W	1 h	NiCd battery	4,8 V	1,2 Ah	58%	x		
NM90545	T5 6W	3 h	NiCd battery	4,8 V	2,2 Ah	44%	x		
NM90540	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
NM90541	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		
Double sided exit sign									
NM90546	T5 6W	1 h	NiCd battery	4,8 V	1,2 Ah	58%	x		
NM90547	T5 6W	3 h	NiCd battery	4,8 V	2,2 Ah	44%	x		
NM90542	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
NM90543	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		

Standard type supplied with test switch



# Kubus

Description: Exit sign luminaire, consisting of flat sections with folded corners. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign.

Luminaires are supplied without panes and accessories.

Special features: Functional look, choice of 3 visibility distances, also available as emergency luminaire.

Technical details see pages 110 - 117

## Technical data

Mounting:

Wall or ceiling mounting

Body:

Sheet steel, white RAL 9003 <sup>1)</sup>

Mains supply:

198 V - 254 V / 50 Hz

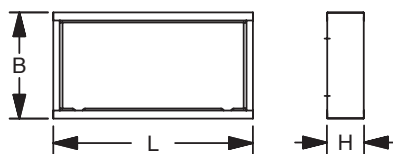
Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode

<sup>1)</sup> Design with aluminium body available on request



W	• Dimensions (mm) •		
	L	B	H
6	255	140	70
8	376	200	70
13	605	315	70



Accessories to be ordered separately				
Order code	Description			Article
6W	8W	13W		
E16604N	E16608N	E16134N	Exit sign pane	
E16605N	E16609N	E16135N	Exit sign pane	
E16606N	E16610N	E16136N	Exit sign pane	
E16607	E16611	E16324	Opal pane	
E16242	E16241	E16251	Pane in body colour	
F95057	F95057	F95057	Adaptor for ceiling mounting	
F95600	F95600	F95600	Suspension profile 250 mm	
F95601	F95601	F95601	Suspension profile 500 mm	
F95602	F95602	F95602	Suspension profile 1000 mm	
F95055	F95056	F95070	Wall bracket	
F95400	F95400	F95400	Pendant rod 500 mm	
F95401	F95401	F95401	Wire suspension max. 1200 mm	
	F95032		Wire guard (wall mounting)	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
NM90612L	T5 6W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100% (1h) / 51% (3h)		x	x
NM90614L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x
NM90680L	T5 13W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	56% (1h) / 24% (3h)		x	x
Double sided exit sign									
NM90624L	T5 6W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100% (1h) / 51% (3h)		x	x
NM90626L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91%(1h) / 38% (3h)		x	x
NM90682L	T5 13W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	56% (1h) / 24% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
NM90612	T5 6W	1 h	NiCd battery	4,8 V	1,2 Ah	58%	x		
NM90613	T5 6W	3 h	NiCd battery	4,8 V	2,2 Ah	44%	x		
NM90614	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
NM90615	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		
NM90680	T5 13W	1 h	NiCd battery	4,8 V	1,2 Ah	27%	x		
NM90681	T5 13W	3 h	NiCd battery	4,8 V	2,2 Ah	20%	x		
Double sided exit sign									
NM90624	T5 6W	1 h	NiCd battery	4,8 V	1,2 Ah	58%	x		
NM90625	T5 6W	3 h	NiCd battery	4,8 V	2,2 Ah	44%	x		
NM90626	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
NM90627	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		
NM90682	T5 13W	1 h	NiCd battery	4,8 V	1,2 Ah	27%	x		
NM90683	T5 13W	3 h	NiCd battery	4,8 V	2,2 Ah	20%	x		
Standard type supplied with test switch									

# Dispos

Description: Exit sign luminaire in functional design, surface mounted version consisting of segmented sections. Choice of single sided (wall mounting) or double sided (recessed ceiling, ceiling, pendant suspended and bracket mounting) exit sign.

Luminaires supplied without exit sign panes and accessories.

Special features: Functional look, display technology, two different visibility ranges, also available with LED light sources.

Technical details see pages 110 - 117

## Technical data

Mounting:

Recessed, ceiling, pendant or bracket installation

Body:

Aluminium, white RAL 9003

Cover for recessed version:

Sheet steel white RAL 9003

Mains supply:

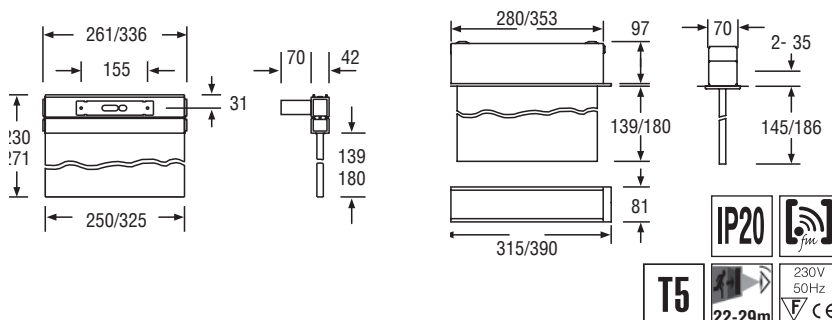
198 V - 254 V / 50 Hz

Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode



Accessories to be ordered separately			
Order code		Description	Article
6W	8W		
E16260N	E16128N	Exit sign pane	
E16261N	E16129N	Exit sign pane	
E16262N	E16130N	Exit sign pane	
F95209	F95209	Adaptor for pendant suspended mounting	
F95600	F95600	Suspension profile 250 mm	
F95601	F95601	Suspension profile 500 mm	
F95602	F95602	Suspension profile 1000 mm	
F95211	F95211	Wall bracket	
F95404	F95404	Pendant rod 500 mm	
F95405	F95405	Wire suspension max. 1200 mm	
F95220	F95221	Concrete ceiling box	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Version for recessed ceiling mounting and double sided exit route sign									
NM90135L	T5 6W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100% (1h) / 51% (3h)		x	x
NM90100L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x
Version for wall mounting and single sided exit route sign									
N90111L	T5 6W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100% (1h) / 51% (3h)		x	x
N90105L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x
Version for pendant suspended mounting and double sided exit route sign									
N90116L	T5 6W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100% (1h) / 51% (3h)		x	x
N90107L	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Standard type supplied with test switch



# Dispos-LED

Description: Exit sign luminaire in functional design, consisting of segmented sections (surface-mounted design). Choice of single sided (wall mounting) or double sided (recessed ceiling, pendant suspended and bracket mounting) exit route sign.

Luminaires supplied without exit sign panes and accessories.

Special features: Functional look, display technology, two different visibility ranges, also available as emergency luminaire with T5 6 W and 8 W.

Technical details see pages 110 - 117

## Technical data

Mounting:

Recessed, ceiling, pendant or bracket installation

Body:

Aluminium, white RAL 9003

Cover for recessed version:

Sheet steel white RAL 9003

Mains supply:

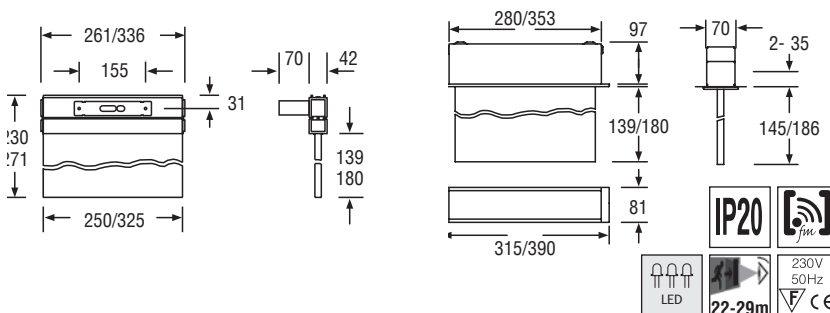
198 V - 254 V / 50 Hz

Ambient temperature:

0 to + 40 °C

Specification:

Maintained or non maintained mode



Accessories to be ordered separately			
Order code		Description	Article
3W	5W		
E16260N	E16128N	Exit sign pane	
E16261N	E16129N	Exit sign pane	
E16262N	E16130N	Exit sign pane	
F95209	F95209	Adaptor for pendant suspended mounting	
F95600	F95600	Suspension profile 250 mm	
F95601	F95601	Suspension profile 500 mm	
F95602	F95602	Suspension profile 1000 mm	
F95211	F95211	Wall bracket	
F95404	F95404	Pendant rod 500 mm	
F95405	F95405	Wire suspension max. 1200 mm	
F95220	F95221	Concrete ceiling box	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Version for recessed ceiling mounting and double sided exit route sign									
NM90215L	LED 3 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100%		x	x
NM90180L	LED 5 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100%		x	x
Version for wall mounting and single sided exit route sign									
N90191L	LED 3 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100 %		x	x
N90185L	LED 5 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100 %		x	x
Version for pendant suspended mounting and double sided exit route sign									
N90196L	LED 3 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100 %		x	x
N90187L	LED 5 W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100 %		x	x

For Logica-FM fittings please order FM-module (FB16304) separately



# Maxima

Description: Exit sign luminaire in functional design with body and panes in oval form. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign. Luminaires are supplied with 4 exit sign films, adaptor for ceiling mounting and bracket for wall mounting.

Special features: Attractive aesthetics, sleek body, long distance visibility, easy installation with quick-adaptor.

Technical details see pages 110 - 117

## Technical data

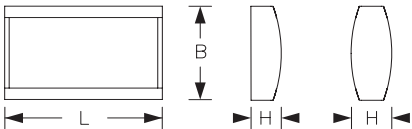
Mounting:  
Wall, ceiling, pendant suspended or bracket mounting

Body:  
Polycarbonate

Mains supply:  
198 V - 254 V / 50 Hz

Ambient temperature:  
0 to + 40 °C

Specification:  
Maintained or non maintained mode



W	• Dimensions (mm) •			Version
	L	B	H	
8	390	227	79,3	1-side
8	390	227	90	2-side



Fittings are supplied complete with		
Order code	Description	Article
<b>8W</b>		
<b>FB16910</b>	Exit signs (set with all 4 films)	
<b>F95505</b>	Adaptor for ceiling mounting	
<b>F95506</b>	Side arm	

Accessories to be ordered separately	
Order code	Description
<b>8W</b>	
<b>FB3723</b>	Adaptor for wire or chain suspension
<b>F95510</b>	Suspension profile 500 mm
<b>F95511</b>	Suspension profile 1000 mm
<b>F95512</b>	Suspension profile 1500 mm



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
<b>N90360L</b>	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x
Double sided exit sign									
<b>N90362L</b>	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
<b>NB90360</b>	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
<b>NB90361</b>	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		
Double sided exit sign									
<b>NB90362</b>	T5 8W	1 h	NiCd battery	4,8 V	1,2 Ah	43%	x		
<b>NB90363</b>	T5 8W	3 h	NiCd battery	4,8 V	2,2 Ah	33%	x		

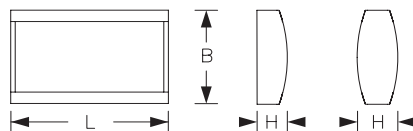
Standard type supplied with test switch

# Maxima LED

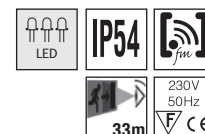
Description: Exit sign luminaire in functional design with body and panes in oval form. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign. Luminaires are supplied with 4 exit sign films, adaptor for ceiling mounting and bracket for wall mounting.

Special features: Attractive aesthetics, sleek body, long distance visibility, easy installation with quick-adaptor.

Technical details see pages 110 - 117



W	• Dimensions (mm) •			Version
	L	B	H	
8	390	227	79,3	1-side
8	390	227	90	2-side



Fittings are supplied complete with		
Order code	Description	Article
<b>8W</b>		
<b>FB16910</b>	Exit signs (set with all 4 films)	
<b>F95505</b>	Adaptor for ceiling mounting	
<b>F95506</b>	Side arm	

Accessories to be ordered separately	
Order code	Description
<b>8W</b>	
<b>FB3723</b>	Adaptor for wire or chain suspension
<b>F95510</b>	Suspension profile 500 mm
<b>F95511</b>	Suspension profile 1000 mm
<b>F95512</b>	Suspension profile 1500 mm



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
<b>N90360L-LED</b>	LED 2x1W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100%		x	x
Double sided exit sign									
<b>N90362L-LED</b>	LED 2x1W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	100%		x	x

For Logica-FM fittings please order FM-module (FB16304) separately



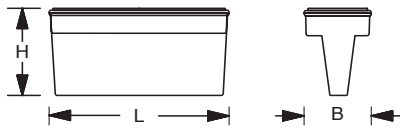
# Tuttovetro Bandiera

Description: Exit sign luminaire in industrial style, consisting of a flat body and a tapered opal cover. Double sided exit route sign (ceiling, wire suspended and bracket mounting). Luminaire supplied with exit sign films, adapter for wire suspension and bracket mounting.  
 Special features: Industrial look, improved degree of protection to IP65 by auxiliary box. Quick fix adapter for IP40 version.

Technical details see pages 110 - 117

## Technical data

Mounting:  
 Ceiling, pendant or bracket mounting  
 Body:  
 ABS plastic  
 Diffuser:  
 ABS plastic  
 Mains supply:  
 198 V - 254 V / 50 Hz  
 Ambient temperature:  
 0 to + 40 °C  
 Specification:  
 Maintained or non maintained mode



W	• Dimensions (mm) •			Lamp
	L	B	H	
8	380	142	194	T5

• Dimensions (mm) IP65 •		
L	B	H
396	156	233



Fittings are supplied complete with		
Order code	Description	Article
8W		
FB16902	Exit signs (set with 4 films)	
FB3722	Wall bracket	
FB3723	Adaptor for wire suspended mounting	

Accessories to be ordered separately		
Order code	Description	Article
8W		
FB2734	IP-65 auxiliary box	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB16313	T5 8W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB16102	T5 8W	1 h	NiCd battery	6,0 V	0,8 Ah	36%	x		
NB16103	T5 8W	3 h	NiCd battery	6,0 V	1,8 Ah	34%	x		

# Indus

Description: Exit sign luminaire in industrial design with flat body and opal diffuser. Light distribution by white reflector. Single sided exit route sign (wall mounting) or double sided (ceiling mounting).  
Special features: Industrial design, robust and shockproof.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Wall, ceiling, wire or chain suspension or bracket mounting

### Body:

White polycarbonate

### Cover:

Polycarbonat opal

### Reflector:

White polycarbonate

### Mains supply:

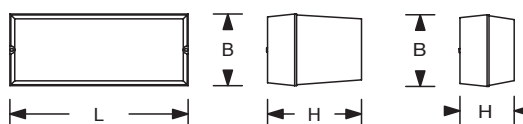
198V – 254V / 50 Hz

### Ambient temperature:

0 to + 40 °C

### Specification:

Maintained or non maintained mode



W	• Dimensions (mm) •			Version
	L	B	H	
8	368	148	112	1-side
8	368	148	194	2-side



Accessories to be ordered separately		
Order code	Description	Article
<b>8W</b>		
F15314N	Exit sign film	
F15313N	Exit sign film	
F15312N	Exit sign film	
F95029	Wall bracket	
FB3723	Adaptor for wire or chain suspension	
F95032	Wire guard	

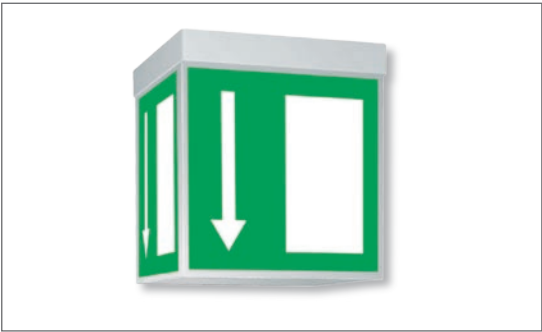


Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
NB90901L	T5 8W	1h/3h	NiCd battery	7,2 V	1,7 Ah	91% (1h)		x	x
Double sided exit sign									
NB90432L	T5 8W	1h/3h	NiCd battery	7,2 V	1,7 Ah	91% (1h) / 38% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
Single sided exit sign									
NB90901	T5 8W	1h	NiCd battery	4,8V	1,2 Ah	43%	x		
NB90902	T5 8W	3h	NiCd battery	4,8V	2,2 Ah	33%	x		
Double sided exit sign									
NB90432	T5 8W	1h	NiCd battery	4,8V	1,2 Ah	43%	x		
NB90433	T5 8W	3h	NiCd battery	4,8V	2,2 Ah	33%	x		

Standard type supplied with test switch



# Quader

Description: Exit sign luminaire consisting of a square base and a cuboids transparent diffuser. Three sided exit route sign (ceiling mounting). Long range visibility due to large diffuser.  
Special features: Three sided exit route sign for large sized areas like supermarkets.

Technical details see pages 110 - 117

Technical data

Mounting:  
Ceiling or pendant mounting, wire or chain suspension

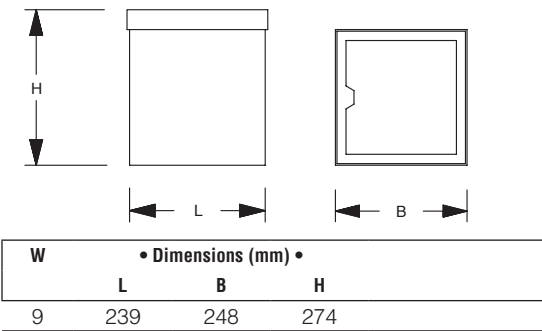
Body:  
Polypropylene

Diffuser:  
PMMA

Mains supply:  
198 V - 254 V / 50 Hz

Ambient temperature:  
0 to + 40 °C

Specification:  
Maintained or non maintained mode



Accessories to be ordered separately		
Order code	Description	Article
9W		
F15330	Exit sign film	
F15331	Exit sign film	
F15332	Exit sign film	
F95600	Pendant rod 250 mm	
F95601	Pendant rod 500 mm	
F95602	Pendant rod 1000 mm	
F95400	Pendant rod	
F95401	Wire suspension kit	
F95210	Adaptor for pendant suspended mounting	
F95406	Adaptor for wire or chain suspension	



Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
N90480L	CFL 4-pin 2 lb 9W	1 h / 3 h	NiCd battery	7,2 V	1,7 Ah	82% (1h) / 34% (3h)		x	x

For Logica-FM fittings please order FM-module (FB16304) separately

Order code	Lamp	Duration	Battery type	Battery voltage	Battery capacity	Ballast lumen factor (BLF)	Standard	Auto-test	Central-test
NB90480	CFL 4-pin 2 lb 9W	1 h	NiCd battery	4,8 V	1,2 Ah	38%	x		
NB90481	CFL 4-pin 2 lb 9W	3 h	NiCd battery	4,8 V	2,2 Ah	29%	x		

Standard type supplied with test switch



# Centralised power supply systems

The NZBVA and NZBVE central battery systems and the NGBVA and NGBVE group battery systems enable the installation of emergency lighting systems in medium and large-scale facilities. Both ranges are based on identical components. They only differ in the design of the cabinets:

- NZBVA and NGBVA: Control cabinets with a large inspection pane and detachable frame to accommodate 19" rack inserts.
- NZBVE und NGBVE: Control cabinets with a small inspection pane and fixed frame to accommodate 19" rack inserts.
- NZBVA and NZBVE: Use of a 216V battery with a lifetime expectation of 10+ years.
- NGBVA and NGBVE: Use of a 24V battery with a lifetime expectation of 5+ years.

#### Special features:

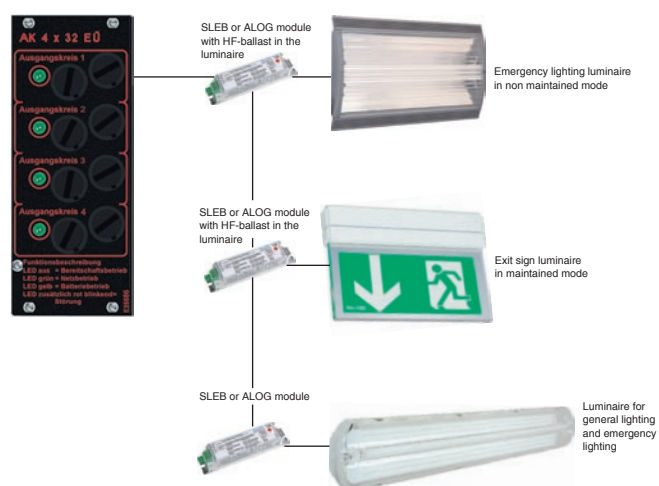
- Control and monitoring by the SleBLOGICA- or AutoLOGICA-system
- Luminaire operation in:
  - Maintained mode
  - Non maintained mode
  - Non maintained mode with selective switching to maintained mode via external light switches
  - Non maintained mode with selective switching in case of partial mains incidents/switching via external mains monitoring modules
- Combination of all options in a single circuit
- Permanent check of the general lighting switches or of the mains monitoring modules via control inputs within the luminaire or system
- Allocation of control information to different luminaires and circuits without limitation
- No manual addressing of the luminaire number at the control and monitoring module within the luminaire required
- No manual coding of the control input at the control and monitoring module within the luminaire required
- Automatic allocation of the required circuits and detection of luminaires
- Individual monitoring of 20 (32) luminaires in a circuit with or without selective irregularity report
- Automatic triggering of function and duration tests
- Automatic reporting to a test journal
- Centralised input and output of all parameters and data
- Operates luminaires with:
  - Incandescent lamps
  - Fluorescent tubes with electronic or magnetic ballast
  - HID lamps with electronic or magnetic ballast

#### Monitoring of emergency luminaires

The automatic test equipment of NGBVA, NGBVE, NZBVA and NZBVE systems monitors all exit signs and emergency luminaires. There are 2 options available:

- Individual monitoring with selective irregularity report enables immediate identification of a defective luminaire. The switching and monitoring modules SLEB or ALOG check during the functional test lamps and ballasts and report the result to the central station. An eventual defect is being indicated and printed by giving details which circuit and which luminaire is not working properly. The modules SLEB and ALOG are also available with integrated HF-ballast. The operation and monitoring modules to be used are AK...EÜ type.
- Individual monitoring without selective irregularity report does not enable immediate identification of a defective luminaire. There is just a comparison between the rated power of a circuit and the measured power during the functional test. An eventual defect is being indicated and printed by giving details which circuit is not working properly. The operation and monitoring modules to be used are AK...SÜ type.

Individual monitoring with selective irregularity report in a circuit with luminaires with different operation modes





SlebLOGICA and AutoLOGICA enable all NGBVA, NGBVE, NZBVA and NZBVE emergency lighting systems to operate luminaires in one single circuit in different operation modes:

- Maintained mode.
- Non maintained mode.
- Switching from non maintained to maintained mode depending on the on/off position of the light switches. Either via SlebLOGICA or AutoLOGICA modules in the emergency luminaires or via a centrally placed LSSA module.
- Automatically switching on of all or of selected emergency luminaires in non maintained mode in case of partial mains failures. Either via SlebLOGICA or AutoLOGICA modules in the emergency luminaires or via a centrally placed LSSA module.
- Automatically switching off of all or of selected emergency luminaires in non maintained mode in case of return of mains voltage. Either with or without time delay.
- Manually switching off of all or of selected emergency luminaires in non maintained mode in case of return of mains voltage. Either via SlebLOGICA or AutoLOGICA modules in the emergency luminaires or via a centrally placed LSSA module.
- On/off switching of emergency luminaires in maintained mode either manually or via time switch.
- Allocation of operating modes to circuits and luminaires without limitation.
- Allocation of commands of control modules to circuits and luminaires without limitation.
- No manual coding of the control input at the modules in the luminaire is required.
- AutoLOGICA system offers the automatic identification of the luminaire address, no manual operation is required.

## Advantages:

- Reduction of the number of circuits and wiring.
- Smaller dimensions of the control cabinets.
- Reduction of the quantity of inflammable items.
- Reduction of installation cost.
- Simplification of the design.
- Increased flexibility during installation.
- Increased flexibility in case of changes.

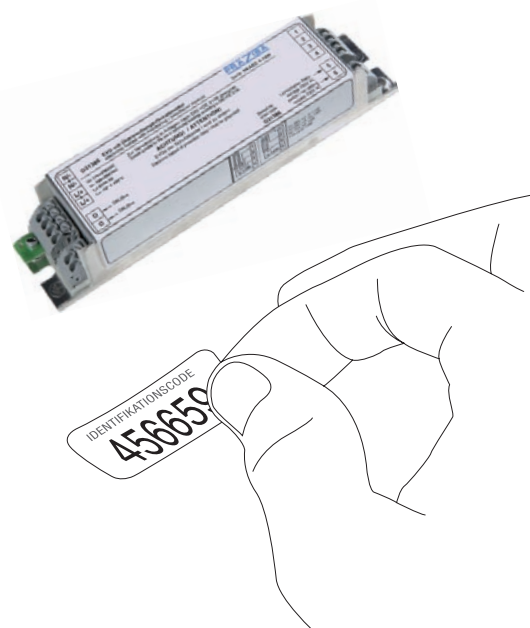
SlebLOGICA and AutoLOGICA systems offer control and switching but also monitoring of the function of emergency luminaires. All these actions can be triggered from the central cabinet.

SlebLOGICA and AutoLOGICA modules are either available as single modules that switch and monitor the lamp and ballast of the luminaire (type SLEB or ALOG) or combined with a HF-ballast (type ECSL or ECAL).

## Additional advantages of the AutoLOGICA system

- Every module and every luminaire is equipped with an identification code. There is no manual addressing required.
- The AutoLOGICA system does not request wrong or double addressing. Consequently there is no time consuming troubleshooting necessary.
- The unconditional colour of the cabinets set a new trend in the industry.

All modules of the AutoLOGICA range are fitted with a self adhesive label showing the identification code.





## Control and monitoring system KOMBI CONTROL

KOMBI CONTROL controls and coordinates all group and central battery systems. It is also an automatic test device according to EN 50171 and EN 50172. Four control buttons, a display, multimedia card (MMC) and a printer port are available for data input and output as well as for operating the module.

### KOMBI CONTROL controls and monitors following key system functions:

- Battery charging with automatic switching between short time battery charging and maintaining battery charging. Display of charge and discharge current/voltage, check of the battery balance.
- Manual enabling/disabling of emergency mode suppression with push button or control input.
- Monitoring of mains supply on the main distribution board by an internal mains monitoring module.
- Automatic switching from mains to battery mode in the case of mains supply incidents/failures.
- Automatic cut-off of battery mode when the deep discharge protection is activated.
- Monitoring of mains supply on the sub distribution boards of general lighting by external mains monitoring modules (optional).
- Automatic switching on of non-maintained luminaires in all or selected luminaire circuits in case of mains supply incidents/failures via optional mains switch dependent control module LSSA.
- Automatic switching off – immediately or delayed – of non-maintained luminaires when mains supply is recovered. The delay can be programmed for all or selected luminaire circuits.
- Manual switching of non-maintained luminaires when mains supply is recovered – for all circuits via control push button or for selected circuits via optional mains switch dependent control module LSSA.
- Manual switching of maintained luminaires via push buttons or control input with or without time control. Time control to be programmed for all or selected luminaire circuits (2-week and 1-year control programme).
- Time controlled switching of emergency lighting and general lighting via push buttons from the general lighting system and via optional control module TSZ.
- Allocation of all luminaire circuits to maintained and non-maintained mode or to an optional control module LSSA or TSZ.
- Automatic charge monitoring in cycles < 5 minutes.
- Automatic function tests with configuration of test parameters according to local/national requirements.

- Automatic duration tests with configuration of test parameters according to local/national requirements.
- Automatic storage of all test results for 2 years (integrated test journal).
- Automatic allocation of luminaire circuits and luminaire detection (EVG/KCE/SLEB).
- Automatic insulation test selective for the central station or for each luminaire circuit (central battery systems only).

### Control push buttons and control inputs:

- Emergency mode suppression ON/OFF
- Maintained mode ON/OFF
- Switching from maintained to non-maintained mode
- Function test triggering
- Insulation test triggering

### Status indicators:

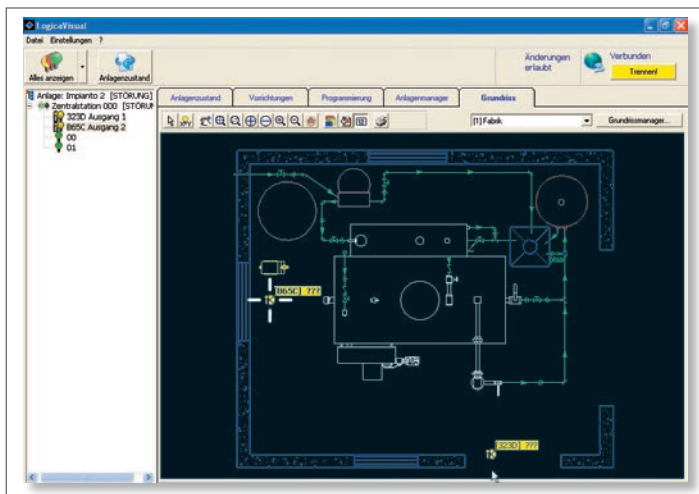
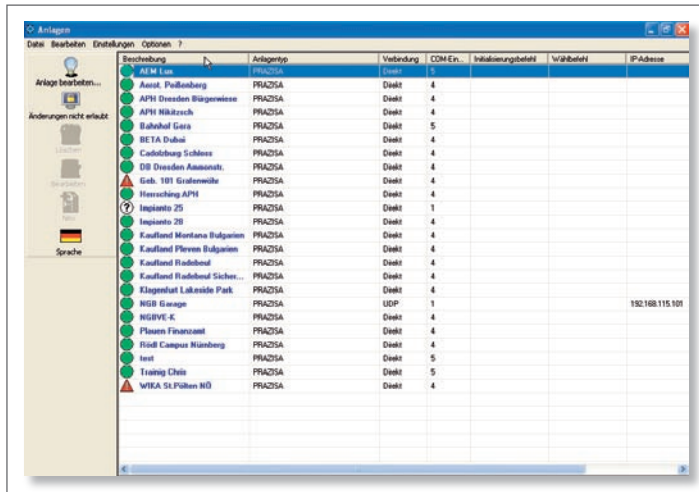
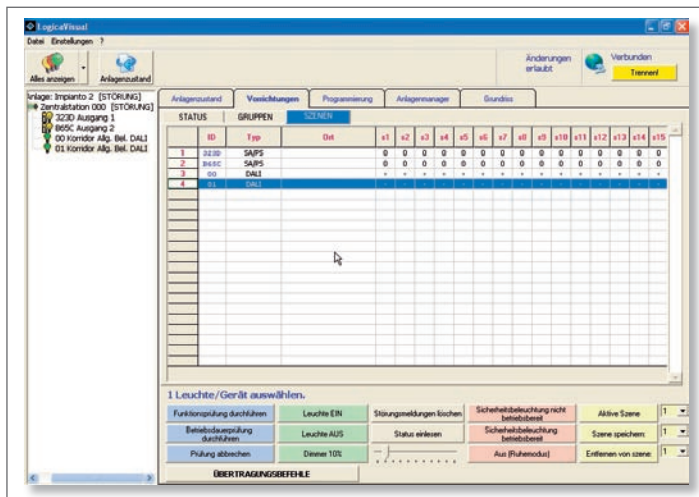
- Emergency mode suppression ON/OFF
- Mains mode
- Battery mode
- Maintained mode ON/OFF
- Mains failure main distribution board (phases L1, L2, and L3)
- Mains failure sub distribution board
- Switching from maintained to non-maintained mode

### Fault indicators:

- Group alarm (detailed information via display or printer)
- Charge fault
- Battery fault
- Luminaire fault
- Bus fault
- Deep discharge
- Insulation fault
- Ventilator fault

### Signal outputs:

- Emergency mode suppression
- Mains mode
- Battery mode
- Group fault



## Monitoring software LOGICA-Visual

Software for centralised monitoring and controlling of emergency lighting systems of the series NZBVE, NZBVA, NGBVE and NGBVA.

**Connection of the PC with the central unit:**

- Interface USB/RS485
- TCP/IP – Ethernet adaptor
- GSM Interface via the telecommunication network

**Input/output of monitoring and control data:**

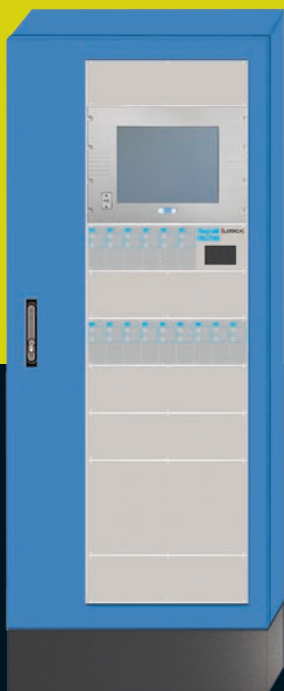
- Numerical and graphical allocation of emergency lighting luminaires to the location in the building plans or in the luminaire list.
- Import of building plans as dxf or dwg data.
- Programming of emergency lighting duration for every single luminaire or every circuit.
- Programming of emergency lighting mode for every single luminaire or every circuit.
- Programming of data for the functional tests and duration tests.
- Programming of the parameters of the LSSA inputs.
- Automatic printing of protocols for the configuration of the system and for failures.
- Clear visualisation of the test results.
- Manual triggering of functional and duration tests.
- Manual suppression of the emergency operation.

**Visualisation during online mode:**

- Numerical and graphical visualisation of the status of all emergency luminaires and allocation to the building plans (dxf or dwg format) and the luminaire list.
- Status of the luminaires.
- Mode of emergency operation.
- Stand by modus.
- Irregularities within the system.
- Tests and results.

Hardware requirements (recommendation): IBM compatible PC with Pentium 4 processor 2 GHz, 512 MB-RAM, 3 GB free store capacity

Software requirements (recommendation): Windows 98 or any Windows of a later edition.



# Central battery systems

# Design and configuration of NZBVA and NZBVE

The central battery systems NZBVA and NZBVE can be designed according to the instructions below:

1. Determine from the customer's specifications:
  - Quantity and technical details of the exit sign and emergency luminaires to be supplied (lamp type, lamp power, ballast lumen factor and gear)
  - Quantity and technical details of the circuits (maintained mode, non-maintained mode, selectively switchable non-maintained mode, selectively switching-on non-maintained mode)
  - Type of luminaire monitoring
2. Power consumption in mains and battery mode (lamp and gear manufacturer data)<sup>1)</sup>
3. Charging unit
4. Battery
5. Operation and monitoring modules for the central station (system spreadsheet)
6. Options for the central station (system spreadsheet)
7. Output(s) to sub-station(s) if required
8. Central station (system spreadsheet)

Type: Identification of the central station:

NZBVA-Z

230/\_/\_/\_/\_/\_

NZBVE-Z

Rack compartment MULTI CONTROL-I

(0 = no, 1 = yes)

Duration (h) (1=1h/3=3h/8=8h)

Rack compartments needed for operation and monitoring modules

Battery capacity (Ah)

Charge current (A)

9. Operation and monitoring modules for the sub-station(s) (system spreadsheet)

10. Options for the sub-station(s) (system spreadsheet)

11. Sub-station(s) (system spreadsheet)

Type: Identification of the sub-station:

NZBVA-UV

/\_ \_ -

NZBVE-UV

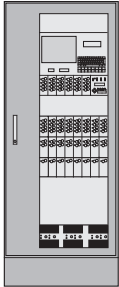

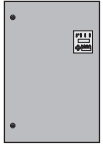

Maintaining fire protection 30 min.(-30)

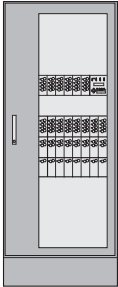
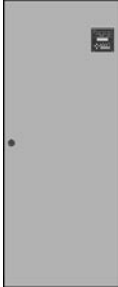

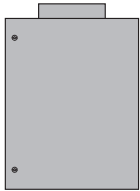
Rack compartments needed for operation and monitoring modules

Mounting (S = floor standing / W = wall mounting)

<sup>1)</sup> Power consumption of the ECSL, ECKC and EC modules on request.

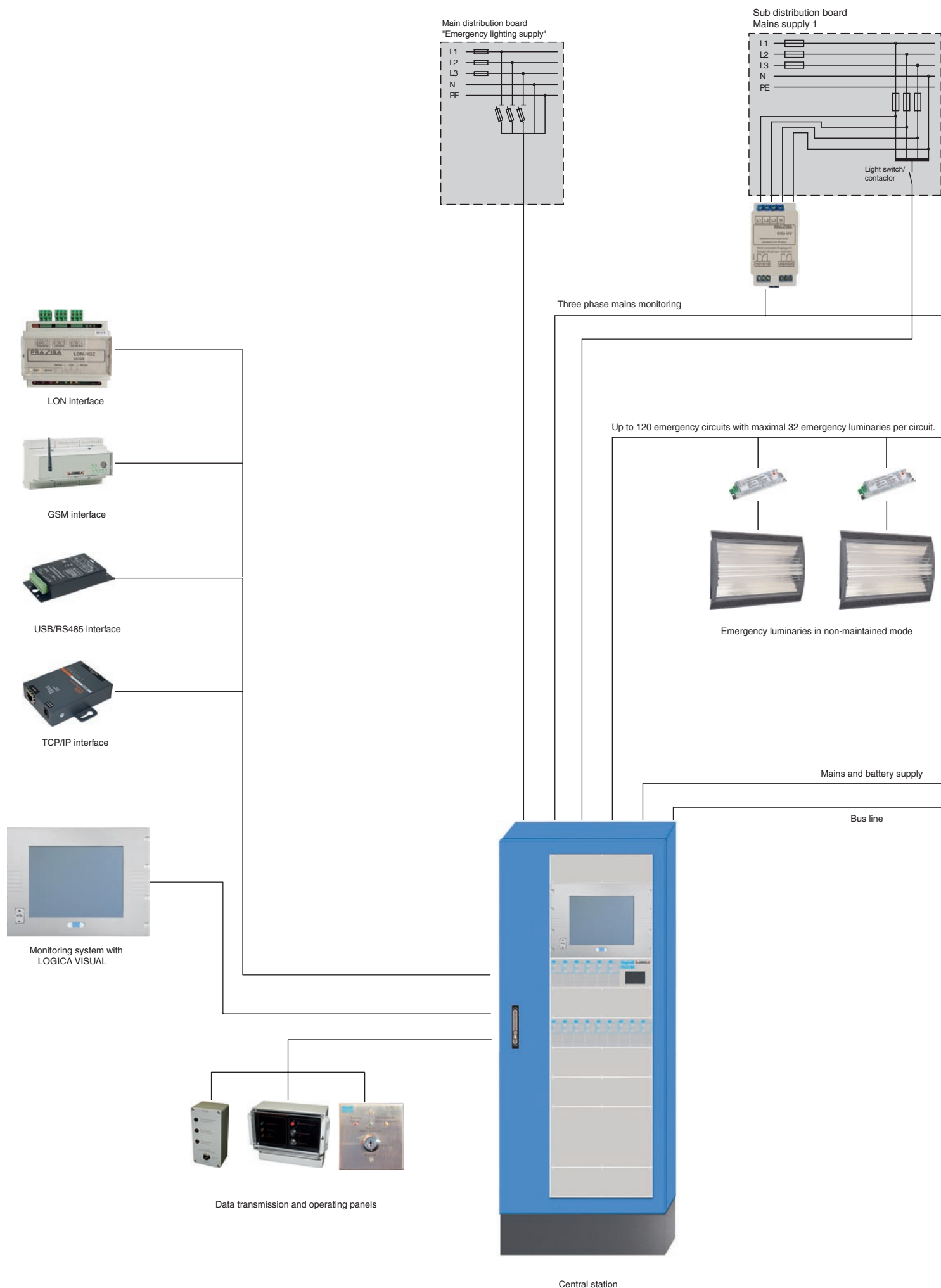
## System spreadsheet NZBVA and NZBVE

				
<b>Type</b>	<b>NZBVA-Z 230/.../6</b> <b>NZBVA-Z 230/.../14</b> <b>NZBVA-Z 230/.../22</b> <b>NZBVA-Z 230/.../30</b>	<b>NZBVE-Z/S 230/.../6</b> <b>NZBVE-Z/S 230/.../14</b> <b>NZBVE-Z/S 230/.../22</b> <b>NZBVE-Z/S 230/.../30</b>	<b>NZBVE-Z/A 230/.../6</b> <b>NZBVE-Z/A 230/.../14</b>	<b>NZBVE-Z/K 230/.../6</b> <b>NZBVE-Z/K 230/.../14</b>
Charging unit L230/1,8	6 max.	6 max.	6 max.	6 max.
Batteries with a lifetime expectation of 10 years	33 Ah to 760 Ah	33 Ah to 200 Ah	33 Ah to 200 Ah	33 Ah to 96 Ah
Control and monitoring unit KOMBI CONTROL	integrated	integrated	integrated	integrated
Built-in printer ED	optional	optional	optional	optional
LON-BUS interface	optional	optional	optional	optional
Monitoring system LOGICA-Visual	optional	optional	only remote installation	only remote installation
USB interface	optional (1 max.)	optional (1 max.)	optional (1 max.)	optional (1 max.)
TCP/IP interface				
GSM interface				
Mains switch/contactors dependent control module LSSA 230/24	optional (8 max.) (8 max.) (8 max.) (8 max.)	optional (8 max.) (8 max.) (8 max.) (8 max.)	optional (1 max.) (2 max.)	optional (4 max.) (4 max.)
Operation and monitoring modules AK 1 x 32 EÜ AK 2 x 32 EÜ AK 4 x 32 EÜ	Rack compartments (6 max.) (14 max.) (22 max.) (30 max.)	Rack compartments (6 max.) (14 max.) (22 max.) (30 max.)	Rack compartments (6 max.) (14 max.)	Rack compartments (6 max.) (14 max.)
Operation and monitoring modules AK 1 x 32 SÜ AK 2 x 32 SÜ AK 4 x 32 SÜ				
Operation and monitoring module AK 32-SÜ-AC				
<b>Design</b>	Floor standing cabinets (electronics and battery)	Floor standing cabinets (electronics and battery)	Wall-mounted cabinet (electronics) Floor standing cabinet (battery)	Floor standing combined cabinet (electronics and battery)
<b>Dimensions (HxWxD)</b>	2000x800x600 mm	2000x800x400 mm	890x800x400 mm	2000x800x600 mm

				
<b>Type</b>	<b>NZBVA-U/S 6</b> <b>NZBVA-U/S 14</b> <b>NZBVA-U/S 22</b> <b>NZBVA-U/S 30</b>	<b>NZBVE-U/S 6</b> <b>NZBVE-U/S 14</b> <b>NZBVE-U/S 22</b> <b>NZBVE-U/S 30</b>	<b>NZBVA-U/A 6</b> <b>NZBVA-U/A 14</b> <b>NZBVE-U/A 6</b> <b>NZBVE-U/A 14</b>	<b>NZBVA-U/A 6-30</b> <b>NZBVA-U/A 14-30</b> <b>NZBVE-U/A 6-30</b> <b>NZBVE-U/A 14-30</b>
Charging unit L230/1,8	-	-	-	-
Batteries with a lifetime expectation of 10 years	-	-	-	-
Control and monitoring unit KOMBI CONTROL	integrated	integrated	integrated	integrated
Built-in printer ED	-	-	-	-
LON-BUS interface	-	-	-	-
Monitoring system LOGICA-Visual	No	No	No	No
USB interface	-	-	-	-
TCP/IP interface				
GSM interface				
Mains switch/contactor dependent control module LSSA 230	optional (8 max.) (8 max.) (8 max.) (8 max.)	optional (8 max.) (8 max.) (8 max.) (8 max.)	optional (1 max.) (2 max.)	optional (4 max.) (4 max.)
Operation and monitoring modules AK 1 x 32 EÜ AK 2 x 32 EÜ AK 4 x 32 EÜ	Rack compartments (6 max.) (14 max.) (22 max.) (30 max.)	Rack compartments (6 max.) (14 max.) (22 max.) (30 max.)	Rack compartments (6 max.) (14 max.)	Rack compartments (6 max.) (14 max.)
Operation and monitoring modules AK 1 x 32 SÜ AK 2 x 32 SÜ AK 4 x 32 SÜ				
Operation and monitoring module AK 32-SÜ-AC				
<b>Design</b>	Floor standing cabinet	Floor standing cabinet	Wall-mounted cabinet	Wall-mounted cabinet
<b>Dimensions (HxWxD)</b>	2000x800x600 mm 2000x800x600 mm 2000x800x600 mm 2000x800x600 mm	2000x800x400 mm 2000x800x400 mm 2000x800x400 mm 2000x800x400 mm	380x600x350 mm 760x600x350 mm	949x608x324 mm 1149x608x324 mm

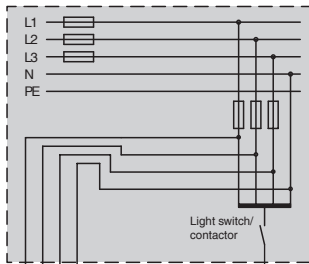


# System spreadsheet NZBVA and NZBVE





Sub distribution board  
Mains supply 2



The mains switch control module LSSA 230/24 transfers the status of the mains switches to any emergency lighting circuit or to any emergency luminaire.

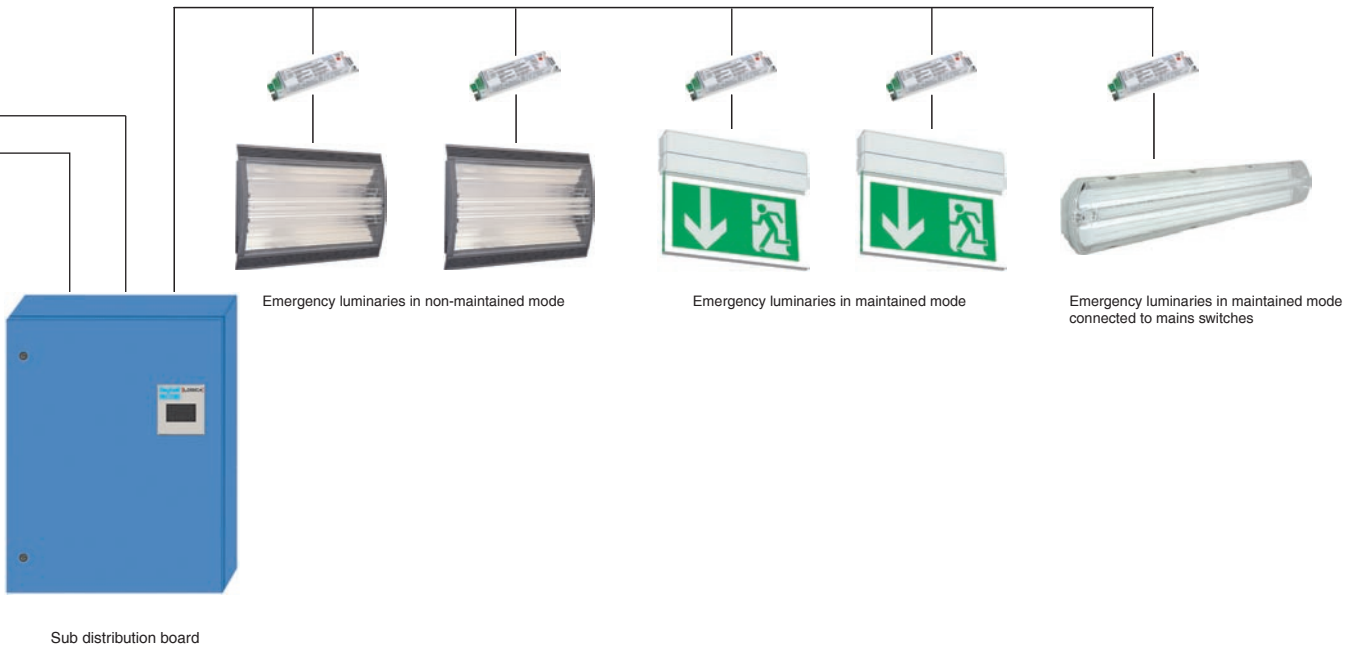


Emergency luminaires may be switched with the light switch by using the LSSA mains switch control module.



Emergency luminaires in maintained mode

Emergency luminaires in maintained mode connected to mains switches



# Central station for NZBVA



- Central station NZBVA-Z acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
  - 6 rack compartments for charging unit L230/1,8
  - Switching device to maintained mode
  - Switching device to non-maintained mode
  - Internal mains monitoring device for maintained mode
  - Control input for external mains monitoring devices for non-maintained mode
  - 6, 14, 22, or 30 rack compartments for operation and monitoring modules

Control cabinet including a lockable door with inspection pane and detachable frame. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

Technical data			
Mains supply:	1 ~ N PE 50/60 Hz	Cable entry:	from bottom
	U : 230 V (+6%/-10)	Cabinet:	Steel sheet
	3 ~ N PE 50/60 Hz	Mounting:	Floor standing
	U : 400 V (+6%/-10)	Degree of protection:	IP54
Battery supply:	U= 216 V	Electrical class:	I
Fuses and terminal blocks according to technical specification			
Rated ambient temperature: -5°C to + 35°C			

SlebLOGICA system:		AutoLOGICA system:	
Cabinet colour:	light grey RAL 7035	Cabinet colour:	brilliant blue RAL 5007
Colour of modules:	black/red		or
			light grey RAL 7035
		Colour of modules:	grey/blue



# Central station for NZBVE KOMBI



- Central station NZBVE KOMBI acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
  - 6 rack compartments for charging unit L230/1,8
  - Switching device to maintained mode
  - Switching device to non-maintained mode
  - Internal mains monitoring device for maintained mode
  - Control input for external mains monitoring devices for non-maintained mode
  - 6, 14, 22, or 30 rack compartments for operation and monitoring modules (with separate control cabinet)

Control cabinet with lockable door and inspection pane. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

Technical data			
Mains supply:	1 ~ N PE 50/60 Hz	Cable entry:	from top
	U : 230 V (+6%/-10)	Cabinet:	Steel sheet
	3 ~ N PE 50/60 Hz	Mounting:	Floor standing
	U : 400 V (+6%/-10)	Degree of protection:	IP21
Battery supply:	U= 216 V	Electrical class:	I
Fuses and terminal blocks according to technical specification			
Rated ambient temperature: -5°C to + 35°C			

SlebLOGICA system:		AutoLOGICA system:	
Cabinet colour:	light grey RAL 7035	Cabinet colour:	brilliant blue RAL 5007
Colour of modules:	black/red		or
			light grey RAL 7035
		Colour of modules:	grey/blue



## Central station for NZBVE

Central station NZBVE-Z acc. to EN 50171 with:

- Control and monitoring system KOMBI CONTROL
- 6 rack compartments for charging unit L230/1,8
- Switching device to maintained mode
- Switching device to non-maintained mode
- Internal mains monitoring device for maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6 or 14 rack compartments for operation and monitoring modules (with combined control and battery cabinet)
- 6, 14, 22, or 30 rack compartments for operation and monitoring modules (with separate control cabinet)

Control cabinet with lockable door and inspection pane. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

### Technical data

Mains supply: 1 ~ N PE 50/60 Hz  
 U : 230 V (+6%/-10)  
 3 ~ N PE 50/60 Hz  
 U : 400 V (+6%/-10)

Battery supply: U = 216 V

Fuses and terminal blocks according to technical specification

Cable entry: from top

Cabinet: Steel sheet

Mounting: Floor standing

Degree of protection: IP21

Electrical class: I

Rated ambient temperature: -5°C to + 35°C

SlebLOGICA system:

Cabinet colour: light grey RAL 7035

Colour of modules: black/red

AutoLOGICA system:

Cabinet colour: brilliant blue RAL

5007 or

light grey RAL 7035

Colour of modules: grey/blue



## Charging unit for NZBVA and NZBVE

### Charging unit L230/1,8

Temperature-controlled charging based on IU characteristic with charging mode-dependent switching from charging to maintaining battery charging (float charging). When multiple charging units are used, each of them is independent from the other.

### Technical data

Charge voltage: 244 V

Charge current: 1,8 A

Design: 19" rack insert  
 (1 rack compartment)

Type: L230/1,8

Order no.: G32893-SL

Colour of modules: black/red

Order no.: G32893-AL

Colour of modules: grey/blue



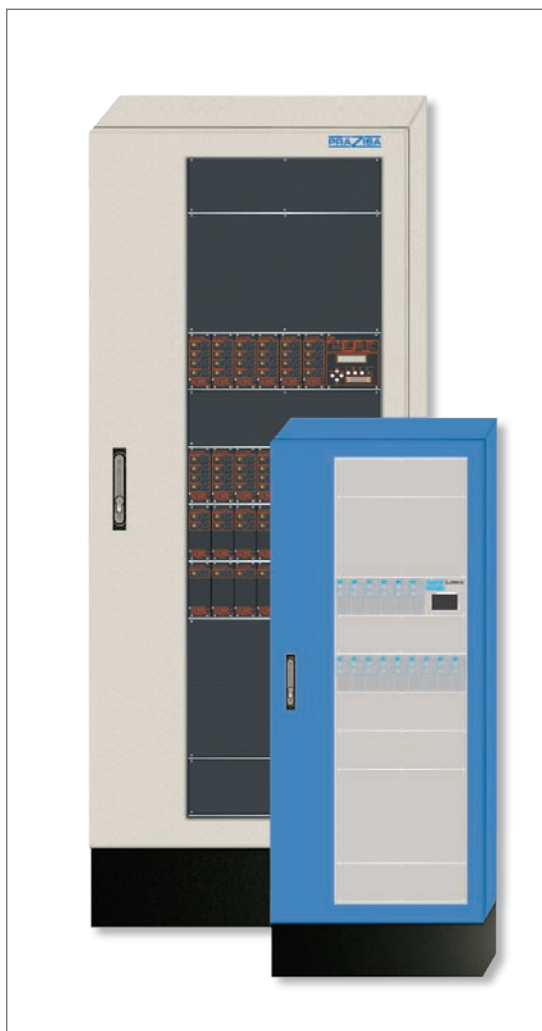
## Batteries for NZBVA and NZBVE

### Batteries

Sealed lead-acid battery with a lifetime expectation of 10+ years at an ambient temperature of 20°C acc. to EN 50171.

Battery capacity 33 Ah up to 760 Ah.

Further information about battery details available on request.



## Sub-station for NZBVA (floor standing)

Sub-station NZBVA-U/S acc. to EN 50171 with:

- Control and monitoring system KOMBI CONTROL
  - Switching device to maintained mode
  - Switching device to non-maintained mode
  - Control input for external mains monitoring devices for non-maintained mode
  - 6, 14, 22, or 30 rack compartments for operation and monitoring modules
- Cabinet with lockable door, inspection pane and detachable frame. Modules for 19" rack technology.

### Technical data

Mains supply: 1 ~ N PE 50/60 Hz  
 U : 230 V (+6%/-10)  
 3 ~ N PE 50/60 Hz  
 U : 400 V (+6%/-10)

Battery supply: U = 216 V

Fuses and terminal blocks according to technical specification

Cable entry: from bottom  
 Cabinet: Steel sheet  
 Mounting: Floor standing  
 Degree of protection: IP54  
 Electrical class: I  
 Rated ambient temperature: -5°C to + 35°C

SlebLOGICA system:

Cabinet colour: light grey RAL 7035  
 Colour of modules: black/red

AutoLOGICA system:

Cabinet colour: brilliant blue RAL 5007  
 or  
 light grey RAL 7035  
 Colour of modules: grey/blue



## Sub-station for NZBVE (floor standing)

Sub-station NZBVE-U/S acc. to EN 50171 with:

- Control and monitoring system KOMBI CONTROL
- Switching device to maintained mode
- Switching device to non-maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6, 14, 22, or 30 rack compartments for operation and monitoring modules (system with separate control cabinet)

Cabinet with lockable door and inspection pane. Modules for 19" rack technology.

### Technical data

Mains supply: 1 ~ N PE 50/60 Hz  
 U : 230 V (+6%/-10)  
 3 ~ N PE 50/60 Hz  
 U : 400 V (+6%/-10)

Battery supply: U = 216 V

Fuses and terminal blocks according to technical specification

Cable entry: from bottom  
 Cabinet: Steel sheet  
 Mounting: Floor standing  
 Degree of protection: IP54  
 Electrical class: I

Rated ambient temperature: -5°C to + 35°C

SlebLOGICA system:

Cabinet colour: light grey RAL 7035  
 Colour of modules: black/red

AutoLOGICA system:

Cabinet colour: brilliant blue RAL 5007  
 or  
 light grey RAL 7035  
 Colour of modules: grey/blue



## Sub-station for NZBVA and NZBVE (wall mounting)

Sub-station NZBVA-U/A or NZBVE-U/A acc. to EN 50171 with:

- Control and monitoring system KOMBI CONTROL
- Switching device to maintained mode
- Switching device to non-maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6 or 14 rack compartments for operation and monitoring modules

Cabinet with lockable door and inspection pane. Modules for 19" rack technology.

### Technical data

Mains supply: 1 ~ N PE 50/60 Hz  
U : 230 V (+6%/-10)  
3 ~ N PE 50/60 Hz  
U : 400 V (+6%/-10)

Battery supply: U= 216 V

Fuses and terminal blocks according to technical specification

Cable entry: from top

Cabinet: Steel sheet

Mounting: Wall mounting

Degree of protection: IP54

Electrical class: I

Rated ambient temperature: -5°C to + 35°C

SlebLOGICA system:

Cabinet colour: light grey RAL 7035

Colour of modules: black/red

AutoLOGICA system:

Cabinet colour: brilliant blue RAL 5007

or

light grey RAL 7035

Colour of modules: grey/blue



## Sub-station with 30 minutes rated fire protection for NZBVA and NZBVE (wall mounting)

Sub-station NZBVA-U/A-30 or NZBVE-U/A-30 acc. to EN 50171 with:

- Control and monitoring system KOMBI CONTROL
- Switching device to maintained mode
- Switching device to non-maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 6 or 14 rack compartments for operation and monitoring modules

Cabinet with maintaining fire protection of 30 minutes following DIN 4102-2 with lockable door. Modules for 19" rack technology.

### Technical data

Terminals:

- Mains: 1 ~ N PE 50/60 Hz  
U : 230 V (+6%/-10)  
3 ~ N PE 50/60 Hz  
U : 400 V (+6%/-10)

- Battery: U= 216 V

Cable entry: From top via a fitted cable entry to which a fire protected cable duct can be tightly connected.<sup>1)</sup>

Body: Highly compressed fire protection panels

Surface coating: Sprela, grey (similar to RAL 7035)

Mounting: Wall mounting

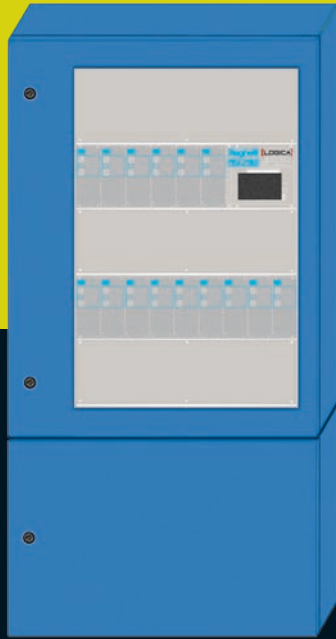
Degree of protection: IP54

Electrical class: I

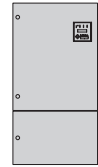
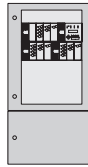
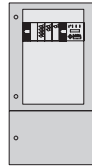
Rated ambient temperature: -5°C to + 35°C

Fuses and terminal blocks according to technical specification



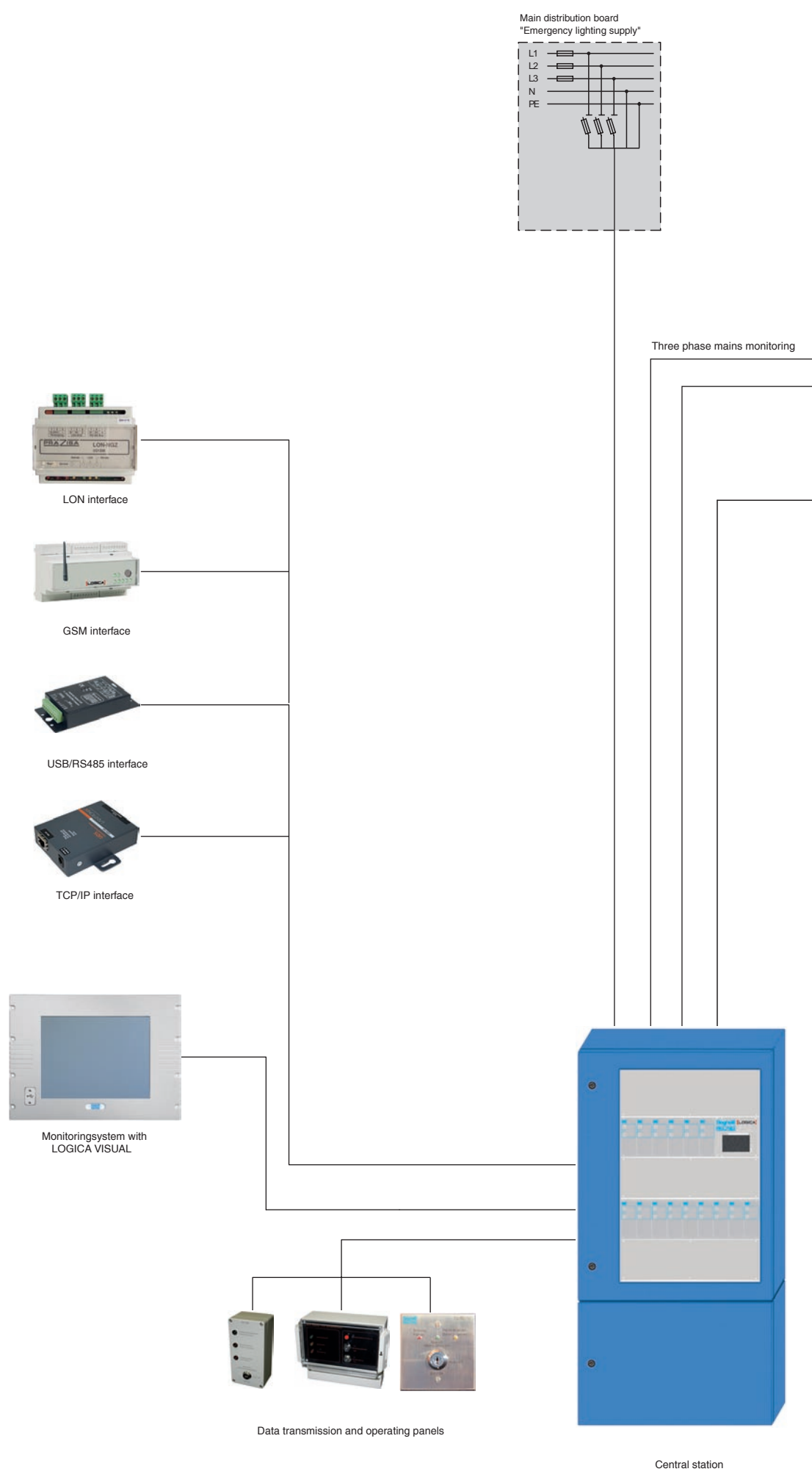


# Group battery systems

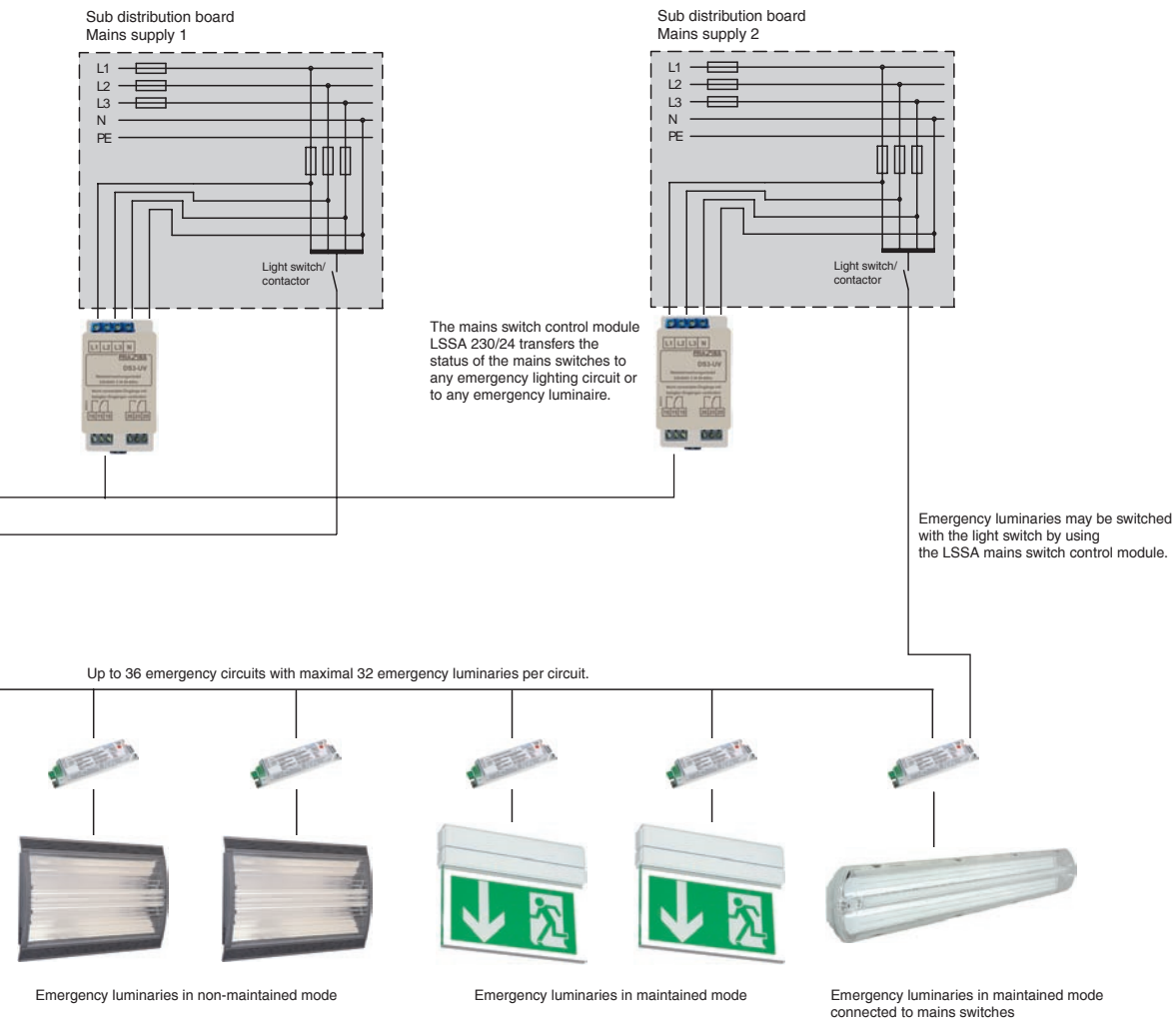


Type	NGBVA 24/6/_/1/3	NGBVA 24/6/_/3/9	NGBVE 24/6/_/1/3	NGBVE 24/6/_/3/9
Charging unit L24/6	integrated	integrated	integrated	integrated
Batteries with a lifetime expectation of 5 years	10 Ah to 115 Ah	10 Ah to 115 Ah	10 Ah to 115 Ah	10 Ah to 115 Ah
Transformers WLG	max. 1 x WLG 400 or 1 x WLG 750	max. 1 x WLG 750 + 2 x WLG 400 or 3 x WLG 400	max. 1 x WLG 400 or 1 x WLG 750	max. 3 x WLG 400 or 1 x WLG 750
Control and monitoring unit KOMBI CONTROL	integrated	integrated	integrated	integrated
Built-in printer ED	optional	optional	optional	optional
LON-BUS interface	optional	optional	optional	optional
Monitoring system LOGICA-Visual	No	No	No	No
USB interface	optional (max. 1)	optional (max. 1)	optional (max. 1)	optional (max. 1)
TCP/IP interface				
GSM interface				
Mains switch/contactor dependent control module LSSA 230	optional (max. 1)	optional (max. 1)	optional (max. 1)	optional (max. 1)
Mains switch/contactor dependent control module LSSA 24				
Staircase mains-/emergency lighting control module TSZ 230				
Operation and monitoring modules AK 1 x 32 EÜ AK 2 x 32 EÜ AK 4 x 32 EÜ	Rack compartments (max. 3)	Rack compartments (max. 9)	Rack compartments (max. 3)	Rack compartments (max. 9)
Operation and monitoring modules AK 1 x 32 SÜ AK 2 x 32 SÜ AK 4 x 32 SÜ				
Operation and monitoring module AK 32-SÜ-AC				
Design	Wall-mounted combined cabinet (electronics and battery)	Wall-mounted combined cabinet (electronics and battery)	Wall-mounted combined cabinet (electronics and battery)	Wall-mounted combined cabinet (electronics and battery)
Dimensions (HxWxD)	1140x600x350 mm	1140x600x350 mm	1140x600x350 mm	1140x600x350 mm









# Group battery system NGBVA

Group battery system NGBVA acc. to EN 50171 with:

- Control and monitoring system KOMBI CONTROL
- Charging unit L24/6
- Switching device to maintained mode
- Switching device to non-maintained mode
- Internal mains monitoring device for maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 1 or 3 rack compartments for transformers
- 3 or 9 rack compartments for operation and monitoring modules

Control cabinet including a lockable door with inspection pane and detachable frame. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

## Technical data

Mains supply:	1 ~ N PE 50/60 Hz U : 230 V (+6%/-10)	Terminals:	25 mm <sup>2</sup>
	3 ~ N PE 50/60 Hz U : 400 V (+6%/-10)	Cable entry:	from top
Fuse:	25 A, 3-pole	Body:	Steel sheet
Terminals:	10 mm <sup>2</sup>	Mounting:	Wall mounting
Battery supply:	U= 24 V	Degree of protection:	IP54/IP32
Fuse:	max. 80 A, 2-pole	Electrical class:	I
		Rated ambient temperature:	20°C
SlebLOGICA system:		AutoLOGICA system:	
Cabinet colour:	light grey RAL 7035	Cabinet colour:	brilliant blue RAL 5007 or
Colour of modules:	black/red		light grey RAL 7035
		Colour of modules:	grey/blue



# Group battery system NGBVE

Group battery system NGBVE acc. to EN 50171 with:

- Control and monitoring system KOMBI CONTROL
- Charging unit L24/6
- Switching device to maintained mode
- Switching device to non-maintained mode
- Internal mains monitoring device for maintained mode
- Control input for external mains monitoring devices for non-maintained mode
- 1 or 3 rack compartments for transformers
- 3 or 9 rack compartments for operation and monitoring modules

Control cabinet with lockable door and inspection pane. Modules for 19" rack technology. Battery cabinet with lockable door and ventilating apertures.

## Technical data

Mains supply:	1 ~ N PE 50/60 Hz U : 230 V (+6%/-10)	Terminals:	25 mm <sup>2</sup>
	3 ~ N PE 50/60 Hz U : 400 V (+6%/-10)	Cable entry:	from top
Fuse:	25 A, 3-pole	Body:	Steel sheet
Terminals:	10 mm <sup>2</sup>	Mounting:	Wall mounting
Battery supply:	U= 24 V	Degree of protection:	IP54/IP32
Fuse:	max. 80 A, 2-pole	Electrical class:	I
		Rated ambient temperature:	20°C
SlebLOGICA system:		AutoLOGICA system:	
Cabinet colour:	light grey RAL 7035	Cabinet colour:	brilliant blue RAL 5007 or
Colour of modules:	black/red		light grey RAL 7035
		Colour of modules:	grey/blue



## Charging unit for NGBVA and NGBVE



### Charging unit L24/6

Temperature-controlled charging based on IU characteristic with charging mode-dependent switching from charging to maintaining battery charging (float charging).

#### Technical data

Charge voltage: 27 V  
Charge current: 6 A  
Design: 19" rack insert  
(1 rack compartment)

Type: L24/6  
Order no.: **G32547-SL**  
Colour of modules: black/red



Order no.: **G32547-AL**  
Colour of modules: grey/blue



## Batteries for NGBVA and NGBVE



Sealed lead-acid battery with a lifetime expectation of 5+ years at an ambient temperature of 20°C acc. to EN 50171.

#### Technical data:

Battery capacity (Ah)		24	40	65	85	115
Battery voltage (V)		24				
Battery current (A)	1 h	14,8	23,7	35,5	50,3	62,5
Maximum load (W)		355	568	852	1207	1500
Battery current (A)	3 h	5,7	9,1	13,6	19,5	20,8
Maximum load (W)		136	218	327	468	500

**Battery capacity and maximum permissible load**

## Transformer modules for NGBVA and NGBVE



### Transformers WL5

Unit for the conversion of 24V input D.C. voltage (battery) to 230V output D.C. voltage. One transformer supplies up to three operation and monitoring modules in battery mode.

#### Technical data

Power: 400 W  
Design: 19" rack insert  
(1 rack compartment)

Type: WL5 400  
Colour of modules: black/red  
Order no.: **G32812-SL**



Order no.: **G32812-AL**



Power: 750 W  
Design: 19" rack insert  
(2 rack compartments)

Type: WL5 750  
Colour of modules: grey/blue  
Order no.: **G32811-SL**



Order no.: **G32811-AL**



System equipment:

NGBVA/NGBVE 24/6/\_\_\_/1/3: 1 x WL5 400 or 1 x WL5 750

NGBVA/NGBVE 24/6/\_\_\_/3/9: 2 x WL5 400 + 1 x WL5 750 or 3 x WL5 400

## 68 Design and configuration of NGBVA and NGBVE

The group battery systems NGBVA and NGBVE can be designed according to the instructions below:

1. Determine from the customer's specifications:
  - Quantity and technical details of the exit sign and emergency luminaires to be supplied (lamp type, lamp power, ballast lumen factor and gear)
  - Quantity and technical details of the circuits (maintained mode, non-maintained mode, selectively switchable non-maintained mode, selectively switching-on non-maintained mode)
  - Type of luminaire monitoring
2. Power consumption in mains and battery mode (lamp and gear manufacturer data )<sup>1)</sup>
3. Charging unit
4. Battery
5. Transformer(s) (system spreadsheet)
6. Operation and monitoring module (system spreadsheet)
7. Options (system spreadsheet)

Type: Defining the group battery system:

NGBVA

24/6/\_\_\_/\_\_\_/\_\_\_/\_\_\_

NGBVE

Duration (h) (1=1 h/3=3 h)

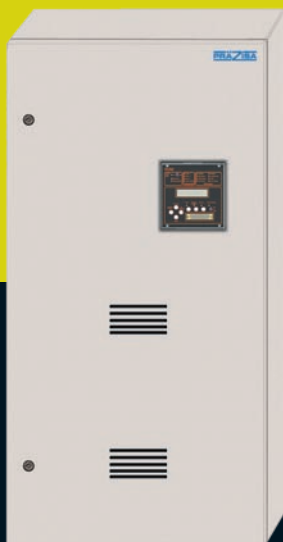
Rack compartments needed for operation and  
monitoring modules

Rack compartments needed for transformers

Battery capacity (Ah) (see above)

Charge current (A)

1) Power consumption of the ECSL, ECKC and EC modules on request.



# **Compact emergency lighting systems NGBVE-K**

The compact emergency lighting systems NGBVE-K offer a combination of decentralised power supply and centralised monitoring. Taking advantage from both self-contained and central battery systems these installations provide safety at its highest level. Depending on national regulations, these include:

- Decentralised supply of exit sign and emergency luminaires per building, section or fire protection zone
- Centralised monitoring of the complete emergency lighting installation
- Lower number of cables and distribution boards
- Minimised fire load in corridors and staircases
- Simplified battery replacement

#### Special features:

- Control and monitoring by the SuperLOGICA system
- Luminaire operation in:
  - Maintained mode
  - Non-maintained mode
  - Non-maintained mode with selective switching to maintained mode via external general lighting switches
  - Non-maintained mode with selective switching in case of partial mains incidents/failures via external mains monitoring modules
- Combination of all options in a single circuit
- Permanent check of the general lighting switches or of the mains monitoring modules via control inputs within the luminaire or system
- Allocation of control information to different luminaires and circuits without limitation
- No manual addressing of the luminaire number at the control and monitoring module within the luminaire required
- No manual coding of the control input at the control and monitoring module within the luminaire required
- Automatic allocation of the required circuits and detection of luminaires
- Individual monitoring of ~~12~~ (20) luminaires in a circuit with or without selective irregularity report
- Automatic triggering of function and duration tests
- Automatic reporting to a test journal
- Centralised input and output of all parameters and data
- Operates luminaires with:
  - Incandescent lamps
  - Fluorescent tubes with electronic ballast



Type	NGBVE-K 24/3/_/1/1-3	NGBVE-K 24/3/_/2/1-3	NGBVE-K 24/3/_/1/1-3	NGBVE-K 24/3/_/2/1-3
Charging unit L24/3	integrated	integrated	integrated	integrated
Batteries with a lifetime expectation of 5 years	24 Ah to 65 Ah	24 Ah to 65 Ah	24 Ah to 65 Ah	24 Ah to 65 Ah
Transformers WLG 400	integrated	integrated	integrated	integrated
Control and monitoring unit KOMBI CONTROL	integrated	integrated	integrated	integrated
Signalling and switching module MSM	optional	optional	optional	optional
Monitoring software LOGICA-Visual	optional	optional	optional	optional
USB interface	Choice of 1 only	Choice of 1 only	Choice of 1 only	Choice of 1 only
GSM interface				
TCP/IP interface				
Mains monitoring module DS 3 UV	optional	optional	optional	optional
Mains switch/contactor dependend control module LSSA 230	integrated (4)	integrated (4)	integrated (4)	integrated (4)
Mains switch/contactor dependend control module LSSA 24	integrated (4)	integrated (4)	integrated (4)	integrated (4)
Operation and monitoring modules AK 4 x 12 EU	Rack compartment (1)	Rack compartment (2)	Rack compartment (1)	Rack compartment (2)
Operation and monitoring modules AK 4 x 12 SU				
<b>Design</b>	Wall-mounted combi cabinet (electronics and battery)	Wall-mounted combi cabinet (electronics and battery)	Wall-mounted combi cabinet (electronics and battery)	Wall-mounted combi cabinet (electronics and battery)
<b>Dimensions (HxWxD)</b>	600x420x250 mm	600x420x250 mm	950x480x250 mm	950x480x250 mm

# Compact emergency lighting system NGBVE-K



- Compact emergency lighting system NGBVE-K acc. to EN 50171 with:
- Control and monitoring system KOMBI CONTROL
  - Charging unit L24/3
  - Switching device to maintained mode
  - Switching device to non-maintained mode
  - Internal mains monitoring device for maintained mode
  - Control input for external mains monitoring devices for non-maintained mode
  - 4 or 8 luminaire circuits
    - for individual monitoring without selective irregularity report
    - for individual monitoring with selective irregularity report
  - 4 control inputs to switch selectively emergency lighting luminaire circuits from non-maintained to maintained mode depending on the general lighting. (control: 230V AC or DC)
  - 4 control inputs switch individual emergency lighting luminaire circuits from non-maintained to maintained mode depending on partial incidents or failures of the general lighting. (control: isolated contact)
  - Cabinet with separate electronics and battery compartments, lockable door with inspection pane and ventilation apertures in the battery compartment

## Technical data

Mains supply:	1 ~ /N PE 50 / 60 Hz	
	U : 230 V (+6% / -10)	
	3 ~ /N PE 50 / 60 Hz	
	U : 400 V (+6% / -10)	
Fuse:	20 A, 3-pole	
Terminals:	6 mm <sup>2</sup>	
Battery supply:	U= 24 V	Degree of protection: IP54 / IP32
Fuse:	max. 50 A, 2-pole	Electrical class: I
Cable entry:	from top	Rated ambient temperature:
Cabinet:	Steel sheet, grey	Electronics -5°C to +35°C
Mounting:	Wall mounting	Battery 20°C
SlebLOGICA system:		AutoLOGICA system:
Cabinet colour:	light grey RAL 7035	Cabinet colour: brilliant blue RAL 5007 or
Colour of modules:	black/red	light grey RAL 7035
		Colour of modules: grey/blue



# Batteries for NGBVE-K



Sealed lead-acid battery with a lifetime expectation of 5+ years at an ambient temperature of 20°C acc. to EN 50171.

## Technical data

Battery capacity (Ah)		24	40	65
Maximum load (W)	1h	355	-	-
Maximum load (W)	3h	136	218	327

**Battery capacity and maximum permissible load**



# Design and configuration of NGBVE-K

The compact emergency lighting systems NGBVE-K can be designed according to the instructions below:

1. Determine the following from the customer's specifications:
  - Quantity and technical details of the exit sign and emergency luminaires to be supplied (lamp type, lamp power, ballast lumen factor and gear)
  - Quantity and technical details of the circuits (maintained mode, non-maintained mode, selectively switchable non-maintained mode, selectively switching-on non-maintained mode)
  - Type of luminaire monitoring
2. Power consumption in battery mode (lamp and gear manufacturer data)<sup>1)</sup>
3. Battery (table 1)
4. Operation and monitoring module (system spreadsheet)
5. Options (system spreadsheet)

Type: NGBVE-K 24/3/\_\_\_/\_\_\_/1-3

Charge voltage

Charge current

Battery capacity

Operation and monitoring modules

Operation duration

1) Power consumption of the ECSL, ECKC and EC modules on request.

Battery capacity (Ah)		24	40	65
Maximum load (W)	1h	355	-	-
Maximum load (W)	3h	136	218	327

**Table 1: Battery**

Note:

When using modules from the SLEB and KCE range consider a power consumption of 1W per module.

Consider 10 W power consumption for every transformer.



# **Monitoring and control components**

## Monitoring system LOGICA-Visual



Panel PC  
 Processor: Pentium IV, 1,0 GHz  
 15" touch screen  
 80 GB hard disk  
 512 MB-RAM  
 WinXP and LOGICA-Visual pre-installed

### **Technical data**

Design: 19" rack insert  
 Type: LOGICA-Visual  
 Order code: **F90210**

## Interface modules for LOGICA-Visual

### **USB 2.0/RS485 interface**

Module used to interface a group or central battery system with a PC running the monitoring software LOGICA-Visual.

### **Technical data**

Mounting: Module for  
 DIN rail  
 Body: Metall  
 Type: USB 2.0/RS485-NGZ  
 Order code: **FB16319**



### **GSM interface**

Module used to interface a group or central battery system with a PC running the monitoring software LOGICA-Visual via the GSM network.

### **Technical data**

Mounting: Module for  
 DIN rail  
 Body: Plastic  
 Type: GSM interface  
 Order code: **FB16306-NZ**



### **TCP/IP interface**

Module used to interface a group or central battery system with a PC running the monitoring software LOGICA-Visual via Ethernet.

### **Technical data**

Mounting: Module for  
 DIN rail  
 Body: Metal  
 Type: TCP/IP-NGZ  
 Order code: **G31209**





## LON bus interface for NGBVA, NGBVE, NZBVA and NZBVE

### LON bus interface LON-NGZ

Module for communication with a building management system via LON bus.  
Control of:

- Maintained mode ON/OFF, function test and insulation test triggering
- Signalling of:
- Emergency mode suppression ON/OFF, mains mode, battery mode, mains failure on main distribution board (phase L1, L2, and L3), mains failure on sub distribution board, group fault, charge fault, battery fault, luminaire fault, bus fault, deep discharge

#### Technical data

Mounting:	DIN rail	Type:	LON-NGZ
Body:	Plastic	Order code:	G31206



## Signalling and switching module for NGBVA, NGBVE, NZBVA and NZBVE

### Signalling and switching module MSM

Display of:

- Emergency mode suppression
- Operating mode
- Group fault

Control of:

- Maintained mode ON/OFF

#### Technical data

Mounting:	Wall mounting	Electrical class:	II
Body:	Plastic	Type:	MSM
Dimensions (HxWxD):	160x80x60 mm	Order code:	G31015
Degree of protection:	IP 65		



### Signalling and switching module MSM

Display of:

- Emergency mode suppression
- Operating mode
- Group fault

Control of:

- Maintained mode ON/OFF

#### Technical data

Mounting:	Recessed wall mounting	Degree of protection:	IP 20
Body:	Metall	Electrical class:	I
Dimensions (HxWxD):	186x86x53 mm	Type:	MSM
		Order code:	G31045



### Signalling and switching module MSM

Display of:

- Emergency mode suppression
- Operating mode
- Group fault

Control of:

- Maintained mode ON/OFF
- Stand by operation ON/OFF
- Stand by operation with reduced light output (e.g. for cinemas)

#### Technical data

Mounting:	Wall installation	Electrical class:	II
Housing:	Plastic	Type:	MSM
Dimensions (HxWxD):	185x245x107 mm	Order code:	G31044
Degree of protection:	IP 65		



## Mains monitoring module for NGBVA, NGBVE, NZBVA and NZBVE

### Mains monitoring module DS 3 UV

Module used in sub distribution boards to monitor the mains supply for general lighting.

Mains input: 3-phase

Control output: 2 change-over contacts, isolated (230V/3A)

#### Technical data

Mounting: DIN rail

Body: Plastic

Dimensions (HxWxD): 95 x 48 x 42 mm

Degree of protection: IP 20

Electrical class: I

Type: DS 3 UV

Order code: **G31020A**



## Switching modules for NGBVA, NGBVE, NZBVA and NZBVE

### Mains switch/contactors dependent control module LSSA 230

Module for selective switching of individual emergency lighting luminaire circuits from non-maintained to maintained mode depending on the general lighting. Allocation of control channels to the luminaire circuits without limitation.

#### Technical data

Control channels: 8

Control: 230 V AC or DC

Mounting: DIN rail

Body: Plastic

Type: LSSA 230

Order code: **G31204**



### Mains switch/contactors dependent control module LSSA 24

Module used to selectively switch individual emergency lighting luminaire circuits from non-maintained to maintained mode depending on partial incidents or failures of the general lighting. Allocation of control channels to the luminaire circuits without limitation.

#### Technical data

Control channels: 8

Control: switching contact, isolated

Mounting: DIN rail

Body: Plastic

Type: LSSA 24

Order code: **G31207**



### Staircase general/emergency lighting control module TSZ 230

Module used to time-dependent control individual luminaire circuits of emergency and general lighting via push buttons of the general lighting system acc. to DIN VDE 0108-4, section 6.2 and DIN VDE 0108-5, section 6.2. Allocation of control channels to the luminaire circuits without limitation.

#### Technical data

Control channels: 4

Control: Push button

Mounting: DIN rail

Body: Steel sheet

Type: TSZ 230

Order code: **G31198**



## Printer for NGBVA, NGBVE, NZBVA and NZBVE

### Printer ED

#### Technical data

Paper type: Thermal paper

Paper width: 80 mm

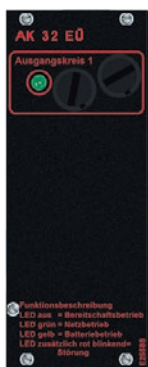
Design: 19" rack insert

Type: ED

Order code: **M10053A**

Printer paper

Order code: **H14146**



## Operation and monitoring module for NGBVA, NGBVE, NZBVA and NZBVE

### Operation and monitoring module AK 1 x 32 EÜ

Modules for one luminaire circuit to operate 1 x 20 (32) luminaires with:

- Incandescent lamps
- Halogen lamps + electronic transformer
- Fluorescent tubes + electronic ballast

Monitoring:

- Individual monitoring with selective irregularity report

#### Technical data

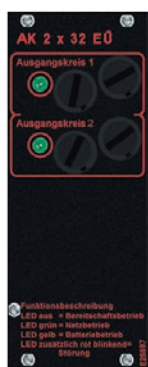
Maximum load: 1 x 1380 W  
Inrush current load: 1 x 42 500 W<sup>1)</sup>

Design: 19" rack insert  
(1 rack compartment)

Colour of modules: black/red  
Order code: **G32754-SL**



Type: AK 1 x 32 EÜ  
Colour of modules: grey/blue  
Order code: **G32100**



### Operation and monitoring module AK 2 x 32 EÜ

Modules for 2 luminaire circuits to operate 2 x 20 (32) luminaires with:

- Incandescent lamps
- Halogen lamps + electronic transformer
- Fluorescent tubes + electronic ballast

Monitoring:

- Individual monitoring with selective irregularity report

#### Technical data

Maximum load: 2 x 690 W  
Inrush current load: 2 x 35 000 W<sup>1)</sup>

Design: 19" rack insert  
(1 rack compartment)

Colour of modules: black/red  
Order code: **G32818-SL**



Type: AK 2 x 32 EÜ  
Colour of modules: grey/blue  
Order code: **G32101**



### Operation and monitoring module AK 4 x 32 EÜ

Modules for 4 luminaire circuits to operate 4 x 12 (20) luminaires with:

- Incandescent lamps
- Halogen lamps + electronic transformer
- Fluorescent tubes + electronic ballast

Monitoring:

- Individual monitoring with selective irregularity report

#### Technical data

Maximum load: 4 x 345 W  
Inrush current load: 4 x 27 500 W<sup>1)</sup>

Design: 19" rack insert  
(1 rack compartment)

Colour of modules: black/red  
Order code: **G32824-SL**



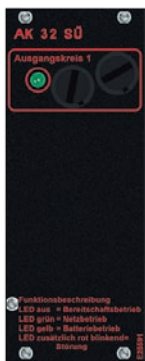
Type: AK 4 x 32 EÜ  
Colour of modules: grey/blue  
Order code: **G32102**



<sup>1)</sup> Max. power for 1 ms



# Operation and monitoring module for NGBVA, NGBVE, NZBVA and NZBVE



## Operation and monitoring module AK 1 x 32 SÜ

Modules for one luminaire circuit to operate 1 x 20 (32) luminaires with:

- Incandescent lamps
- Halogen lamps + electronic transformer
- Fluorescent tubes + electronic ballast

Monitoring:

- Individual monitoring without selective irregularity report

### Technical data

Maximum load:	1 x 1380 W	Design:	19" rack insert (1 rack compartment)
Inrush current load:	1 x 42 500 W <sup>1)</sup>	Type:	AK 1 x 32 SÜ
Colour of modules:	black/red	Colour of modules:	grey/blue
Order code:	<b>G32797-SL</b>	Order code:	<b>G32103</b>
	<b>LOGICA</b> SOLUTION		<b>LOGICA</b> SOLUTION



## Operation and monitoring module AK 2 x 32 SÜ

Modules for 2 luminaire circuits to operate 2 x 20 (32) luminaires with:

- Incandescent lamps
- Halogen lamps + electronic transformer
- Fluorescent tubes + electronic ballast

Monitoring:

- Individual monitoring without selective irregularity report

### Technical data

Maximum load:	2 x 690 W	Design:	19" rack insert (1 rack compartment)
Inrush current load:	2 x 35 000 W <sup>1)</sup>	Type:	AK 2 x 32 SÜ
Colour of modules:	black/red	Colour of modules:	grey/blue
Order code:	<b>G32815-SL</b>	Order code:	<b>G32104</b>
	<b>LOGICA</b> SOLUTION		<b>LOGICA</b> SOLUTION



## Operation and monitoring module AK 4 x 32 SÜ

Modules for 4 luminaire circuits to operate 4 x 20 (32) luminaires with:

- Incandescent lamps
- Halogen lamps + electronic transformer
- Fluorescent tubes + electronic ballast

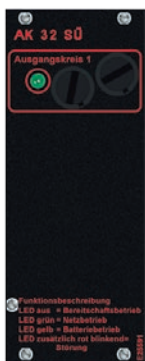
Monitoring:

- Individual monitoring without selective irregularity report

### Technical data

Maximum load:	4 x 345 W	Design:	19" rack insert (1 rack compartment)
Inrush current load:	4 x 27 500 W <sup>1)</sup>	Type:	AK 4 x 32 SÜ
Colour of modules:	black/red	Colour of modules:	grey/blue
Order code:	<b>G32820-SL</b>	Order code:	<b>G32105</b>
	<b>LOGICA</b> SOLUTION		<b>LOGICA</b> SOLUTION

<sup>1)</sup> Max. power for 1 ms



## Operation and monitoring module AK 4 x 32 SÜ-AC

Modules for one luminaire circuit to operate 1 x 20 (32) luminaires with:

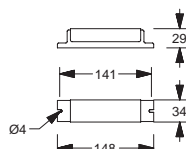
- Halogen lamps + magnetic transformer
- Fluorescent tubes + magnetic ballast (LPF circuit, non-compensated)

Monitoring:

- Individual monitoring without selective irregularity report

### Technical data

Maximum load:	575 VA/400 W	Design:	19" rack insert (1 rack compartment)
Rated frequency:	50 Hz (square wave)	Type:	AK 32 SÜ-AC
Colour of modules:	black/red	Colour of modules:	grey/blue
Order code:	<b>G32857-SL</b>	Order code:	<b>G32857-AL</b>
	<b>LOGICA</b> SOLUTION		<b>LOGICA</b> SOLUTION



## Monitoring and switching module ALOG

Module in *Super*LOGICA technology with following functions:

- Luminaire monitoring (lamp + gear) with selective irregularity report
  - Luminaire allocation to modes:
    - Non-maintained mode/maintained mode/non-maintained mode, selectively switchable via internal LSSA control input or external LSSA control module
    - Transmission of the control information from an internal LSSA control input to further luminaires within the same or other luminaire circuits
  - No need to manually encode the luminaire address at the module
  - No need for the manual coding of the LSSA control input at the module
- Every module and every luminaire is equipped with an identification code. There is no manual addressing required.

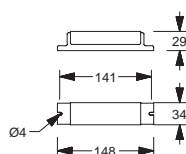
### Technical data

#### Lamp or

system power: 5 W to 120W  
 Mains voltage: 198 V bis 254 V  
 Mains frequency: 50 Hz  
 Battery voltage: 176 V bis 254 V  
 Rated ambient temperature: - 10° C to + 50 °C  
 Mounting: to be installed in

#### luminaires

Body: Metal  
 Degree of protection: IP 20  
 Electrical class: I  
 Type: ALOG  
 Order code: **G31351**

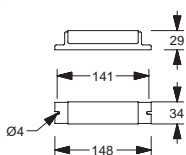


## Monitoring and switching module ALOG-DALI

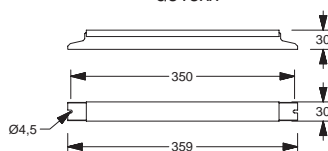
Module with the same functions as the module ALOG, but with DALI control input to connect with luminaires featuring a DALI control unit.

### Technical data

Type: ALOG-DALI  
 Order no.: **G31354**



G313xx



G313xx

## Monitoring and switching module with HF-ballast

Module is a combination of a HF-ballast type EC and the ALOG monitoring and switching unit.

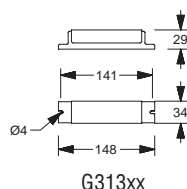
- HF-ballast available with fixed or variable ballast lumen factor

### Technical data

Mains voltage: 198 V bis 254 V  
 Battery voltage: 176 V bis 254 V  
 Mains frequency: 50 Hz  
 Ambient temperature: - 10° C bis + 50 °C  
 Mounting: to be installed in luminaires  
 Body: Metal  
 Degree of protection: IP 20  
 Electrical class: I

Order code	Lamp	Ballast lumen factor
<b>G31352</b>	T16-Lp 4 - 13 W	75%
	TC-Lp 5 - 11 W	75%
<b>G31353</b>	T16-Lp 14 - 21 W	10% - 100%
	T26-Lp 18 W	10% - 100%
	TC-Lp 13 - 26 W	10% - 100%
<b>G31357</b>	T16-Lp 28 - 80 W	10% - 100%
	T26-Lp 36 - 58 W	10% - 100%
	TC-Lp 32 - 55 W	10% - 100%





G313xx

## Monitoring and switching module with LED ballast

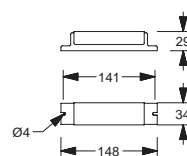
Module is a combination of a operation unit for LEDs and the ALOG monitoring and switching unit.

### Technical data

Output voltage: 15 - 22,5V to operate  
2 - 5 Power LEDs  
(serial connection)

LED current: 400 mA

Order code	Lamp	Ballast lumen factor
<b>G31355</b>	2 - 4 PowerLEDs	100%
<b>G31356</b>	3 - 5 PowerLEDs	100%



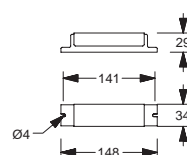
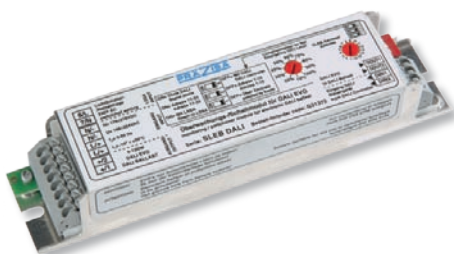
## Monitoring and switching module SLEB

Module in *SuperLOGICA* technology with following functions:

- Luminaire monitoring (lamp + gear) with selective irregularity report
  - Luminaire allocation to modes:
    - Non-maintained mode/maintained mode/non-maintained mode, selectively switchable via internal LSSA control input or external LSSA control module
    - Transmission of the control information from an internal LSSA control input to further luminaires within the same or other luminaire circuits
  - No need to manually encode the luminaire address at the module
  - No need for the manual coding of the LSSA control input at the module
- Every module and every luminaire is equipped with an identification code. There is no manual addressing required

### Technical data

Lamp or system power:	5 W to 120W	luminaires
Mains voltage:	198 V bis 254 V	Body: Metal
Mains frequency:	50 Hz	Degree of protection: IP 20
Battery voltage:	176 V bis 254 V	Electrical class: I
Rated ambient temperature:	- 10° C to + 50 °C	Type: SLEB
Mounting:	to be installed in	Order no.: <b>G31371</b>

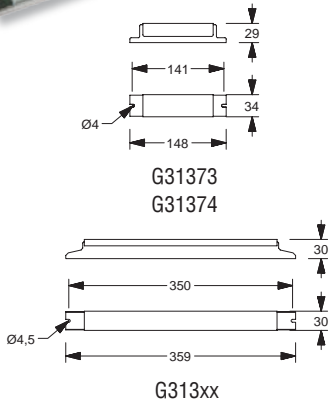


## Monitoring and switching module SLEB-DALI

Module with the same functions as the module SLEB, but with DALI control input to connect with luminaires featuring a DALI control unit.

### Technical data

Type:	SLEB-DALI
Order no.:	<b>G31372</b>



## Monitoring and switching module with HF-ballast

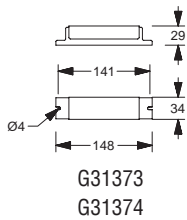
Module is a combination of a HF-ballast type EC and the SLEB monitoring and switching unit.

- HF-ballast available with fixed or variable ballast lumen factor

### Technical data

Mains voltage: 198 V bis 254 V  
Battery voltage: 176 V bis 254 V  
Mains frequency: 50 Hz  
Ambient temperature: - 10° C bis + 50 °C  
Mounting: to be installed in luminaires  
Body: Metal  
Degree of protection: IP 20  
Electrical class: I

Order code	Lamp	Ballast lumen factor
G31373	T16-Lp 4 - 13 W	75%
	TC-Lp 5 - 11 W	75%
G31374	T16-Lp 14 - 21 W	10% - 100%
	T26-Lp 18 W	10% - 100%
	TC-Lp 13 - 26 W	10% - 100%
G31382	T16-Lp 28 - 80 W	10% - 100%
	T26-Lp 36 - 58 W	10% - 100%
	TC-Lp 32 - 55 W	10% - 100%



## Monitoring and switching module with LED ballast

Module is a combination of a operation unit for LEDs and the SLEB monitoring and switching unit.

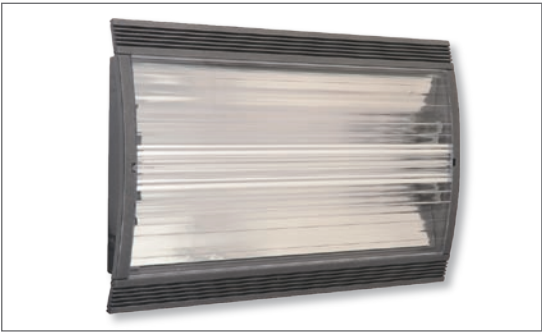
### Technical data

Output voltage: 15 - 22,5V to operate  
2 - 5 Power LEDs  
(serial connection)  
LED current: 400 mA

Order code	Lamp	Ballast lumen factor
G31360	2 - 4 PowerLEDs	100%
G31361	3 - 5 PowerLEDs	100%



# **Exit sign and emergency luminaires for Central and Group Battery Systems**



# Arcus V

Description: Emergency luminaire in elegant style with convex body. Front surface designed as a pane, projecting on all sides. Light distribution by mirror reflector and transparent cover with longitudinal prisms.  
Special features: Architectural look, sleek design, wide beam light distribution, high light output ratio, also available as exit sign luminaire.

Technical details see pages 110 - 117

**Technical data**

Mounting:  
Wall or ceiling mounting

Body:  
Die-cast aluminium and extruded aluminium, anthracite RAL 9007

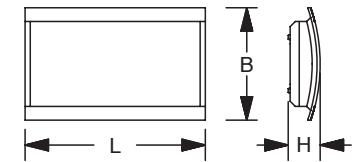
Diffuser:  
Prismatic polycarbonate

Reflector:  
Specular aluminium

Mains supply:  
198 V - 254 V / 50 Hz

Battery supply:  
176V - 254 V

Ambient temperature:  
-10 to +40 °C



W	• Dimensions (mm) •		
	L	B	H
8	348	217	62

IP40

T5

230V  
50Hz  
V CE



Order Code	Lamp		EVG	SLEB	AUTO	NEA
T92316_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems

# Design

Description: Emergency luminaire in functional style, consisting of semi-circular sections and flat end caps. Light distribution by mirror reflector and transparent cover with longitudinal prisms.

Special features: Functional look, extremely sleek design, wide beam light distribution, high light output ratio, also available as exit sign luminaire.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Wall or ceiling mounting

### Body:

Sheet steel, white (RAL 9003)<sup>1)</sup>

### Diffuser:

Plastic with longitudinal prisms

### Reflector:

Specular aluminium

### Mains supply:

198 V - 254 V / 50 Hz

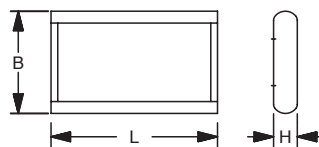
### Battery supply:

176 V - 254 V

### Ambient temperature:

-10 to +40 °C

1) Design with aluminium body available on request



W	• Dimensions (mm) •		
	L	B	H
8	386	237	55



Order Code	Lamp		EVG	SLEB	AUTO	NEA
TM92548_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules

Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding

Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding

Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



# Kubus

Description: Emergency luminaire, consisting of flat sections with folded corners. Light distribution by mirror reflector and cover with longitudinal prisms. Special features: Functional look, also available as exit sign luminaire.

Technical details see pages 110 - 117

**Technical data**

Mounting:  
Wall or ceiling mounting

Body:  
Sheet steel, white (RAL 9003)<sup>1)</sup>

Diffuser:  
Plastic with longitudinal prisms

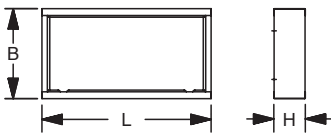
Reflector:  
Specular aluminium

Mains supply:  
198 V - 254 V / 50 Hz

Battery supply:  
176 V - 254 V

Ambient temperature:  
-10 to +40 °C

1) Design with aluminium body available on request



W	• Dimensions (mm) •		
	L	B	H
8	376	200	70

IP40

T5

230V  
50Hz  
V CE



Order Code	Lamp		EVG	SLEB	AUTO	NEA
TM92678_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems

# Intos

Description: Emergency luminaire in industrial design with recessed box and opal diffuser fixed in white painted frame. Light distribution by aluminium reflector and opal diffuser. Single face exit signs available.

Special features: designed for industrial areas, robust, shock proof.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Recessed wall or ceiling mounting

### Body:

Sheet steel white (RAL 9003)

### Diffuser:

Clear acrylic with prisms

### Reflector:

Specular aluminium

### Mains supply:

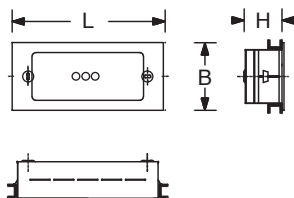
198 V - 254 V / 50 Hz

### Battery supply:

176 V - 254 V

### Ambient temperature:

-10 to +40 °C



W	• Dimensions (mm) •			Version
	L	B	H	
8	385	170	95	single sided



Accessories, to be ordered separately		
Order Code	Description	Article
8W		
E16266N	Exit sign pane	
E16267N	Exit sign pane	
E16268N	Exit sign pane	
E16265	Opal pane	

Order Code	Lamp	EVG	SLEB	AUTO	NEA
T92400_*	T5 8 W	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules

Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding

Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding

Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



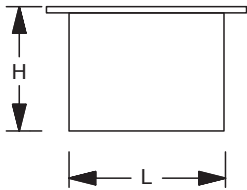
# Crater

Description: Emergency luminaire in functional style, consisting of a round recessed or surface mounted box and specular aluminium reflector. Horizontal lamp orientation.  
 Special features: Functional look, emergency luminaires also available as general lighting luminaires.

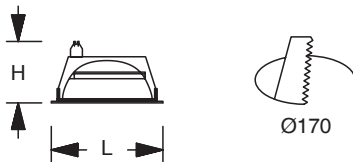
Technical details see pages 110 - 117

### Technical data

Mounting:  
 Recessed or surface mounting  
 Body:  
 Steel sheet, white (RAL 9003)  
 Diffuser:  
 Specular aluminium  
 Mains supply:  
 198 V - 254 V / 50 Hz  
 Battery supply:  
 176 V - 254 V  
 Ambient temperature:  
 -10 to +40 °C



W	• Dimensions (mm) •		
	L	B	H
13	265	-	200



W	• Dimensions (mm) •		
	L	B	H
13	190	-	105

Order Code	Lamp		EVG	SLEB	AUTO	NEA
Recessed type						
<b>T92078_*</b>	CFL 4pin/4lb 13 W	<b>Ballast lumen factor:</b>	100%	75%	75%	100%
Surface mounted type						
<b>T92079_*</b>	CFL 4pin/4lb 13 W	<b>Ballast lumen factor:</b>	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
 Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
 Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
 Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



# MetricalLED

Description: Emergency lighting luminaire with optical system designed for wall installation. Sleek, elegant body of white polycarbonate with clear cover. Light distribution by faceted mirror reflector. Innovative powerful 1 Watt light source with very long lifetime (Power LED).

Special features: attractive design combined with robust and shockproof body. Versions with IP 40 or IP 65 protection available.

Technical details see pages 110 - 117

## Technical data

Mounting:

Wall mounting

Body:

Polycarbonate white

Cover:

Clear polycarbonate

Reflector:

Polycarbonate aluminised and welded with the cover

Mains supply:

198V – 254V / 50Hz

Battery supply:

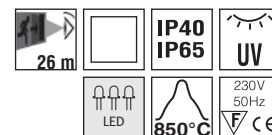
176V - 254V

Ambient temperature:

-10 to +40 °C



Ref-Watt	• Dimensions (mm) •			LED lumens
	L	B	H	
8	355	179	57	2 x 30 lm



Fitting supplied complete with		
Order Code	Description	Article
8 RW		
FB12941	Exit signs (Set with all 3 films)	

Accessories, to be ordered separately	
Order Code	Description
8 RW	
FB12943	Kit for recessed installation
FB3908	Wire guard

Order Code	Lamp	EVG	SLEB	AUTO	NEA
TB16104	LED 2x1W	Ballast lumen factor: 100%			
TB16106	LED 2x1W	Ballast lumen factor:	100%		
TB16107	LED 2x1W	Ballast lumen factor:		100%	
TB16108	LED 2x1W	Ballast lumen factor:			100%



Technical data

Mounting:  
Surface and recessed wall mounting, surface and recessed ceiling mounting

Body and diffuser:  
polycarbonate

Reflector:  
polycarbonate specular aluminised

Mains supply:  
198 V - 254 V / 50 Hz

Battery supply:  
176V - 254 V

Ambient temperature:  
-10 to +40 °C

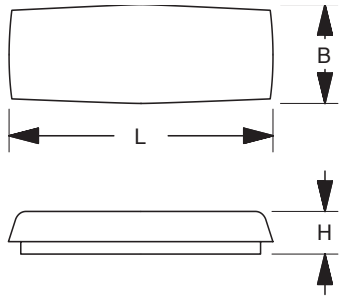


Logica



Description: Exit sign and emergency luminaire in a functional style, consisting of a body with convex contours and a flat transparent cover. Light distribution by mirror reflector of aluminised plastic with complex shape. Single sided exit route sign (surface and recessed mounting on ceiling and walls). Luminaires supplied with three exit sign films and recess box.




Special features: Functional look, wide beam light distribution, high light output ratio, suited for exit route signalling or exit route lighting, choice of surface or recessed mounting, surface mounting via quick fix adapter with integrated bubble level.


Technical details see pages 110 - 117




W	• Dimensions (mm) •			
	L	B	H	
8	406	147	63	







Fitting supplied complete with		
Order Code	Description	Article
8W		
FB16909	Exit signs (Set with all 3 films)	
FB12198	Box for recessed mounting	

Accessories, to be ordered separately	
Order Code	Description
8W	
FB12194	Wire guard

Order Code	Lamp		EVG	SLEB	AUTO	NEA
TB16400	T5 8 W	Ballast lumen factor:	100%			
TB16401	T5 8 W	Ballast lumen factor:		75%		
TB16406	T5 8 W	Ballast lumen factor:			75%	
TB16407	T5 8 W	Ballast lumen factor:				100%

## Aestetica

Description: Exit sign and emergency luminaire in sleek design, consisting of a flat body and an oval transparent cover. Light distribution by white reflector. Single sided exit route sign (wall mounting). Luminaire supplied with three exit sign films.

Special features: sleek design, suited for exit route signalling or exit route lighting.

Technical details see pages 110 - 117

### Technical data

Mounting:

Wall or ceiling mounting

Body:

white polycarbonate

Diffuser:

transparent polycarbonate

Reflector:

white polycarbonate

Mains supply:

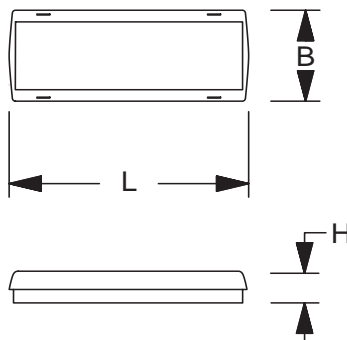
198 V - 254 V / 50 Hz

Battery supply:

176 V - 254 V

Ambient temperature:

-10 to +40 °C



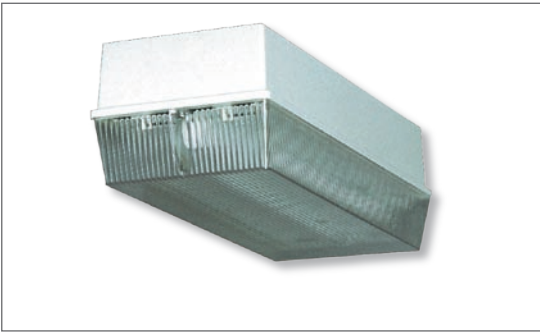
W	• Dimensions (mm) •		
	L	B	H
8	336	135	47



Fitting supplied complete with		
Order Code	Description	Article
8W		
FB16905	Exit signs (Set with all 3 films)	

Accessories, to be ordered separately	
Order Code	Description
8W	
FB3908	Wire guard

Order Code	Lamp	EVG	SLEB	AUTO	NEA
TB16203	T5 8 W	Ballast lumen factor: 100%			
TB16204	T5 8 W	Ballast lumen factor: 75%			
TB16210	T5 8 W	Ballast lumen factor: 75%			
TB16211	T5 8 W	Ballast lumen factor: 100%			



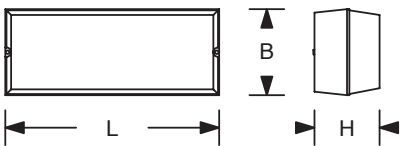
# Indus

Description: Emergency luminaire in industrial style with flat body and prismatic diffuser. Light distribution by white reflector. Installation on ceiling, wall or wall bracket.  
Special features: industrial design, robust and shockproof.

Technical details see pages 110 - 117

**Technical data**

Mounting:  
Ceiling, wall or wall bracket  
Body:  
White polycarbonate  
Diffuser:  
Prismatic polycarbonate  
Reflector:  
White polycarbonate  
Mains supply:  
198V – 254V / 50Hz  
Battery supply:  
176V - 254 V  
Ambient temperature:  
-10 to +40 °C



W	• Dimensions (mm) •			Version
	L	B	H	
8	368	148	112	single sided



Accessories, to be ordered separately	
Order Code	Description
8W	
F95029	Wall bracket
F95032	Wire guard

Order Code	Lamp		EVG	SLEB	AUTO	NEA
T92161_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems

# Pratica Tuttovetro

Description: Exit sign and emergency luminaire in an industrial style, consisting of a flat body and a rectangular transparent cover. Light distribution by white reflector. Single sided exit route sign (wall mounting). Luminaire supplied with three exit sign films.

Special features: Industrial look, improved degree of protection to IP65 by auxiliary box. Suited for exit route signalling or exit route lighting. Quick fix adapter for IP40 version

Technical details see pages 110 - 117

## Technical data

Mounting:

Wall or ceiling mounting

Body:

ABS plastic

Diffuser:

Transparent polycarbonate

Reflector:

White polycarbonate

Mains supply:

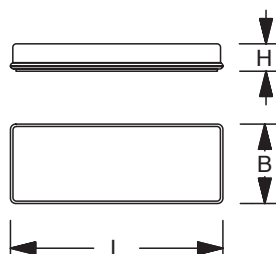
198 V - 254 V / 50 Hz

Battery supply:

176 V - 254 V

Ambient temperature:

-10 to +40 °C



W	• Dimensions (mm) •		
	L	B	H
6	304	142	49
8	380	142	49



Fitting supplied complete with			
Order Code	8W	Description	Article
6W			
FBxxxx		Exit signs	
	FB16901	Exit signs (Set with all 3 films)	

Accessories, to be ordered separately			
Order Code	8W	Description	
6W			
FB2733	FB2734	IP 65 auxiliary box	
FB3907	FB3908	Wire guard	



Order Code	Lamp	EVG	SLEB	AUTO	NEA
TB16000	T5 6 W	Ballast lumen factor: 100%			
TB16001	T5 6 W	Ballast lumen factor: 75%			
TB16013	T5 6 W	Ballast lumen factor: 75%			
TB16014	T5 6 W	Ballast lumen factor: 100%			
TB16003	T5 8 W	Ballast lumen factor: 100%			
TB16004	T5 8 W	Ballast lumen factor: 75%			
TB16011	T5 8 W	Ballast lumen factor: 75%			
TB16012	T5 8 W	Ballast lumen factor: 100%			



# Leader

Description: Emergency luminaire in industrial style, consisting of an oval body and diffuser. Transparent diffuser with longitudinal and lateral prisms. Light distribution by specular reflector of aluminised plastic with complex shape. Special features: Industrial look, optimal light distribution, high light output ratio, emergency Luminaires also available for general lighting. Twin lamp fittings with one lamp operating in emergency mode are available on request.

Technical details see pages 110 - 117

**Technical data**

Mounting:  
Ceiling or wall

Body:  
Grey polycarbonate

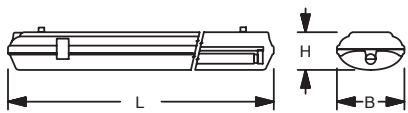
Diffuser:  
Prismatic polycarbonate

Reflector:  
Specular aluminised polycarbonate

Mains supply:  
198 V - 254 V / 50 Hz

Battery supply:  
176 V - 254 V

Ambient temperature:  
-10 to +40 °C



W	• Dimensions (mm) •		
	L	B	H
18	670	170	95
36	1280	170	95
58	1580	170	95

IP66

T8

230V  
50Hz  
F CE



Order Code	Lamp		EVG	SLEB	AUTO	NEA
T92071_*	für T16 18 W	Ballast lumen factor:	100%	100%	100%	100%
T92072_*	für T16 36 W	Ballast lumen factor:	100%	100%	100%	100%
T92073_*	für T16 58 W	Ballast lumen factor:	100%	100%	100%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems

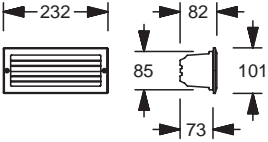
# Stufen

Description: Emergency luminaire consisting of recess box and cover with asymmetric shutter blade apertures.  
Special features: Low level lighting of corridors and staircases. Also suitable for exterior lighting.

Technical details see pages 110 - 117

Technical data

Mounting:  
Recessed wall mounting  
Body:  
Die-cast aluminium, white  
Cover:  
Die-cast aluminium, black  
Mains supply:  
198 V - 254 V / 50 Hz  
Battery supply:  
176 V - 254 V  
Ambient temperature:  
-10 to +40 °C



Cutout dimensions: 228 x 85mm

T5 IP54

Accessories, to be ordered separately	
Order Code	Description
4W	
E25582	Recess box (for plasterboard walls)



Order Code	Lamp		EVG	SLEB	AUTO	NEA
T92003_*	für T5 4 W	Ballast lumen factor:	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



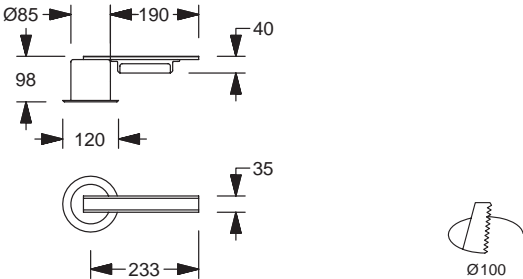
# Pylon

Description: Emergency luminaire consisting of recess box and flat circular reflector cover. Bare lamp without protection.  
Special features: Omni-directional exit route lighting.

Technical details see pages 110 - 117

**Technical data**

Mounting:  
Recessed ceiling mounting  
Body:  
Sheet steel, white  
Cover:  
Die-cast aluminium, white  
Mains supply:  
198 V - 254 V / 50 Hz  
Battery supply:  
176 V - 254 V  
Ambient temperature:  
-10 to +40 °C



Order Code	Lamp		EVG	SLEB	AUTO	NEA
T92141_*	CFL 4pin/4lb 13 W	Ballast lumen factor:	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



# Arcus V

Description: Exit sign luminaire in elegant style with convex body. Front surface designed as a pane, projecting on all sides. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign.

Special features: Architectural look, sleek design, wide beam light distribution, high light output ratio, also available as emergency luminaire.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Wall or ceiling mounting

### Body:

Die-cast aluminium and extruded aluminium, anthracite RAL 9007

### Mains supply:

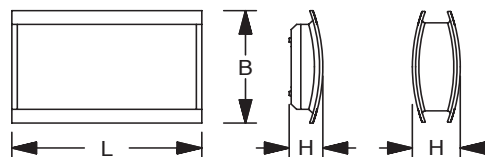
198 V - 254 V / 50 Hz

### Battery supply:

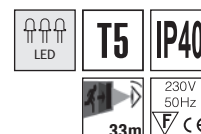
176 V - 254 V

### Ambient temperature:

-10 to +40 °C



W	• Dimensions (mm) •			Version
	L	B	H	
8	348	217	62	single sided
8	348	217	89	double sided



Accessories, to be ordered separately		
Order Code	Description	Article
<b>8W</b>		
E16282N	Exit sign pane	
E16283N	Exit sign pane	
E16284N	Exit sign pane	
E16302	Opal pane	
E16285	Pane in body colour	
F95104	Adaptor for ceiling mounting	
F95083	Suspension profile 250 mm	
F95084	Suspension profile 500 mm	
F95085	Suspension profile 1000 mm	
F95064	Wall bracket	
F95402	Pendant rod 500 mm	
F95403	Wire suspension max. 1200 mm	



Order Code	Lamp		EVG	SLEB	AUTO	NEA
Single sided exit sign						
T92304_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
T92333_*	LED 5 x 1W	Ballast lumen factor:	100%	100%	100%	100%
Double sided exit sign						
T92305_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
T92334_*	LED 5 x 1W	Ballast lumen factor:	100%	100%	100%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules

Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding

Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding

Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



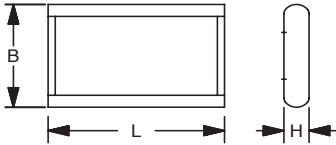
# Design

Description: Exit sign luminaire in functional style, consisting of semi-circular sections and flat end caps. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign.  
 Special features: Functional look, extremely sleek design, wide beam light distribution, high light output ratio, also available as emergency luminaire.

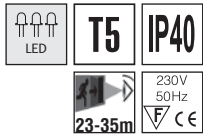
Technical details see pages 110 - 117

## Technical data

Mounting:  
 Wall or ceiling mounting  
 Body:  
 Sheet steel, white (RAL 9003)<sup>1)</sup>  
 Mains supply:  
 198 V - 254 V / 50 Hz  
 Battery supply:  
 176 V - 254 V  
 Ambient temperature:  
 -10 to +40 °C  
 1) Design with aluminium body available on request



W	• Dimensions (mm) •			
	L	B	H	
6	265	175	55	
8	386	237	55	



Accessories, to be ordered separately			
Order Code		Description	Article
6W	8W		
E16604N	E16608N	Exit sign pane	
E16605N	E16609N	Exit sign pane	
E16606N	E16610N	Exit sign pane	
E16607	E16611	Opal pane	
E16242	E16241	Pane in body colour	
F95057	F95057	Adaptor for ceiling mounting	
F95100	F95100	Suspension profile 250 mm	
F95101	F95101	Suspension profile 500 mm	
F95102	F95102	Suspension profile 1000 mm	
F95022	F95035	Wall bracket	
F95067	F95067	Adaptor for wire suspension	
F95400	F95400	Pendant rod 500 mm	
F95401	F95401	Wire suspension max. 1200 mm	
	F95032	Wire guard (Wall mounting)	

Order Code	Lamp		EVG	SLEB	AUTO	NEA
Single sided exit sign						
TM92544_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
TM92545_*	LED 3 x 1 W	Ballast lumen factor:	100%	100%	100%	100%
TM92540_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
TM92549_*	LED 5 x 1 W	Ballast lumen factor:	100%	100%	100%	100%
Double sided exit sign						
TM92546_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
TM92551_*	LED 3 x 1 W	Ballast lumen factor:	100%	100%	100%	100%
TM92542_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
TM92550_*	LED 5 x 1 W	Ballast lumen factor:	100%	100%	100%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
 Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
 Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
 Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



# Kubus

Description: Exit sign luminaire, consisting of flat sections with folded corners. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign.

Luminaires are supplied without panes and accessories.

Special features: Functional look, choice of 3 visibility distances, also available as emergency luminaire.

Technical details see pages 110 - 117

## Technical data

Mounting:

Wall or ceiling mounting

Body:

Sheet steel, white (RAL 9003) <sup>1)</sup>

Mains supply:

198 V - 254 V / 50 Hz

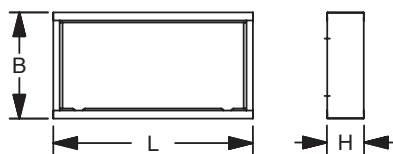
Battery supply:

176 V - 254 V

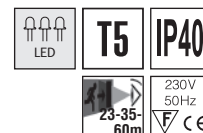
Ambient temperature:

-10 to +40 °C

1) Design with aluminium body available on request



W	• Dimensions (mm) •		
	L	B	H
6	255	140	70
8	376	200	70
13	605	315	70



Accessories, to be ordered separately				
Order Code	Description			Article
6W	8W	13W		
E16604N	E16608N	E16134N	Exit sign pane	
E16605N	E16609N	E16135N	Exit sign pane	
E16606N	E16610N	E16136N	Exit sign pane	
E16607	E16611	E16324	Opal pane	
E16242	E16241	E16251	Pane in body colour	
F95057	F95057	F95057	Adaptor for ceiling mounting	
F95600	F95600	F95600	Suspension profile 250 mm	
F95601	F95601	F95601	Suspension profile 500 mm	
F95602	F95602	F95602	Suspension profile 1000 mm	
F95055	F95056	F95070	Wall bracket	
F95400	F95400	F95400	Pendant rod 500 mm	
F95401	F95401	F95401	Wire suspension max. 1200 mm	
	F95032		Wire guard (Wall mounting)	

Order Code	Lamp		EVG	SLEB	AUTO	NEA
Single sided exit sign						
TM92630_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
TM92652_*	LED 3 x 1 W	Ballast lumen factor:	100%	100%	100%	100%
TM92631_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
TM92651_*	LED 5 x 1 W	Ballast lumen factor:	100%	100%	100%	100%
TM92616_*	T5 13 W	Ballast lumen factor:	100%	75%	75%	100%
Double sided exit sign						
TM92624_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
TM92656_*	LED 3 x 1 W	Ballast lumen factor:	100%	100%	100%	100%
TM92625_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
TM92655_*	LED 5 x 1 W	Ballast lumen factor:	100%	100%	100%	100%
TM92615_*	T5 13 W	Ballast lumen factor:	100%	75%	75%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules

Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding

Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding

Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



## Tula

Description: Exit sign luminaire in functional style, consisting of curved diffusers and flat end caps. Choice of single side or double side exit sign panes.  
Special features: Functional look, sleek design, wide beam light distribution.

Technical details see pages 110 - 117

### Technical data

Mounting:

Wall or ceiling mounting

Body:

Sheet steel, white RAL 9006

Diffuser:

Opal polycarbonate

Mains supply:

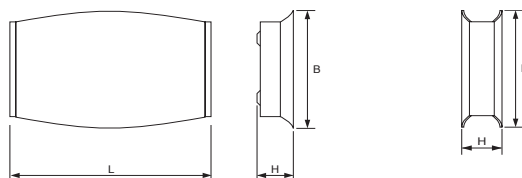
198 V - 254 V / 50 Hz

Battery supply:

176 V - 254 V

Ambient temperature:

-10 to +40 °C



W	• Dimensions (mm) •			Version
	L	B	H	
3	266	154	54	single sided
3	266	154	62	double sided
4	360	215	64	single sided
4	360	215	68	double sided



Fitting supplied complete with			
Order Code	3W	4W	Description
F15337NU	F15338NU		Exit signs (Set with 3 films)
F15337NR	F15338NR		Exit signs (Set with 3 films)
F15337NL	F15338NL		Exit signs (Set with 3 films)
E16625	E16626		Opal pane

Accessories, to be ordered separately	
Order Code	Description
3/4W	
F95109P	Wall bracket
F95109PK	Adaptor for ceiling mounting
F95109PR	Pendant rod 500 mm
F95109PS	Wire suspension max. 1200 mm

Order Code	Lamp		EVG	SLEB	AUTO	NEA
Single sided exit sign						
T92800_*	LED 3 x 1W	Ballast lumen factor:	100%	100%	100%	100%
T92802_*	LED 4 x 1W	Ballast lumen factor:	100%	100%	100%	100%
Double sided exit sign						
T92801_*	LED 3 x 1W	Ballast lumen factor:	100%	100%	100%	100%
T92803_*	LED 4 x 1W	Ballast lumen factor:	100%	100%	100%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules

Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding

Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding

Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems

# Dispos

Description: Exit sign luminaire in functional design, surface mounted version consisting of segmented sections. Choice of single sided (wall mounting) or double sided (recessed ceiling, ceiling, pendant suspended and bracket mounting) exit sign.

Luminaires supplied without exit sign panes and accessories.

Special features: Functional look, display technology, two different visibility ranges, available with T5 fluorescent tubes or LED light sources.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Recessed, ceiling, pendant or bracket installation

### Body:

Aluminium white (RAL 9003)

Cover for recessed version:

Sheet steel white (RAL 9003)

### Mains supply:

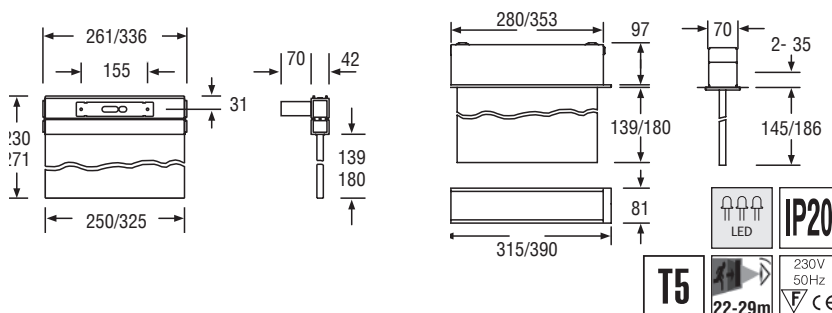
198 V - 254 V / 50 Hz

### Battery supply:

176 V - 254 V

### Ambient temperature:

-10 to +40 °C



Accessories, to be ordered separately			
Order Code		Description	Article
6W	8W		
E16260N	E16128N	Exit sign pane	
E16261N	E16129N	Exit sign pane	
E16262N	E16130N	Exit sign pane	
F95209	F95209	Adaptor for pendant suspended mounting	
F95600	F95600	Suspension profile 250 mm	
F95601	F95601	Suspension profile 500 mm	
F95602	F95602	Suspension profile 1000 mm	
F95211	F95211	Wall bracket	
F95404	F95404	Pendant rod 500 mm	
F95405	F95405	Wire suspension max.1200 mm	
F95220	F95221	Concrete ceiling box	



Order Code	Lamp		EVG	SLEB	AUTO	NEA
Version for recessed ceiling mounting and double sided exit route sign						
TM92101_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
TM92180_*	LED 3 x 1W	Ballast lumen factor:	100%	100%	100%	100%
TM92100_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
TM92181_*	LED 5 x 1W	Ballast lumen factor:	100%	100%	100%	100%
Version for wall mounting and single sided exit route sign						
T92108_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
T92188_*	LED 3 x 1W	Ballast lumen factor:	100%	100%	100%	100%
T92110_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
T92190_*	LED 5 x 1W	Ballast lumen factor:	100%	100%	100%	100%
Version for ceiling mounting and double sided exit route sign						
T92120_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
T92200_*	LED 3 x 1W	Ballast lumen factor:	100%	100%	100%	100%
T92121_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
T92201_*	LED 5 x 1W	Ballast lumen factor:	100%	100%	100%	100%
Version for pendant suspended mounting and double sided exit route sign						
T92109_*	T5 6 W	Ballast lumen factor:	100%	75%	75%	100%
T92189_*	LED 3 x 1W	Ballast lumen factor:	100%	100%	100%	100%
T92111_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
T92191_*	LED 5 x 1W	Ballast lumen factor:	100%	100%	100%	100%

\* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules

Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding

Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding

Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



# Plana

Description: Exit sign luminaire in functional design consisting of an acrylic pane with integrated LED batten. Choice of single sided (wall mounting) or double sided (recessed ceiling, pendant suspended and bracket mounting) exit sign.

Luminaires supplied with accessories but without exit sign panes.

Special features: Functional look, LED display technology.

Technical details see pages 110 - 117

## Technical data

Mounting:

Recessed, pendant or bracket installation

Body:

Clear methacrylate

Wall bracket:

Sheet metal white (RAL 9006)

Mains supply:

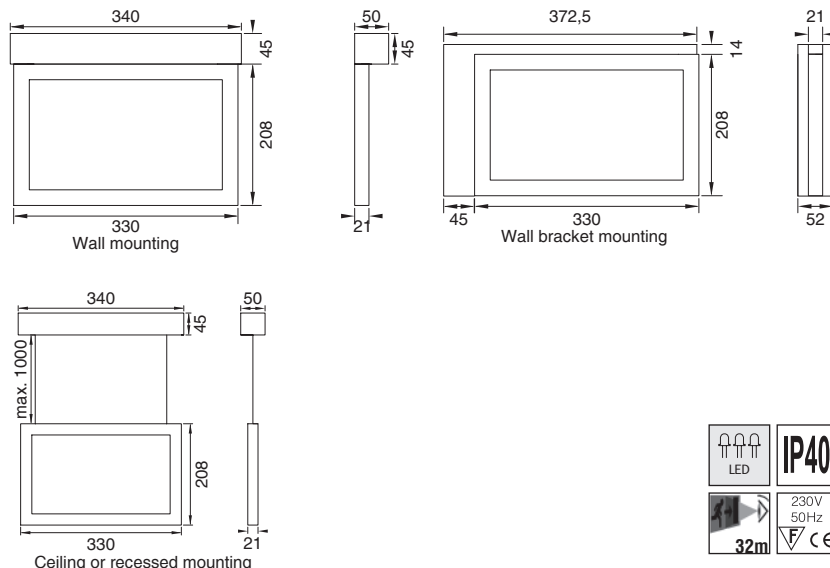
198 V - 254 V / 50 Hz

Battery supply:

176 V - 254 V

Ambient temperature:

-10 to +40 °C



Accessories, to be ordered separately		
Order Code	Description	Article
<b>LED</b>		
<b>E16624TRL</b>	Exit sign pane double sided	
<b>E16624TU</b>	Exit sign pane double sided	
<b>E16624WL</b>	Exit sign pane single sided	
<b>E16624WR</b>	Exit sign pane single sided	
<b>E16624WU</b>	Exit sign pane single sided	

Order Code	Lamp		EVG	SLEB	AUTO	NEA
Version for wall mounting and single sided exit route sign						
<b>TM92182_*</b>	LED batten 3,6W	<b>Ballast lumen factor:</b>	100%	100%	100%	100%
Version for wall bracket mounting and double sided exit route sign						
<b>TM92183_*</b>	LED batten 3,6W	<b>Ballast lumen factor:</b>	100%	100%	100%	100%
Version for wire suspended mounting and double sided exit route sign						
<b>TM92184_*</b>	LED batten 3,6W	<b>Ballast lumen factor:</b>	100%	100%	100%	100%
Version for recessed ceiling mounting and wire suspension and double sided exit route sign						
<b>TM92185_*</b>	LED batten 3,6W	<b>Ballast lumen factor:</b>	100%	100%	100%	100%

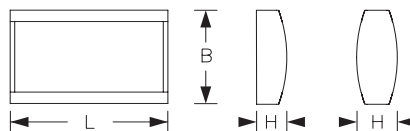
- \* Order code with suffix **E**: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
 Order code with suffix **S**: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
 Order code with suffix **A**: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
 Order code with suffix **N**: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems

# Maxima

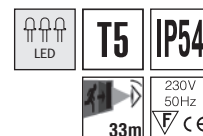
Description: Exit sign luminaire in functional design with body and panes in oval form. Choice of single sided (wall mounting) or double sided (ceiling, pendant suspended and bracket mounting) exit sign. Luminaires are supplied with 4 exit sign films, adaptor for ceiling mounting and bracket for wall mounting.

Special features: Attractive aesthetics, sleek body, long distance visibility, easy installation with quick-adaptor.

Technical details see pages 110 - 117



W	• Dimensions (mm) •			Version
	L	B	H	
8	390	227	79,3	single sided
8	390	227	90	double sided



Fitting supplied complete with		
Order Code	Description	Article
8W		
FB16910	Exit signs (Set with all 4 films)	
F95505	Adaptor for ceiling mounting	
F95506	Wall bracket	

Accessories, to be ordered separately	
Order Code	Description
8W	
FB3723	Adaptor for suspended mounting
F95510	Suspension kit 500mm
F95511	Suspension kit 1000mm
F95512	Suspension kit 1500mm

## Technical data

### Mounting:

Wall, ceiling, pendant rod and wall bracket mounting

### Body:

White polycarbonate

### Mains supply:

198 V - 254 V / 50 Hz

### Battery supply:

176 V - 254 V

### Ambient temperature:

-10 to +40 °C



Order Code	Lamp		EVG	SLEB	AUTO	NEA
Version for wall mounting and single sided exit route sign						
T92360_*	T5 8W	Ballast lumen factor:	100%	75%	75%	100%
T92360_LED*	LED 2 x 1W	Ballast lumen factor:	100%	75%	75%	100%
Version for ceiling, pendant rod and wall bracket mounting and double sided exit route sign						
T92362_*	T5 8W	Ballast lumen factor:	100%	75%	75%	100%
T92362_LED*	LED 2 x 1W	Ballast lumen factor:	100%	75%	75%	100%

- \* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
 Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
 Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
 Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



# Tuttovetro Bandiera

Description: Exit sign luminaire in industrial style, consisting of a flat body and a tapered opal cover. Double sided exit route sign (ceiling, wire suspended and bracket mounting). Luminaire supplied with three exit sign films, adapter for wire suspended mounting and bracket. Additional IP 65 auxiliary box for increased protection.

Special features: Industrial look, improved degree of protection to IP65 by auxiliary box. Quick fix adapter for IP40 version.

Technical details see pages 110 - 117

## Technical data

Mounting:  
Ceiling, pendant or bracket mounting

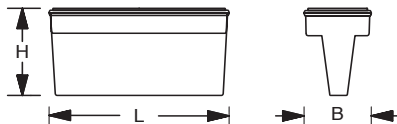
Body:  
ABS plastic

Diffuser:  
ABS plastic

Mains supply:  
198 V - 254 V / 50 Hz

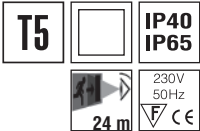
Battery supply:  
176 V - 254 V

Ambient temperature:  
-10 to +40 °C



W	• Dimensions (mm) •			Lamp
	L	B	H	
8	380	142	194	T5

• Dimensions (mm) IP65 •		
L	B	H
396	156	233



Fitting supplied complete with		
Order Code	Description	Article
8W		
FB16902	Exit signs (Set with all 3 films)	
FB3722	Wall bracket	
FB3723	Adaptor for suspended mounting	

Accessories, to be ordered separately		
Order Code	Description	Article
8W		
FB2734	IP 65 auxiliary box	

Order Code	Lamp	EVG	SLEB	AUTO	NEA
TB16006	T5 8 W	Ballast lumen factor: 100%			
TB16007	T5 8 W	Ballast lumen factor:	75%		
TB16009	T5 8 W	Ballast lumen factor:		75%	
TB16010	T5 8 W	Ballast lumen factor:			100%



# Indus

Description: Exit sign luminaire in industrial design with flat body and opal diffuser. Light distribution by white reflector. Single sided exit route sign (wall mounting) or double sided (ceiling mounting).  
Special features: Industrial design, robust and shockproof.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Wall, ceiling, wire or chain suspension or bracket mounting

### Body:

White polycarbonate

### Reflector:

White polycarbonate

### Mains supply:

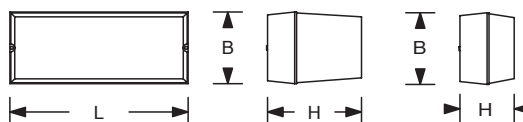
198V – 254V / 50Hz

### Battery supply:

176 V - 254 V

### Ambient temperature:

-10 to +40 °C



W	• Dimensions (mm) •			Version
	L	B	H	
8	368	148	112	single sided
8	368	148	194	double sided

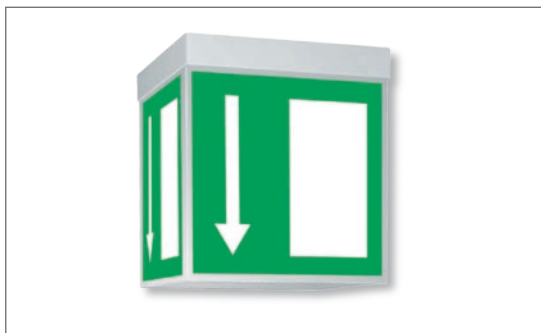


Accessories, to be ordered separately		
Order Code	Description	Article
8W		
F15314N	Exit sign film	
F15313N	Exit sign film	
F15312N	Exit sign film	
F95029	Wall bracket	
FB3723	Adaptor for suspended mounting	
F95032	Wire guard	



Order Code	Lamp		EVG	SLEB	AUTO	NEA
Single sided exit sign						
T92032_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%
Double sided exit sign						
T92058_*	T5 8 W	Ballast lumen factor:	100%	75%	75%	100%

- \* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
 Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
 Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
 Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems



# Quader

Description: Exit sign luminaire consisting of a square base and a cubic shaped transparent diffuser. Three sided exit route sign (ceiling or suspended mounting). Long range visibility due to large diffuser.  
Special features: Three sided exit route sign for large sized areas like supermarkets.

Technical details see pages 110 - 117

## Technical data

Mounting:

Ceiling or pendant mounting, wire or chain suspension

Body:

Polypropylene

Diffuser:

PMMA

Mains supply:

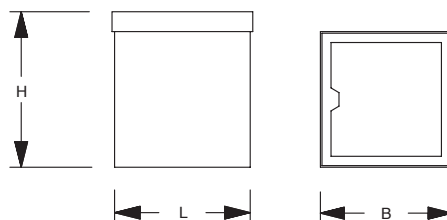
198 V - 254 V / 50 Hz

Battery supply:

176 V - 254 V

Ambient temperature:

-10 to +40 °C



W	• Dimensions (mm) •		
	L	B	H
9	239	248	274



Accessories, to be ordered separately		
Order Code	Description	Article
9W		
F15330	Exit sign film	
F15331	Exit sign film	
F15332	Exit sign film	
F95600	Suspension profile 250 mm	
F95601	Suspension profile 500 mm	
F95602	Suspension profile 1000 mm	
F95400	Pendant rod 1000 mm	
F95401	Wire suspension	
F95210	Adaptor for pendant rod mounting	
F95406	Adaptor for wire and chain suspension	

Order Code	Lamp		EVG	SLEB	AUTO	NEA
T92480_*	CFL 4pin/2lb 9 W	Ballast lumen factor:	100%	75%	75%	100%

- \* Order code with suffix E: e.g. TnnnnE = Luminaire with HF ballast without monitoring modules  
Order code with suffix S: e.g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding  
Order code with suffix A: e.g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding  
Order code with suffix N: e.g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems

# Convex

Description: Exit sign luminaire in elegant style with convex body and concave taper. Vertical joints at both ends. Choice of single sided (wall mounting) or double sided (ceiling, suspended or wall bracket mounting) exit sign. Luminaire is supplied without accessories and exit sign panes.

Special features: Architectural look, sleek design, minimal dimensions.

Technical details see pages 110 - 117

## Technical data

### Mounting:

Wall, ceiling, suspended or wall bracket mounting

### Body:

Die-cast aluminium, anthracite RAL 9007

### Mains supply:

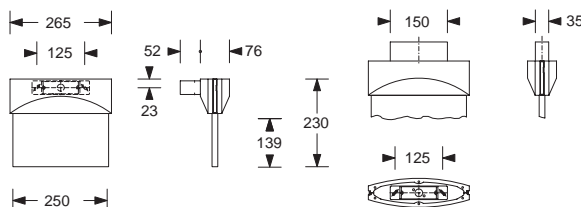
198 V - 254 V / 50 Hz

### Battery supply:

176 V - 254 V

### Ambient temperature:

-10 to +40 °C



Accessories, to be ordered separately		
Order Code	Description	Article
<b>6W</b>		
E16260N	Exit sign pane	
E16261N	Exit sign pane	
E16262N	Exit sign pane	
F95106	Pendant rod 250mm	
F95107	Pendant rod 500mm	
F95108	Pendant rod 1000mm	
F95014	Wall bracket	



Order Code	Lamp		EVG	SLEB	AUTO	NEA
Version for wall mounting and single sided exit sign						
<b>T92708_*</b>	T5 6 W	<b>Ballast lumen factor:</b>	100%	75%	75%	100%
Version for ceiling mounting and double sided exit sign						
<b>T92709_*</b>	T5 6 W	<b>Ballast lumen factor:</b>	100%	75%	75%	100%
Version for suspended or wall bracket mounting						
<b>T92710_*</b>	T5 6 W	<b>Ballast lumen factor:</b>	100%	75%	75%	100%

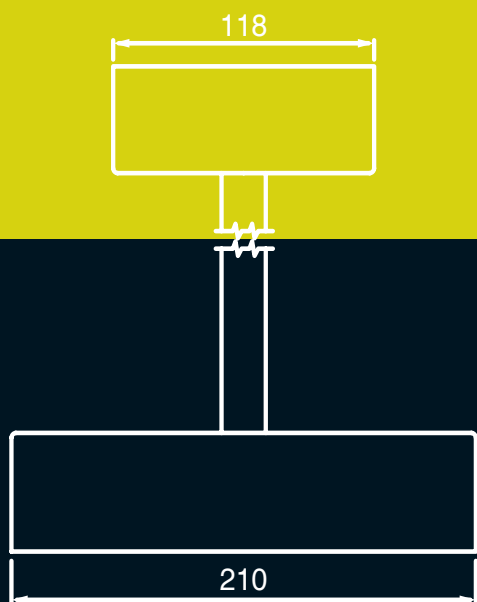
\* Order code with suffix E: e. g. TnnnnE = Luminaire with HF ballast without monitoring modules

Order code with suffix S: e. g. TnnnnS = Luminaire with HF ballast with monitoring module, manual coding

Order code with suffix A: e. g. TnnnnA = Luminaire with HF ballast with monitoring module, automatic coding

Order code with suffix N: e. g. TnnnnN = Luminaire with HF ballast suitable for LOGICA-NEA emergency lighting systems





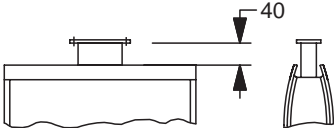
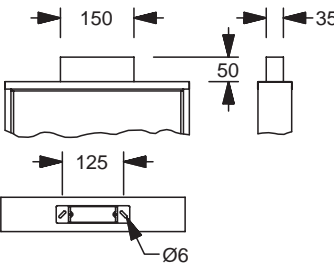
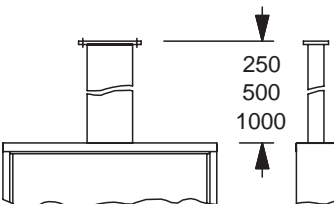
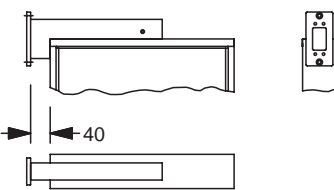
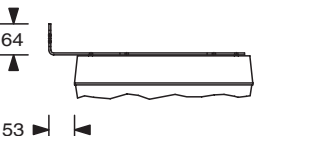
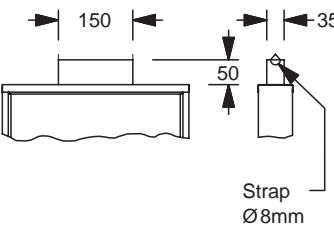
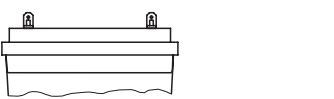
# **Appendix**

## **Accessories**

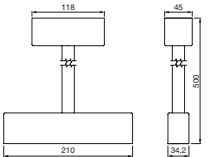
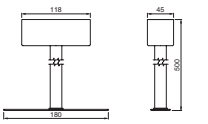
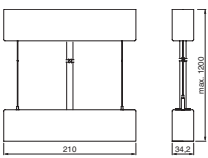
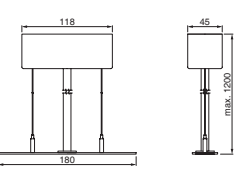
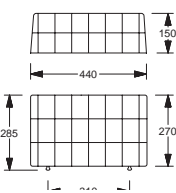
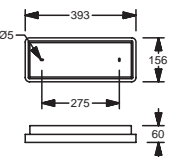
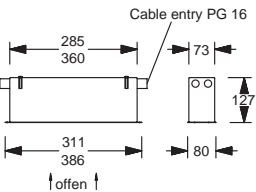
### **Technical data summary**

### **Lighting data**

### **Symbols**










Adaptor for ceiling mounting		Suitable for					
				ARCUS F95104			
		KUBUS F95057	DESIGN F95057				TULA F95109PK
Suspended installation							
	<b>Suspension profile</b> 250 mm 500 mm 1000 mm	KUBUS F95600 F95601 F95602	DESIGN F95100 F95101 F95102	ARCUS F95083 F95084 F95085	DISPOS F95600 F95601 F95602	QUADER F95600 F95601 F95602	
w/o drawing	Adaptor for pendant rod installation				F95209	F95210	
Bracket							
	<b>Wall bracket</b> Luminaire 6W Luminaire 8W Luminaire 13W	KUBUS F95055 F95056 F95070	DESIGN F95022 F95035	ARCUS F95064	DISPOS F95211 F95211		TULA F95109P
	<b>Wall bracket</b>	INDUS F95029					
Adaptor for wire or chain suspension							
		KUBUS F95067	DESIGN F95067				
		INDUS FB3723	QUADER F95406				











































# NEW! Suspension kits










Suspended installation		Suitable for					
	Suspension profile 500 mm	KUBUS F95400	DESIGN F95400	ARCUS F95402	DISPOS	QUADER F95400	TULA F95109PR
	Suspension profile (for DISPOS only) 500 mm				F95404		
Wire suspension							
	Wire suspension max. 1200 mm	F95401	F95401	F95403		F95401	F95109PS
	Wire suspension (for DISPOS only) max. 1200 mm				F95405		
Wire guard (wall mounted)		Suitable for					
	KUBUS (only 6W and 8W) DESIGN ARCUS INDUS MAXIMA	F95032					
w/o drawing	LOGICA AESTETICA PRATICA TUTTOVETRO 8W METRICA LED	FB12194 FB3908 FB3908 FB3908					
IP 65 Cover box		Suitable for					
	PRATICA TUTTOVETRO and TUTTOVETRO BANDIERA	FB2734					
Concrete box (recessed ceiling mounting)		Suitable for					
	DISPOS (recessed ceiling mounting) Luminaire 6W Luminaire 8W	F95220 F95221					

	Series	Page	Mounting of Emergency luminaires				Mounting of Exit sign luminaires				
	Exit sign luminaire and Emergency luminaire <b>AESTETICA</b>	27/91									
	Exit sign luminaire <b>ARCUS-V</b>	35/97									
	Emergency luminaire <b>ARCUS-V</b>	20/84									
	Exit sign luminaire <b>CONVEX</b>	107									
	Emergency luminaire <b>CRATER</b>	24/88									
	Exit sign luminaire <b>DESIGN</b>	36/98									
	Emergency luminaire <b>DESIGN</b>	21/85									
	Exit sign luminaire <b>DISPOS</b>	39/101									
	Exit sign luminaire <b>INDUS</b>	45/105									
	Emergency luminaire <b>INDUS</b>	28/92									
	Exit sign luminaire and Emergency luminaire <b>INTOS</b>	23/87									
	Exit sign luminaire <b>KUBUS</b>	37/99									
	Emergency luminaire <b>KUBUS</b>	22/86									

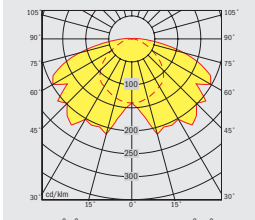


 T5	 T8	 CFL 4pin/2lb	 CFL 4pin/4lb	 LED	Protection	Electrical class				
8W					IP 40	II	x	x	x	22 m
8W				3x1W 5x1W	IP 40	I	x	x	x	33 m
8W					IP 40	I	x	x	x	
6W					IP 40	I	x	x	x	33 m
			13W		IP 20	I	x	x	x	
6W 8W				3x1W 5x1W	IP 40	I	x	x	x	23 m 35 m
8W					IP 40	I	x	x	x	
6W 8W				3x1W 5x1W	IP 20	I	x	x	x	22 m 29 m
8W					IP 54	I	x	x	x	26 m
8W					IP 54	I	x	x	x	
8W					IP 20	I	x	x	x	25 m
6W 8W 13W				3x1W 5x1W	IP 40	I	x	x	x	23 m 35 m 60 m
8W					IP 40	I	x	x	x	

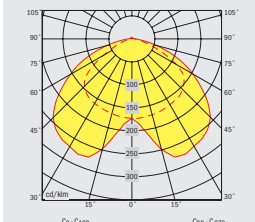
	Series	Page	Mounting of Emergency luminaires				Mounting of Exit sign luminaires				
	Emergency luminaire <b>LEADER</b>	30/94									
	Exit sign luminaire and Emergency luminaire <b>LOGICA</b>	26/90									
	Exit sign luminaire <b>MAXIMA</b>	42/103									
	Exit sign luminaire and Emergency luminaire <b>MetricaLED</b>	25/89									
	Exit sign luminaire <b>PLANA</b>	102									
	Exit sign luminaire and Emergency luminaire <b>PRATICA TUTTOVETRO</b>	29/93									
	Emergency luminaire <b>PYLON</b>	96									
	Exit sign luminaire <b>QUADER</b>	46/106									
	Emergency luminaire <b>STUFEN</b>	95									
	Exit sign luminaire <b>TULA</b>	100									
	Exit sign luminaire <b>TUTTOVETRO BANDIERA</b>	44/104									

 T5	 T8	 CFL 4pin/2lb	 CFL 4pin/4lb	 LED	Protection	Electrical class				
	18W 36W 58W				IP 66	I	x	x	x	
8W					IP 65	II	x	x	x	24 m
8W				2 x 1W	IP 54	I	x	x	x	33 m
				2 x 1W	IP 40 (IP 65)	II	x	x	x	26 m
				3,6W	IP 40		x	x	x	32 m
8W					IP 40 IP 65	II	x	x	x	24 m
			10W 13W		IP 20	I	x	x	x	
		9W			IP 42	I	x	x	x	44 m
4W					IP 54	I	x	x	x	
				3 x 1W 4 x 1W	IP 20		x	x	x	23 m 32 m
8W					IP 40 IP 65	II	x	x	x	24 m

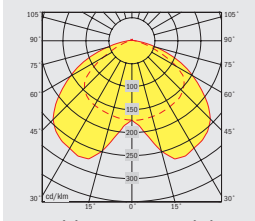
## Arcus V

<p>Arcus-V 8 W</p>				
				

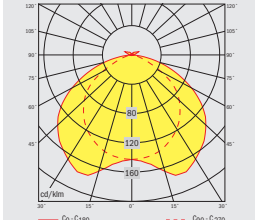
## Design

<p>Design 8 W</p>				
				

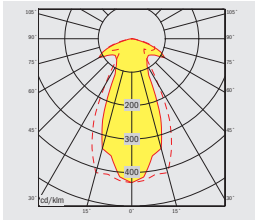
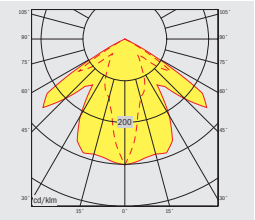
## Kubus

<p>Kubus 8 W</p>				
				

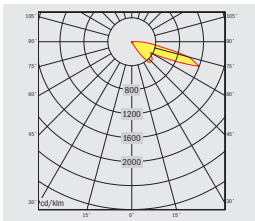
## Intos

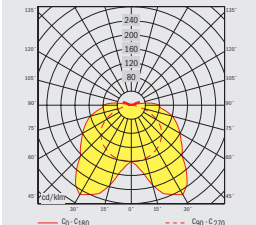
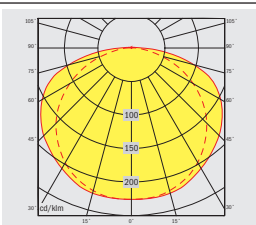
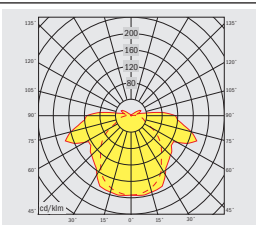
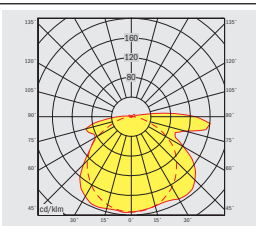
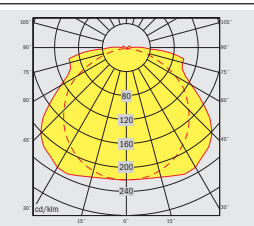
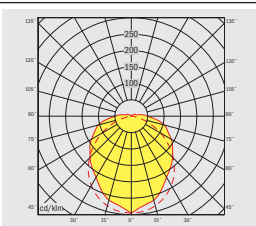
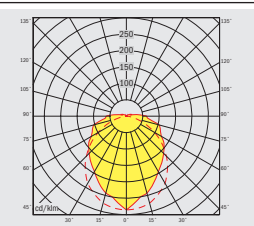
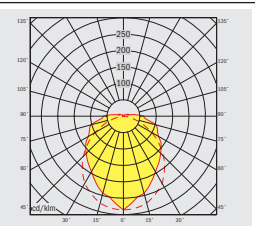
<p>Intos 8 W</p>				
				

## Crater

<p>Crater 13 W Recessed version</p>	<p>Crater 13 W Surface mounted version</p>			
				

## MetricalLED

<p>MetricalLED 8 W</p>				
				

Logica				
Logica W				
				
Aestetica				
Aestetica 8 W				
				
Indus				
Indus 8 W				
				
Pratica Tuttovetro				
Pratica Tuttovetro 6 W	Pratica Tuttovetro 8 W			
				
Leader				
Leader 18 W	Leader 36 W	Leader 58 W		
				



Electrical class II



Protection



AutoLogica



SLEBLogica



Logica NEA-System



Fluorescent tube, diameter 16 mm



Fluorescent tube, diameter 26 mm



Compact fluorescent lamp



Visibility



Luminaire to be mounted on normally inflammable surfaces



Luminaire to be mounted on surfaces with not identified inflammability



Temperature of glow wire test



Conformity mark of the European Union



Resistance against UV-rays



