DALI
Emergency lighting

Integration for safe monitoring in smart buildings

DALI emergency lighting from ABB can easily provide a safe and reliable solution to meet smart building emergency lighting requirements.

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Product applications

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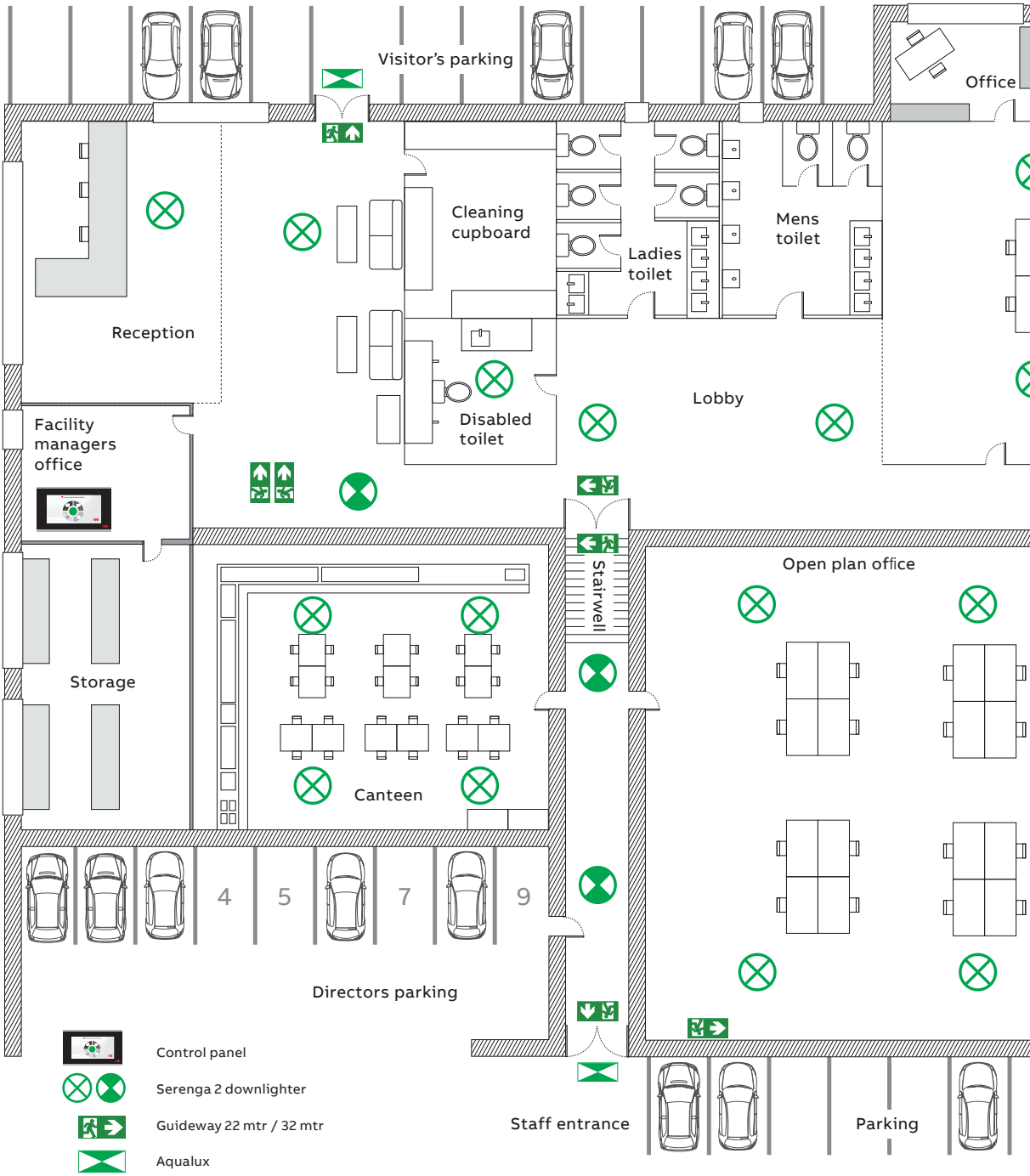

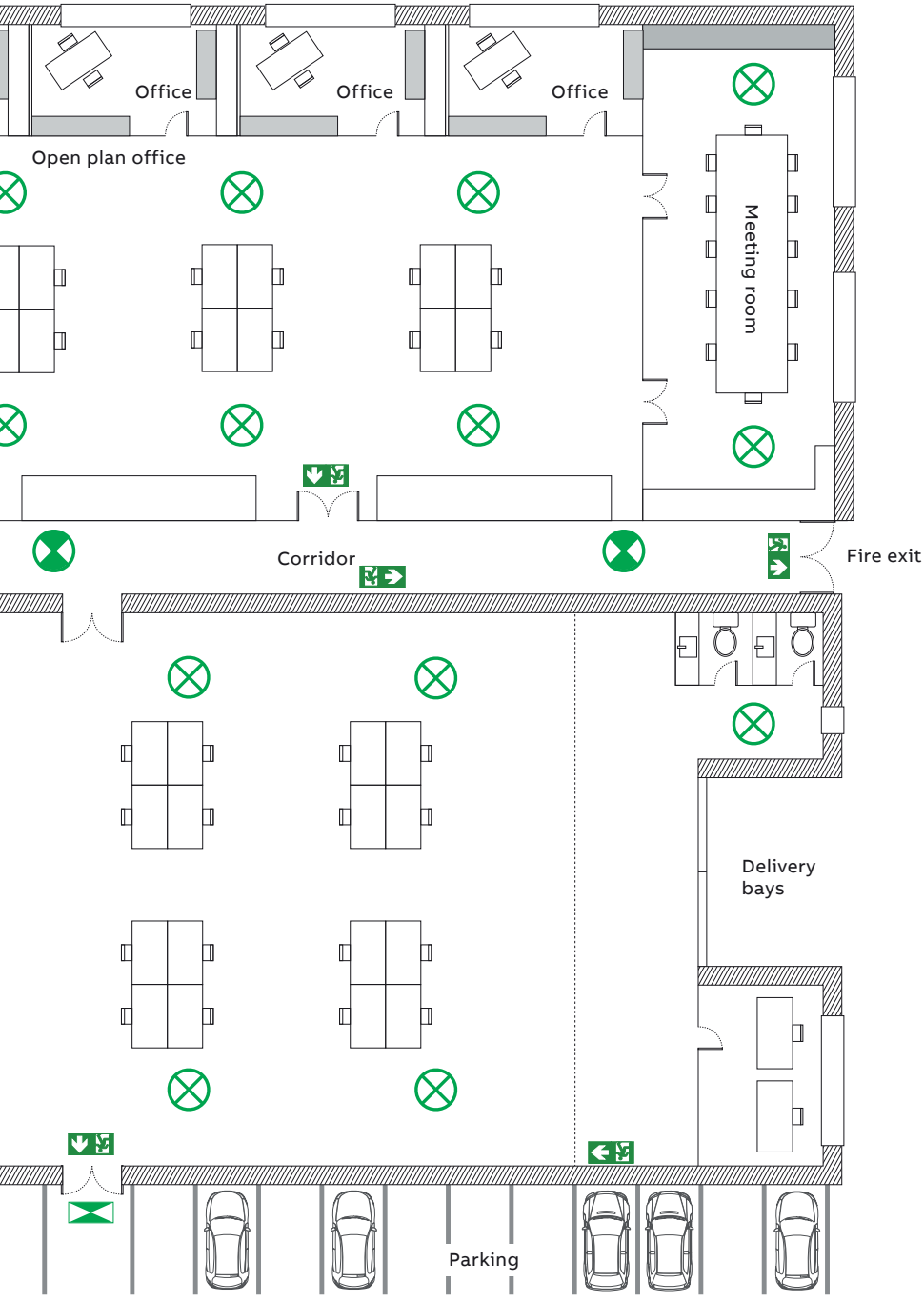
Office
Office
Office
Open plan office
Meeting room
Corridor
Fire exit
Delivery
bays
Parking

01

02

03

04

DALI emergency lighting
Why use DALI with emergency lighting?

Regular system checks must be carried out to guarantee that any emergency lighting system is fully operational. Emergency lighting with DALI constantly monitors the system, storing reports of any failures or issues and ensuring that the system is 100 percent healthy for the maximum time possible. The health of building occupants is assured, and automatic monitoring reduces maintenance costs.

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01 Emergency lighting can be controlled and monitored via DALI for maximum safety in all types of property.

DALI emergency system key features:
- Central monitoring from touch screen panel
- Report logging software
- Functional and full duration tests
- Faults reported to central computer, reducing maintenance time and costs
- Fully addressable emergency system with central test to BS-EN and IEC standards
- Switching of maintained luminaires, individually or per group
- Scheduled tests can be programmed via the touch screen panel and automatic tests can be staggered minimising disruption to building users and still protecting every area in case of a real emergency
- Based on the international industry standard DALI protocol
- Utilises standard DALI bus wiring

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Advantages of using DALI with emergency lighting

1. Proven DALI technology specific for emergency lighting

2. Our DALI solution is based on non-proprietary systems. As long as all components of a system are DALI compliant, they will be able to communicate with each other

3. Cost-effective solution with reduced maintenance costs after commissioning

4. With the addition of the ABB DALI gateway, we can connect our DALI luminaires with KNX systems and BMS

5. DALI (DiiA) Certified

DALI emergency lighting
Safety of emergency lighting

It has never been more important to ensure the safety of a building, because ensuring safety requires full knowledge that the emergency lighting is fully operational and healthy.

DALI emergency is an extension of the DALI protocol, allowing for monitoring of the status of emergency fittings from a touch screen. Proven DALI technology is specific for emergency lighting.

About DALI emergency

DALI - Digital Addressable Lighting Interface - is an open standard defined under EN62386. This standard ensures that all DALI-compatible emergency control systems work in synchronization and that the technology is available to multiple device manufacturers.

DALI emergency lighting is a cost effective monitored emergency system that often betters the traditional systems

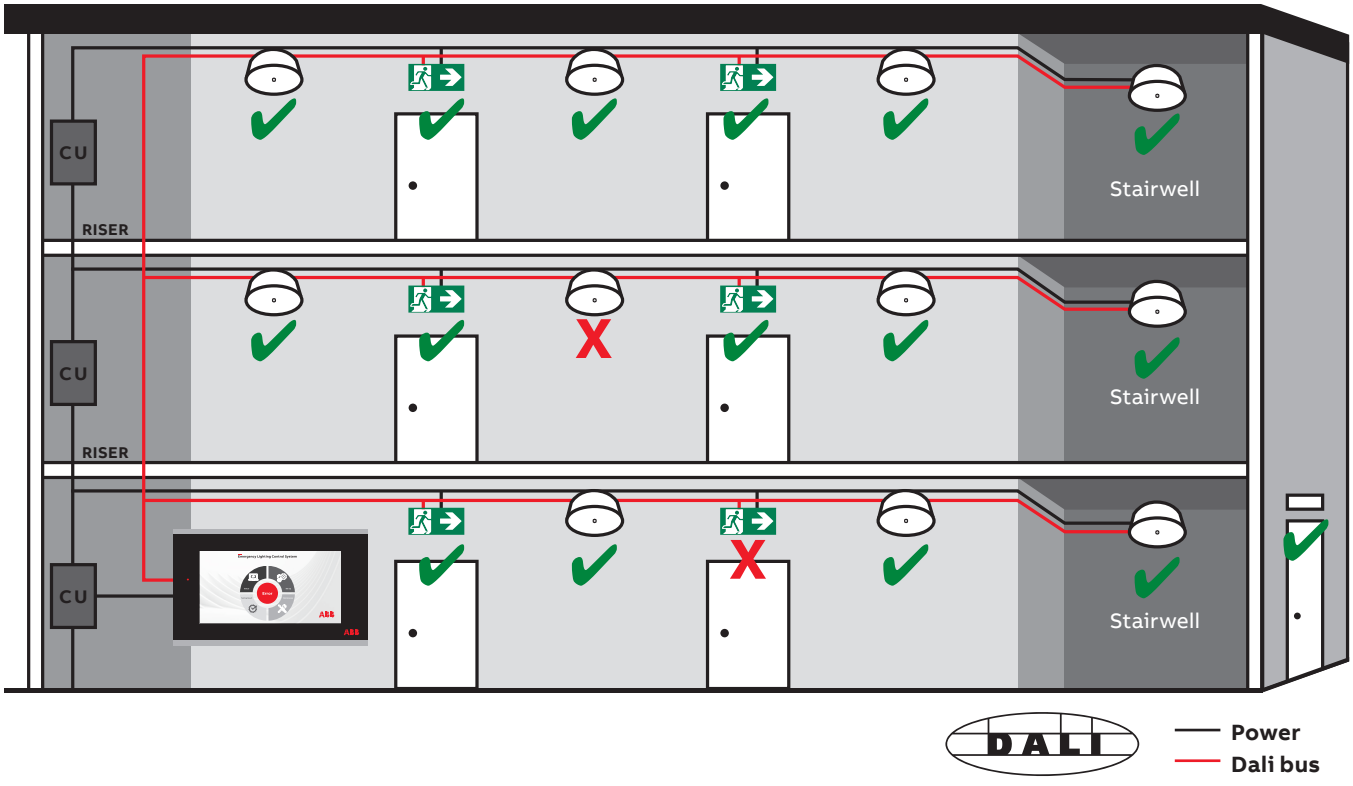
As a standalone monitored emergency system DALI emergency can monitor lamp and battery status and advise whether the luminaires are working, faulty, charge levels and hours of use in either normal or emergency operation.

As DALI is a two-way communication protocol, the central control can send commands to the luminaire and they will send back information to the control system.

Its a mandatory requirement that building owners are taking steps to ensure that their emergency lighting installations are routinely tested, with detailed records maintained. The associated labour costs have resulted in the owners of many larger buildings or building complexes investing in automated centralised test systems.

This type of system has also become increasingly popular since changes to the fire regulations now place the legal responsibility for recording these testing procedures solely with the building owners.

The benefits of using DALI central test systems for emergency lighting applications are wide-ranging:
- Increased safety
- Reduced maintenance labour time
- Ongoing monitoring savings



The emergency lighting package consists of:

- ABB luminaires: Exit signs and escape routes self-contained
- ABB control panel with emergency lighting function for test and monitoring solutions for up to 128 luminaires per panel.

DALI control unit (DCU)

Productivity & reliability

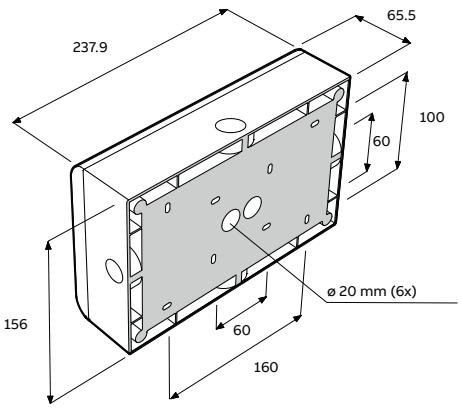
DALI emergency lighting control panel

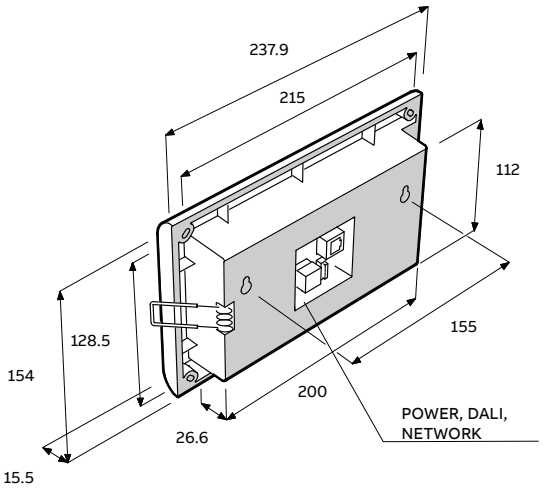
- Ensuring building occupant safety
- Touch screen to control, test and monitor emergency lighting
- Simple to group and easy to install

Control unit

Order code	Description	Input voltage	Lamp type	Power consumption (VA/W)	Operation / duration (hrs)	Environment temp. (°C)	Weight (kg)
ELDCS1/DALI	DALI emergency control unit	220-240 Vac, 50 Hz	N/A	6	N/A	0 - 50	1.1

Note. The manual, pre-commissioning documents, device location record sheet, test record sheet and download software for spreadsheet are available on the ABB low voltage website
DALI bus power supply 12V DC included



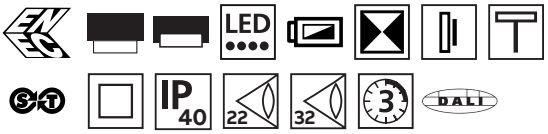


Guideway

Innovative & stylish

Escape route signalisation

- Compatible with DALI control unit to control, test & monitor emergency lighting
- Clearly visible in daylight - 500 cd/m2
- Uniform light distribution
- In harmony with interior spaces
- Frameless legend design



Luminaire

Order code	Description	Input voltage	Lamp type	Power consumption (VA/W)	Operation / duration (hrs)	Environment temp. (°C)	Weight (kg)
DAEGR3LS1-S22	REC LED SIGN M3 22M DALI	220-240 Vac, 50 Hz	LED strip 1.8W	4.2 / 4.2	M3/NM3	5 - 35	0.93
DAEGR3LS1-S32	REC LED SIGN M3 32M DALI	220-240 Vac, 50 Hz	LED strip 3.6W	6.0 / 6.0	M3/NM3	5 - 35	1.11
DAEG3LS1-S22	LED SIGN M3 22M DALI	220-240 Vac, 50 Hz	LED strip 1.8W	4.2 / 4.2	M3/NM3	5 - 35	1.11
DAEG3LS1-S32	LED SIGN M3 32M DALI	220-240 Vac, 50 Hz	LED strip 3.6W	6.0 / 6.0	M3/NM3	5 - 35	1.58

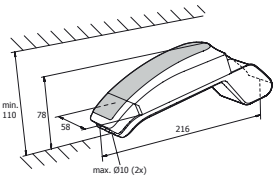
Includes back to wall mounting accessory as standard.
60 hrs charge at first commissioning, 24 hrs re-charge thereafter.
Maintained and non maintained

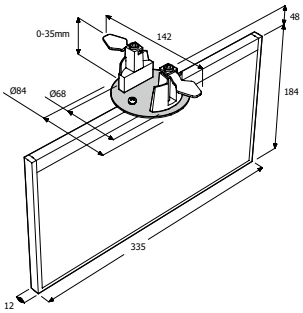
Single sided

Order code	Legends
ISO 7010 legend format	
XEN2EG32	
XEN3EG32	
XEN6EG32	
XEN5EG32	

Flag mounted

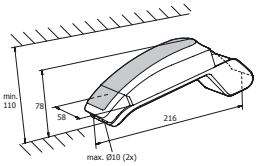
Order code	Legends
ISO 7010 legend format	
XEN602EG32	
XEN603EG32	
XEN606EG32	
XEN605EG32	

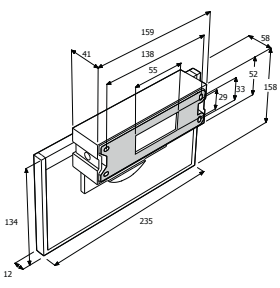




Accessories

Order code	Description	Colour
EG-T4SG	Cover discs, 2+2 self contained	
EG-T4EG	Cover discs, 2+2 slave	





Serenga 2

Project covering & stylish

Escape route lighting

- Compatible with DALI control unit to control, test & monitor emergency lighting
- Injection moulded - high grade polycarbonate body and geartray of aluminium die cast
- Specially designed lens for optimised light distribution
- Modular, First-Fix installation

Luminaire

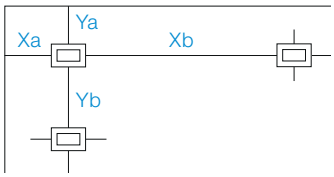
Order code	Description	Input voltage	Lamp type	Power consumption (VA/W)	Operation / duration (hrs)	Environment temp. (°C)	Weight (kg)
DASR2-DEA-M3	REC M3 DALI ESC-4MH WH	220-240 Vac, 50 Hz	2x LED 0.85W = 1,9W	4.74 / 4.0	M3/NM3	5 - 40	0.6 kg
DASR2-SEM3-A1	SFC M3 DALI ESC-L4M WH	220-240 Vac, 50 Hz	2 x LED 0.85W = 1.9W	4.74 / 4.0	M3/NM3	5 - 40	1.0

Interchangeable lenses are available.
Maintained and non maintained

Accessories

Order code	Description
SR2-CCAW	WH circular adaptor

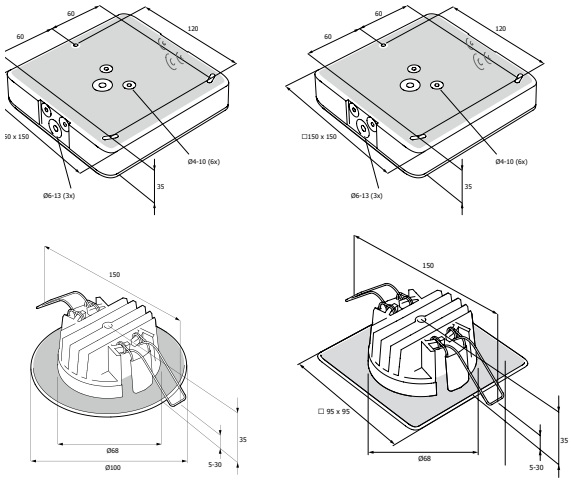
Picture table



Select optical lens for application required

Order code	Lens	Type	Application
SR2-LENS1*	A	Escape route	2-4m corridor use, ceiling mount
SR2-LENS2	B	Escape route, or object	4-8m corridor use, ceiling mount, or spot light at 2-4m (ceiling mount)
SR2-LENS3	C	Escape route	8-12m corridor use, ceiling mount
SR2-LENS4	D	Open area	2-4m, open area space
SR2-LENS5	E	Open area	4-8m, open area space
SR2-LENS6	F	Open area	8-12m, open area space
SR2-LENS7	G	Escape route	2-4m corridor use, wall mount

*Lens included in the box



IP Rating	Product type
IP20	flush mount from above
IP42	flush mount from below

Aqualux & Aqualux Freez-Lite

Durable & high performance

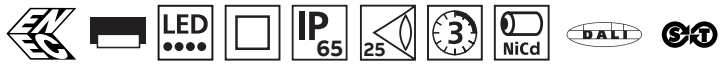
Aqualux: Escape route signalisation

- Compatible with DALI control unit to control, test & monitor emergency lighting
- Attractive aluminium modular enclosure
- Clear polycarbonate broad delivery diffuser

Aqualux Freez-Lite: high power open area luminaire

- Attractive aluminium modular enclosure
- Clear polycarbonate broad delivery diffuser
- Intelligent self-test as standard
- Complies to IEC 60598.2.22

Aqualux



Aqualux Freez-Lite

LED base unit

Order code	Description	Input voltage	Lamp type	Lamp output (lm)	Power consumption (VA/W)	Operation / duration (hrs)	Environment temp. (°C)	Weight (kg)
DLOW3LS60	AQUALUX 3W LED DALI M3	220-240 Vac, 50 Hz	3W LED		9.9 / 5.1	M3/NM3	0 - 25	**2.2**
DLSTF3L560	AQUALUX FREEZ-LITE 3W LED DALI M3	220-240 AC 50 Hz	1 x 3W LED	**79**	17.2 / 11.2	M3/NM3	0 - 25	**2.2**

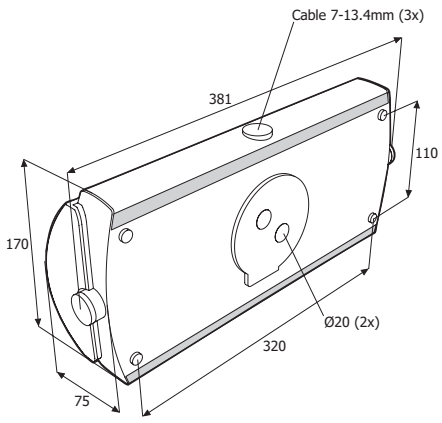
Maintained and non maintained

Legends

Order code	Pictogram
XEN2W	
XEN3W	
XEN6W	
XEN5W	
XLF802W	
XLF803W	

Accessoires

Order code	Description
OW/BCM	Ceiling bracket, vertical mount
OW/BWA	Wall bracket, angled mount



Movion®

Modular & versatile

Escape route lighting - Recessed

- Round shaped design fitting any ceiling
- Specially designed lens for optimal light distribution - long and wide beam
- Quick installation and parallel wiring option with the smart loop-in, loop-out system

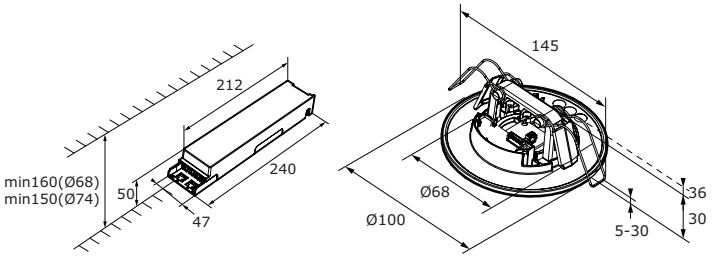
Luminaire

Order code	Description	GID Number	Input voltage	Lamp type	Lamp output (lm)	Light optics	Power consumpt. (VA/W)	Operation / duration (hrs)	Env. temp. (°C)	Weight (kg)
511013221/50	EL800R-M3/DALI ER	7TCA305020R0105	230-240 Vac, 50/60Hz	1 x LED 1W	101	Escape route	3.33 / 3.19	3	5-35	0.31
511013222/50	EL800R-M3/DALI OA	7TCA305020R0111			109	Open area	3.33 / 3.19	3	5-35	0.31

Accessories

Order code	Description	GID Number	Product type
11160111/50	RENO 2200-3300	7TCA307020R0022	Renovation kit recess mounted, white route ligthing

IP Rating	Product type
IP20	flush mount from above
IP42	flush mount from below



Movion®

Modular & versatile

Escape route lighting - Surface mount

- Square shaped design fitting any ceiling
- Specially designed lens for optimal light distribution - long and wide beam
- Quick installation and parallel wiring option with the smart loop-in, loop-out system
- Light track mountable with 3C adapter included

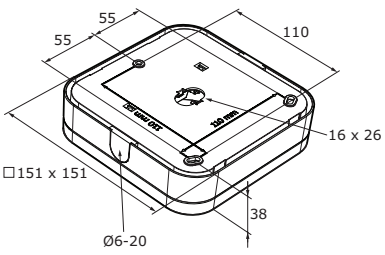
Luminaire

Order code	Description	GID Number	Input voltage	Lamp type	Lamp output (lm)	Light optics	Power consumpt. (VA/W)	Operation / duration (hrs)	Env. temp. (°C)	Weight (kg)
511013211/50	EL800S-M3/DALI ER	7TCA305020R0093	230-240 Vac, 50/60Hz	1 x LED 1W	101	Escape route	3.33 / 3.19	3	5-35	0.39
511013212/50	EL800S-M3/DALI OA	7TCA305020R0099			109	Open area	3.33 / 3.19	3	5-35	0.39

Accessories

Order code	Description	GID Number	Product type
5110007/50	PK EL800	7TCA307020R0054	Pendant kit surface mounted escape route ligthing

Modular pendant tubes and accessories to be used in combination with the pendant kit see page 66.



Movion®

Modular & versatile

Escape route signalisation - 22m

- One version available for wall and ceiling mount
- Strong light distribution with 500 cd/m²
- Light track mountable with 3C adapter included
- Recess kit for flush mounting available

Luminaire

Order Code	Description	GID Number	Version	Input voltage	Lamp type	Power consumpt. (VA/W)	Operation / duration (hrs)	Env. temp. (°C)	Weight (kg)
411013211/50	XT800S-M3/DALI 22M	7TCA305020R0066	Sign	230-240 Vac, 50/60Hz	1 x LED 2W	4.38 / 4.14	3	5-35	0.53

*Products delivered including pictograms

Legends

Order code	GID Number	Legends
1522251/50	7TCA307030R0134	
1522252/50	7TCA307030R0136	
1522253/50	7TCA307030R0135	
1522258/50	7TCA307030R0137	
1522250/50	7TCA307030R0142	
1522210/50	7TCA307030R0143	
1522211/50	7TCA307030R0144	

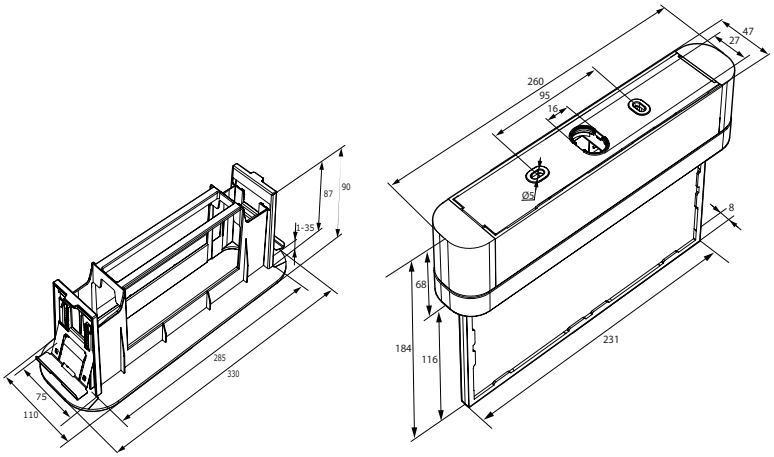
Accessories

Order code	Description	GID Number	Product type
4110001/50	RK XT800	7TCA307020R0049	Recess kit for exit signs
4110003/50	PK XT800*	7TCA307020R0050	Pendant kit surface mounted exit signs
4100007/50	RENO XT800**	7TCA307020R0048	Renovation kit for exit signs

*Modular pendant tubes and accessories to be used in combination with the pendant kit see page 66.
** Use the RENO XT800 in combination with RK XT800.

IP Rating	Product type
IP20*	flush mount from above
IP42*	flush mount from below

*Only applicable when the recess kit is used.



Movion®

Modular & versatile

Hybrid - 22m

- All-in-one escape route lighting and signalisation luminaire for wall and ceiling mount
- Available lenses for escape route lighting and 5 lux illumination of safety equipment
- Light track mountable with 3C adapter included
- Recess kit for flush mounting available

Luminaire

Order Code	Description	GID Number	Version	Input voltage	Lamp type	Lumen output (lm)	Power consumpt. (VA/W)	Operation / duration (hrs)	Env. temp. (°C)	Weight (kg)
411113211/50	XTH800S-M3/DALI 22M	7TCA305020R0073	Hybrid	230-240 Vac, 50/60Hz	1 x LED 2W + 1 x LED 1W	67	5.02 / 4.89	3	5-35	0.6

*Products delivered including pictograms

Legends

Order code	GID Number	Legends
1522251/50	7TCA307030R0134	
1522252/50	7TCA307030R0136	
1522253/50	7TCA307030R0135	
1522258/50	7TCA307030R0137	
1522250/50	7TCA307030R0142	
1522210/50	7TCA307030R0143	
1522211/50	7TCA307030R0144	

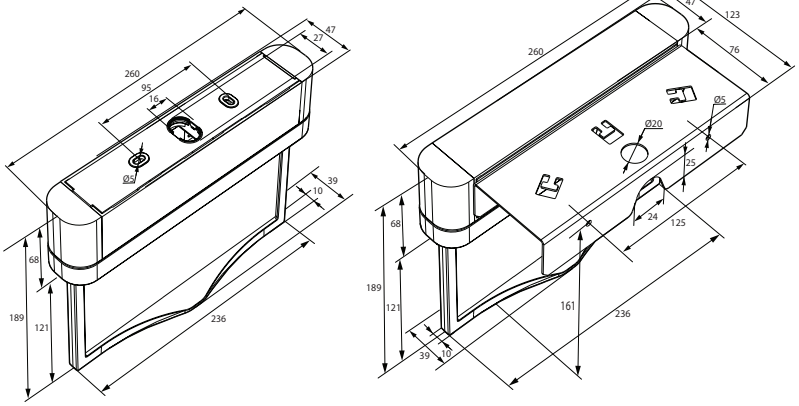
Accessories

Order code	Description	GID Number	Product type
4110001/50	RK XT800	7TCA307020R0049	Recess kit for exit signs
4110003/50	PK XT800*	7TCA307020R0050	Pendant kit surface mounted exit signs
4110004/50	WB XTH 800	7TCA307020R0051	Wall bracket for Hybrid exit signs
4100007/50	RENO XT800**	7TCA307020R0048	Renovation kit for exit signs

*Modular pendant tubes and accessories to be used in combination with the pendant kit see page 66.
** Use the RENO XT800 in combination with RK XT800.

IP Rating	Product type
IP20*	flush mount from above
IP42*	flush mount from below

*Only applicable when the recess kit is used.



Lutia

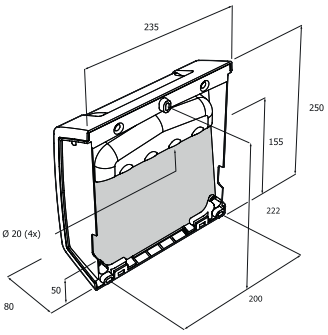
Reliable & robust

Ceiling and wall mounted luminaire

- First-fix and loop-in, loop-out systems minimalise installation time
- One product concept for both wall and ceiling mounted
- Robust design developed for outdoor applications

Luminaire

Order Code	Description	GID Number	Input voltage	Lamp type	Lumen output (lm)	Power NON cons. (VA/W)	Power cons. (VA/W)	Duration (hrs)	Env. temp. (°C)	Weight (kg)
65790239/50	EL9400S-M3/DALI ER	7TCA305020R0064	230-240 Vac, 50/60 Hz	2 x LED 0,95W	97	6.1 / 5.5	4.32 / 4.165	3	-20+40	1.4



Spacing data Lutia

3h (1,0 lx)

Lutia ceiling mounted

h(m)	Ya	Yb	Xa	Xb
2,0	3,82	8,48	3,21	1,07
2,5	4,49	9,94	3,04	1,01
3,0	5,04	11,30	3,00	1,04
3,5	5,50	12,61	2,87	1,06
4,0	5,76	13,79	2,90	1,06
4,5	5,73	14,76	2,98	1,03
5,0	5,75	15,62	3,02	0,95
5,5	5,61	16,05	3,03	0,86
6,0	5,21	16,28	2,99	0,75
6,5	3,61	16,24	2,88	0,62
7,0	1,83	16,26	2,74	0,31

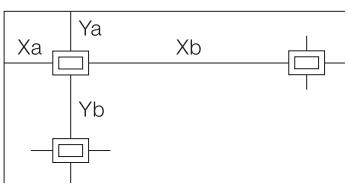
3h (1,0 lx)

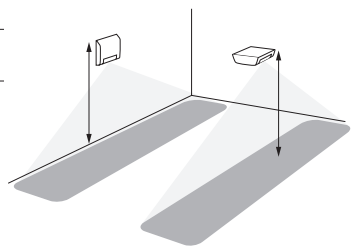
Lutia wall mounted

Distance from wall (Yc)

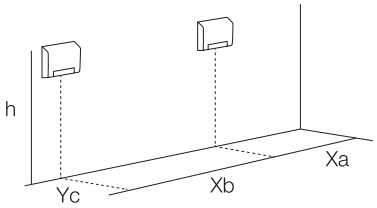
	1m		2m	
h(m)	Xa	Xb	Xa	Xb
2,0	3,5	7,8	-	-
2,5	4,1	9,4	-	-
3,0	4,6	10,0	-	5,0
3,5	5,0	12,0	-	5,2
4,0	5,2	12,8	-	5,4
5,0	5,3	14,2	3,5	14,0
6,0	4,6	14,4	2,2	14,8

Lutia ceiling mounted





Lutia wall mounted



HyLED

Powerful & reliable

Energy efficient, high output LED luminaire

- 360 degrees turnable lamp unit, steady in position
- High ceilings industrial environments
- Sealed IP65 loop in, loop out cabling system
- Mounting and assembly flexibility onto pillars, ceilings, etc.

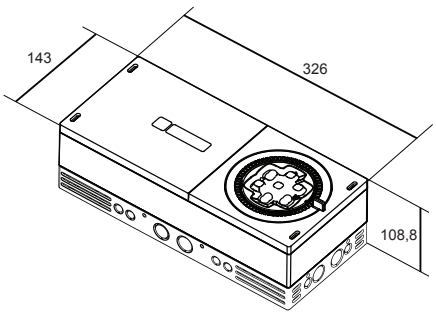
Luminaire

Order code	Description	GID Number	Input voltage	Lamp type	Lumen output (lm)	Power consumpt. (VA/W)	Operation / duration (hrs)	Env. temp. (°C)	Weight (kg)
3 hour									
11370047/50	EL9300S-M3/DALI ER	7TCA305025R0046	220-240 Vac, 50Hz	1 x LED 7W	350	15 / 7	3	0-25	1.7
11370057/50	EL9300S-M3/DALI OA	7TCA305025R0045			350	15 / 7	3	0-25	1.7

60 hrs charge at first commissioning, 24 hrs re-charge thereafter.

Accessories

Order code	Description
HY-MBK	Wall mounting/coupling bracket kit
HY-RKIT	Recessing kit



Weatherforce

Practical & durable

Surface mounted luminaire

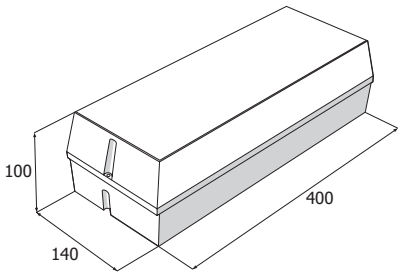
- Simple, vandal resistant design
- Cast aluminium enclosure
- Opal diffuser as standard with clear polycarbonate diffuser option available
- Converts easily to exit sign with addition of self-adhesive legend
- Complies to IEC 60598.2.22

Luminaire

Order code	Description	GID Number	Input voltage	Lamp type	Lumen output (lm)	Power consumpt. (VA/W)	Operation / duration (hrs)	Env. temp. (°C)	Weight (kg)
DAWWA3LS1	XTE9000S-M3/DALI OP	7TCA305025R0035	220-240 Vac, 50/60Hz	1 x LED 2W	207	6.1 / 3.9	3	0-30	1.8
DAWWA3LS11	XTE9000S-M3/DALI PR	7TCA305025R0038			207	6.1 / 3.9	3	0-30	1.8

Legends

Order code	GID Number	Pictogram
RSEN2120	7TCA091350R4215	
RSEN3120	7TCA091350R4216	
RSEN6120	7TCA091350R4218	
RSEN5120	7TCA091350R4217	



Cable entry via BESA on rear and 20 mm drill holes on ends of unit.
Ceiling cutout 390 mm x 130 mm when semi-recessing.

Cordona

Elegant LED lighting

IP65 decorative emergency LED luminaire

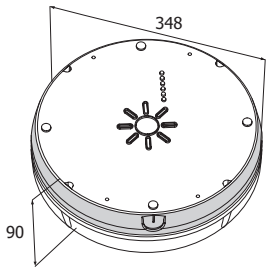
- LED light source/optional fluorescent
- Designed for escape route and open area lighting
- Polycarbonate luminaire body with clear or translucent diffuser
- ELR/SLR exemption for luminaires with Emergency as the primary function
- Semi-recessing accessory available
- Complies to IEC 60598.2.22 and IEC 60598-1
- Available in Opal and Clear diffuser

Luminaire

Order code	Description	GID Number	Input voltage	Lamp type	Lumen output (lm)	Power consumpt. (VA/W)	Operation / duration (hrs)	Env. temp. (°C)	Weight (kg)
DACPW4LA1	EL530S-M3/DALI OP	7TCA305025R0029	220-240 Vac, 50/60Hz	1 + 1 x LED 20+2W	1830 / 207	25.8 / 23	3	0-30	2.2
DACPW4LA11	EL530S-M3/DALI PR	7TCA305025R0032			2355 / 207	25.8 / 23	3	0-30	2.2

Accessories

Type code	GID Number	Description
CPW/BZ	7TCA091360R0666	Semi-recessing bezel



Ceiling cutout 346 mm when semi-recessing.

MirEvo Twinspot

Compact & reliable

Surface mount luminaire

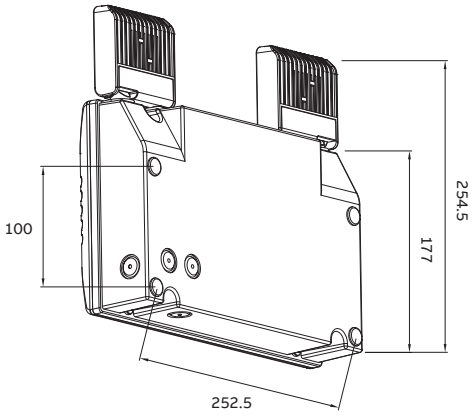
- Full adjustable heads with 140° beam angle
- Available with Lithium Ferrophosphate (LiFePO4) battery technology for a longer service life
- Suitable for commercial and industrial environments

Luminaire

Order code	Description	GID Number	Input voltage	Lamp type	Lamp output (lm)	Power consumption (VA/W)	Operation / duration (hrs)	Environment temp (°C)	Weight (kg)
TW500DA	Twinspot 500Lm Ip65 DALI	7TCA305020R0023	220-240 AC, 50/60 Hz	8x LED 1W	500	5.5 / 4	3	0-40	1.45

* Operates in extreme low temperatures

See spacing tables on page 134



Notes

DALI TESTING AND CONTROL

The DALI protocol is set out in the technical standards governed by the Digital Illumination Interface Alliance in association with member companies in industry working groups.

DALI
What is DALI?

DALI (Digital Addressable Lighting Interface) is a data protocol and transport mechanism that was jointly developed and specified by several manufacturers of lighting equipment.

It is essentially a network connected by a pair of cables and powered by a power supply. The common platform of DALI enables equipment from different manufacturers to be connected together. ABB's DALI is designed to work with all DALI-compliant equipment displaying the DALI logo.

Put simply, DALI (digital addressable lighting interface) is a two-way communication system that brings digital technology to lighting.

An international standard for communication, DALI allows individual ballasts to "talk" to the user and allows the user to "talk" back via DALI controllers.

DALI is a testing and control system that offers both flexibility and reliability.

Bus wiring
In terms of wiring a DALI system also includes the bus wires that are used to connect together the DALI terminals of the various devices in the system.
- Standard 2-core cable (1.5mm2)
- 5-core cable possible to enable power and data
- Polarity free & free wiring topology
- maximum 64 devices per subnet (Hub/Routers)
- maximum 300m cabling
- maximum 250mA device consumption

Control devices
Control devices can provide information to other control devices and can send commands to control gear. Input devices are a type or a part of a control device that provides some information. Application controllers are also a type or a part of a control device and are the decision makers in a DALI system – for example, they can send commands to control gear to modify the lighting or test an emergency lighting system.

Bus power supplies
At least one bus power supply must be present in a DALI system. This is necessary to allow both communications on the bus, as well as to power any bus-powered devices. The bus power supply does not need to be a separate unit – it could be part of another device such as an DALI control unit or a KNX DALI gateway.

ABB has 3 different power supply options. The central control DALI Touch screen panel or the KNX DALI gateway. Only one power supply is needed in each network.

Control gear
Control gear usually contains the power control circuit to drive lamps, or some other type of output such as on/off switching.

DALI emergency lighting
Testing & monitoring

ABB DALI emergency lighting offers automatic test functions from either a central controller or from the luminaire itself. This ensures you will always know the status of your emergency fitting. Effective monitoring helps to ensure the safety of building occupants and give building owners the peace of mind they require.

—
01 DALI emergency lighting and control system - Normal
—
02 DALI emergency lighting and control system - Error detected

Automatic testing & monitoring
Automatic monitoring includes the status of battery charging and the status of the main power supply. Central testing includes the current battery charge condition, functional tests and duration tests. Test frequencies can be adjusted to meet the requirements of the building or the local regulations. Testing periods can vary from weekly to monthly in the case of function tests, or annually for duration tests.

Function test
A function test that simulates a mains failure and checks the operation of the emergency light from the battery supply. If there is a failure during a function test, the local indicator LED changes its status on the luminaire.

Duration test
A duration test simulates a power failure and checks the operation of the emergency light from the battery supply for the rated duration of the product. Duration tests can be one, three hours or more depending on the local regulations. If there is a failure during a duration test, the local indicator LED alerts you to a problem or, in the case of a system monitored from a central location, the emergency lighting DALI control unit (DCU) will alert by showing an error message. As with all central test systems that require annual duration testing, this is only started after the battery has had an initial uninterrupted 24 hour+ charge period.

Local testing
Function and duration tests are initiated by the emergency light fitting. It performs automatic testing according to the locally stored settings.

Central testing
Function and duration tests are initiated by the DALI control unit and displays results on the screen.

Switching
Maintained luminaires can be switched and grouped.

Emergency lighting and control unit

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01

—
02

ABB DALI emergency lighting control unit

The ABB DALI emergency lighting control system provides a user-friendly touch screen panel that can control, monitor and perform regularly scheduled tests. The standard function and duration test scan be performed at regular or planned intervals.

01 Dali control unit home Screen

02 Dali control unit descriptive screens

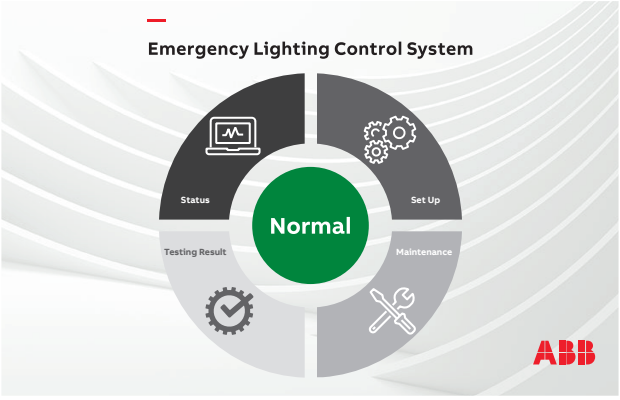
03 Dali control unit spreadsheet

Each control unit can control and monitor up to 2 lines of DALI (128 maximum devices). Additional touch screen panels need to be added to control more than 128 luminaires. Test results and logs from each panel need to be transferred to an excel file to a computer LAN and then printed or stored for later reference.

- 2 Built-in DALI lines allow for 128 DALI luminaires
- Function and duration tests conducted in accordance with local regulations
- 7" Colour touch screen
- Smart graphical interface for client operation
- Easy, system driven, DALI addressing and grouping
- Individual indication of groups and devices
- Calendar-controlled function and service life test
- Easily read system status
- Simple download of test report to a PC

The DALI control unit has easy-to-use descriptive screens that lead the system user screen by screen. The luminaire on the DALI network are found after initialisation and are displayed on the device with a list of the addresses. Each luminiare can be given a name and location so it can be easily located in the event of a fault. Faults are clearly displayed on the home screen.

The product features an ethernet port, which allows for the download of a spreadsheet that can prove the status of the emergency lighting system.



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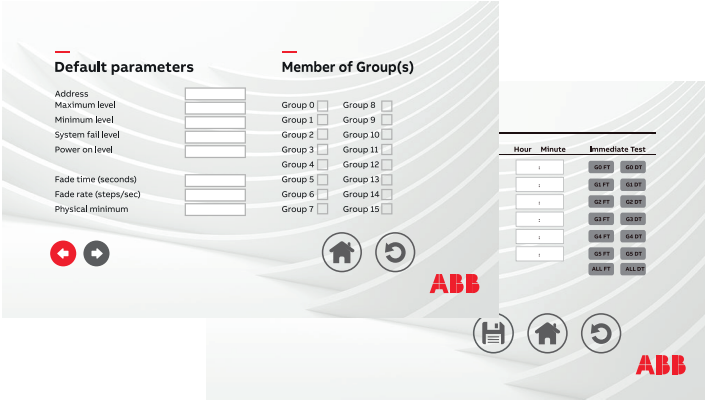

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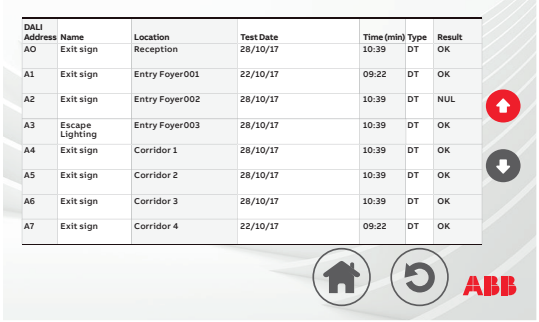

03

DALI LAN Connection

The DALI control Unit (DCU) can be connected to the user PC or laptop designated for access to the emergency lighting central control via the ethernet port and through a network switch. In a managed network switch, the cables from the DALI control Unit (DCU) and the access user PC or laptop can be passed through the main network switch and combined with good internal protection used to prevent and reduce vulnerability whilst on the LAN network.

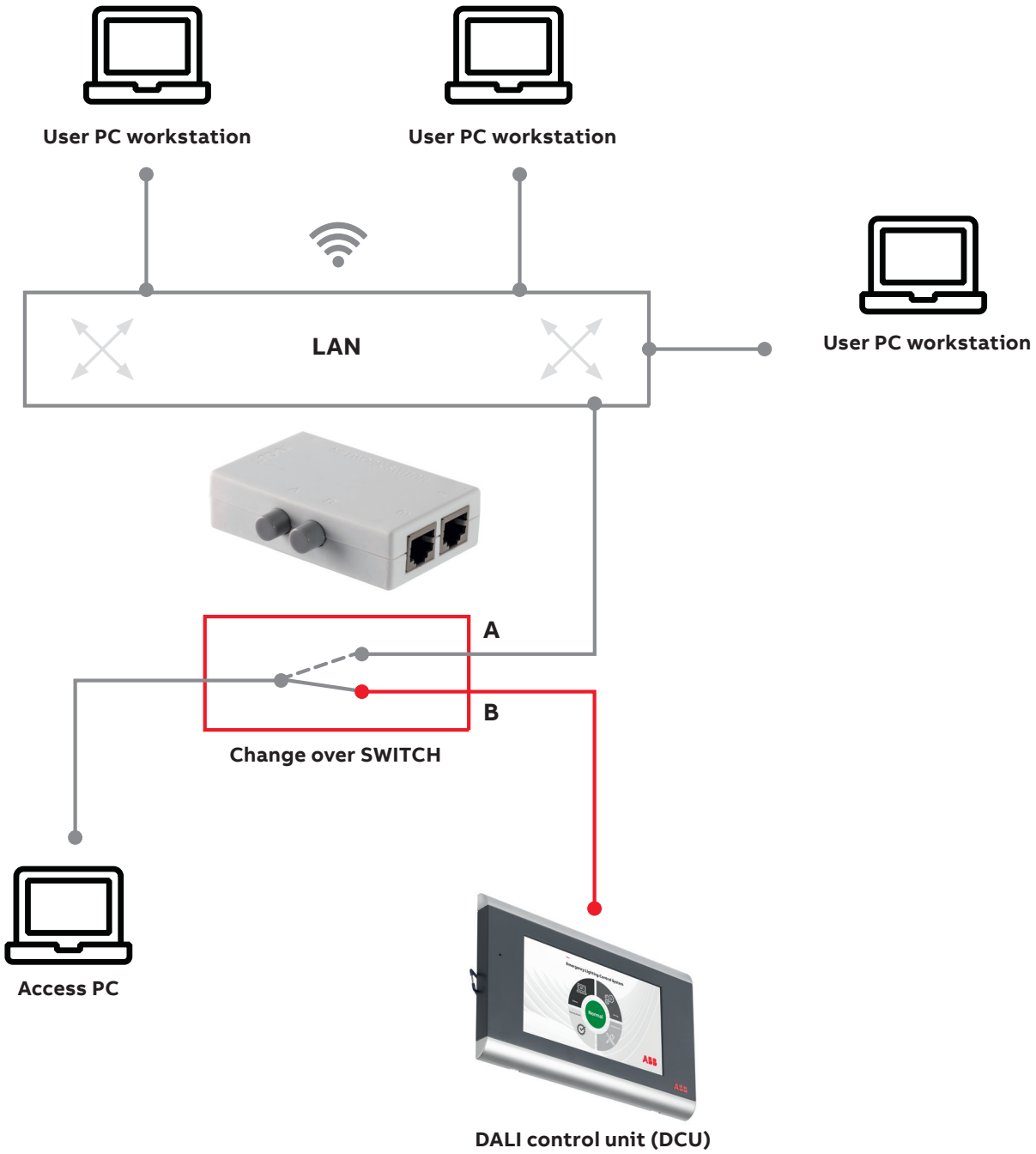

ABB DALI Gateways

ABB DALI Gateways provide an interface DALI (Digital Addressable Lighting Interface) and KNX installations. This allows ABB DALI products to work with ABB KNX products, providing a comprehensive smart building solution.

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01 DALI-Gateway DG/S 1.64.1.1
—
02 DALI-Gateway DG/S 2.64.1.1
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03 Example of an ABB DALI gateway in a KNX/ DALI installation with emergency lighting.

DALI-Gateway DG/S 1.64.1.1

Flexibility by controlling light individually per device or in groups.

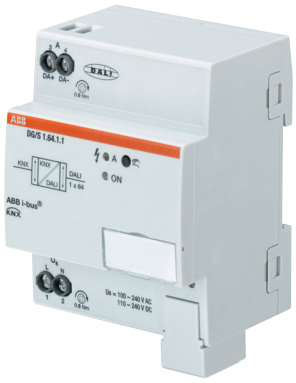
The DG/S 1.64.1.1 DALI-Gateway (1fold) can install up to 64 DALI devices both via 16 flexible DALI (red lined group) and KNX lighting groups (grey dotted lined group), each with one or more DALI participants. Control and monitoring via KNX. Control and status feedback can also be carried out via Broadcast. 16 independent lighting scenes are available.

DALI-Gateway DG/S 2.64.1.1

Maximum flexibility combined with the highest of number of DALI participants and groups, to meet all customer needs.

The DG/S 2.64.1.1 DALI-Gateway (2fold) can install up to 2 x 64 DALI devices both via 2 x 16 flexible DALI (red lined group) and KNX lighting groups (grey dotted lined group), each with one or more DALI participants. Control and monitoring via KNX. Control and status feedback can also be carried out via Broadcast. 2 x 16 independent lighting scenes are available.

Both KNX DALI Gateways act as a gateway between DALI self-contained emergency lighting systems and a KNX building automation system. This allows DALI-based emergency lighting complying with IEC 62386-202 to be controlled and monitored with a KNX control panel or visualization.



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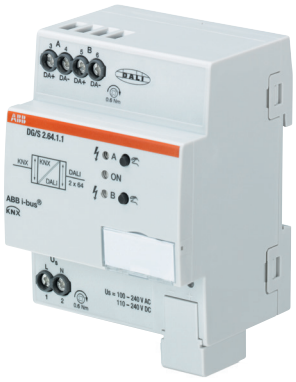

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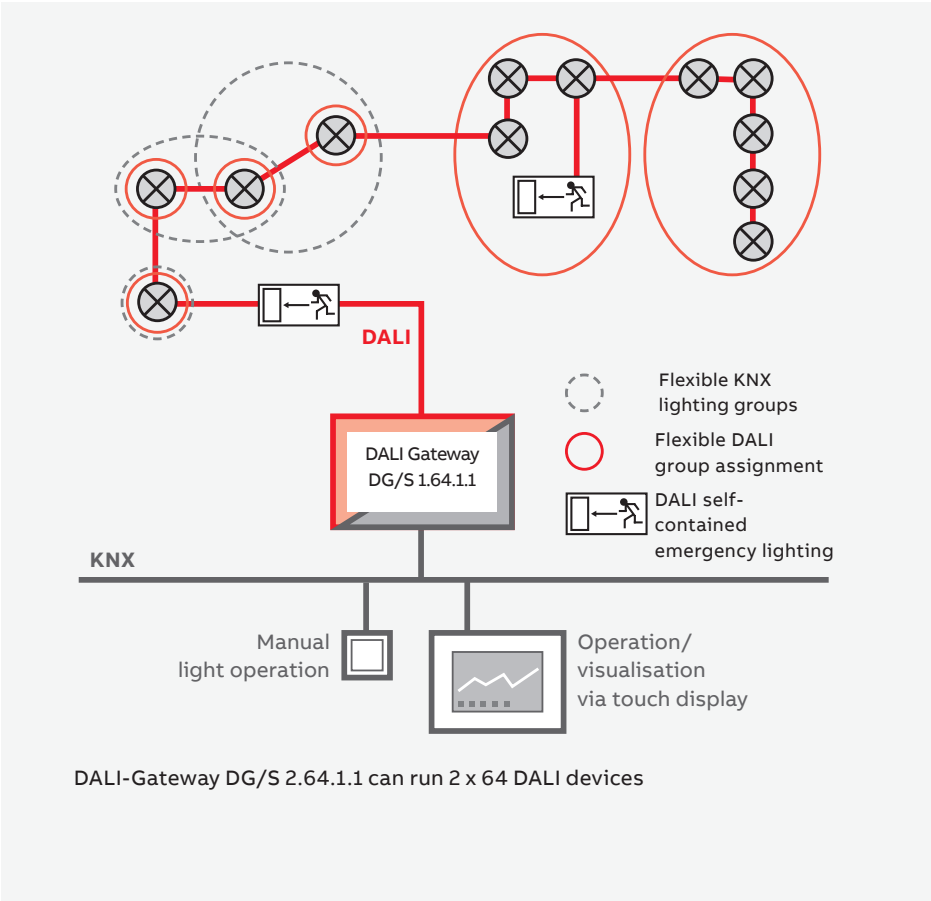


DALI-Gateway DG/S 2.64.1.1 can run 2 x 64 DALI devices

Standards

ABB is a member of the DiiA (Digital Illumination Interface Alliance) which is an organisation dedicated to the following aims and objectives:

- To define, standardize, launch and maintain a testing, certification and logo-licensing program for digital addressable lighting interface (DALI) functionality, as specified in the IEC 62386 family of standards.
- To enable continuous improvements in multi-vendor system interoperability.
- To protect and increase the value of this technology and the certification program, for the industry and our customers.
- To accelerate the development of new functionality beyond the current IEC 62386.

Standards
The standards dictate that emergency lighting systems must routinely inspect, monitor and record tests completed on the networks.
The results of these tests must be maintained.
If central testing is used, the results of a monthly short duration test and an annual full-rated duration test should be recorded.

Digital Illumination Interface Alliance

Certifications

EN 55015:2013+A1:2015 (EMC)
Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment

EN 55024:2001+A1
Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement

EN55032:2015
Electromagnetic compatibility of multimedia equipment - Emission requirements

EN 60598-1:2015
Luminaires. General requirements and tests

EN 60598-2-22 ed4.0 (2014) -
Luminaires - Part 2-22: Particular requirements - Luminaires for emergency luminaires

EN 60950-1: :2006+A11:2009+A1:2010+A12:2011 +A2:2013
Information Technology Equipment – Safety – General Requirements

EN 61000
Electromagnetic compatibility (EMC)

EN 61000-3-2:2014
Electromagnetic Compatibility (EMC) – Limits for Harmonic Emissions

EN 61000-3-3:2013
Electromagnetic Compatibility (EMC) – Limitation of Voltage Changes, Voltage Fluctuations and Flicker in Public Low-Voltage Supply systems

EN 61347-1:2015
Lamp control gear. General and Safety requirements

EN 61347-2-13 ed2.0(2014)
Lamp control gear - Part2-13: Particular requirements for d.c. or a.c. supplied electronic controlegear for LED-modules

EN 61547 ed2.0 (2009)
Equipment for general lighting purposes - EMC immunity requirements

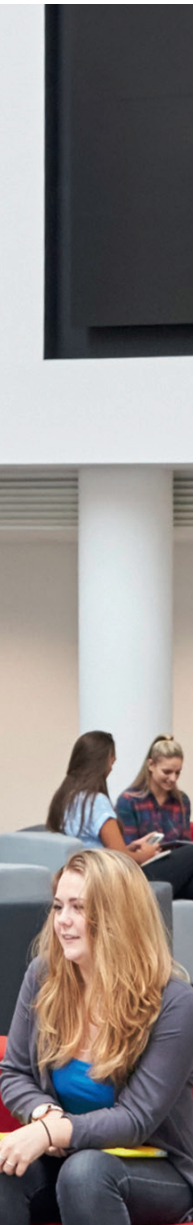
EN 62031 ed1.2 (2014)
LED modules for general lighting - Safety specifications

EN 62034:2012
Automatic Test Systems for Battery Powered Emergency Escape Lighting

EN 62386-101:2014
Digital addressable lighting interface - Part 101: General requirements - System components

EN 62386-102:2014
Digital addressable lighting interface - Part 102: General requirements - Control gear

EN 62386-202 Ed. 1
Digital addressable lighting interface - Part 2012: Self-contained emergency lighting



Summary

Whether you are planning, installing, managing or renewing emergency lighting, our products, systems and services always offer you smart, state-of-the art, highly user-friendly solutions.

Optimum Interface

The ABB emergency lighting DALI control unit is a user-friendly touch screen device that controls and continuously monitors the emergency luminaires within a building. The device continuously monitors and alerts the user of any faults and their location. The user can set up automatically regular weekly or monthly tests as well as duration tests.

This test information is stored in the form of a spreadsheet that can be easily accessed via an ethernet cable to a laptop or PC.

- User friendly
- Touch screen
- Continuous monitoring
- Central testing
- Status reports

Ease of Installation

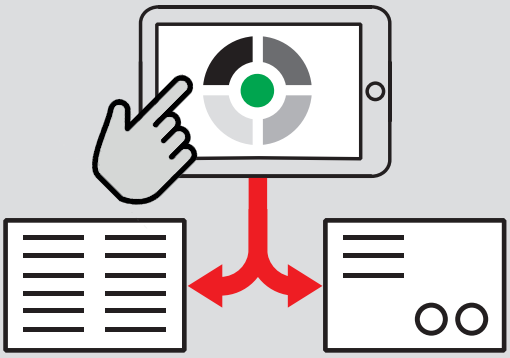
Our DALI emergency lighting products are simple, quick and easy to install. Users can utilise standard DALI commands with user-friendly installation to group luminaires into zones to provide safe exit and escape routes.

With the option of a central control system with simple connections and a user-friendly touch screen that ensures a building's safety will not be compromised.

- User friendly
- Touch screen
- Simple installation
- Centralised control

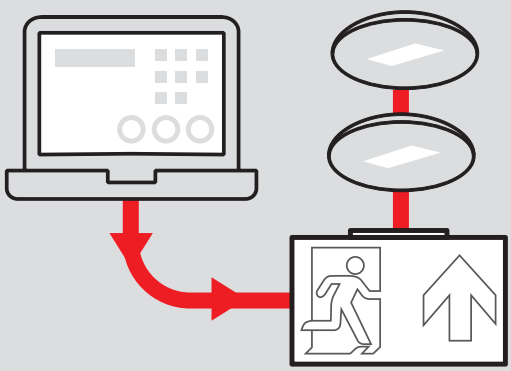
DALI
Ease of installation

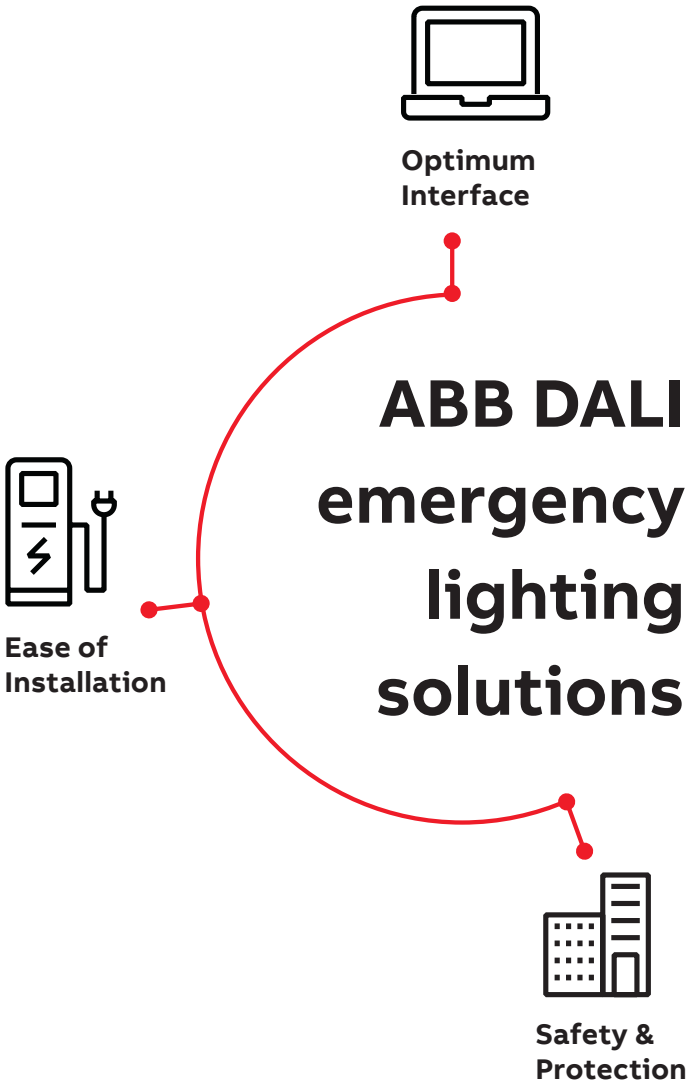
Touch screen to control, test & monitor emergency lighting



DALI
Optimum interface

Simple to group and easy to install





Safety & Protection

The ABB DALI emergency lighting range defines the safety of buildings and premises by offering either full control from a centralised device or with auto test functions on individual luminaires. The luminaires can be manually tested or tested at set and programmed intervals for full peace of mind. This type of monitoring will ensure that the safety of the building's occupants cannot be compromised with permanent records stored in a spreadsheet format.

DALI emergency lighting safety solutions to ensure:

- Safety
- Control
- Monitoring
- Test reports
- Luminaire status

DALI
Safety & protection

Ensuring building occupant safety

DALI is a cost effective solution.
It lowers maintenance costs in the long run and is easy to commission.

Legend & GID code reference

Tested and certified by an independent European certification agency such as DEKRA

Surface mounted luminaire

Recess mounted luminaire

Product comes with an LED light source

Self-contained: in case of power failure, the luminaire is battery powered

Maintained / non maintained luminaire

Rear plate

Suspension kit

Indicates ingress protection class (IP value)

Classification for the degree of protection provided by enclosures against external mechanical impacts

Indicates the viewing distance of the (illuminated) pictogram in metres

3 hours autonomy
(battery-powered light operating time)

DALI compatible product

NiCd Battery

Self-Test product

Insulation class II. This luminaire must not be earthed

Accessories GID Code reference

Order code	GID Code	Page No.
XEN2EG32	7TCA091350R4007	11
XEN3EG32	7TCA091350R4010	11
XEN6EG32	7TCA091350R4009	11
XEN5EG32	7TCA091350R4008	11
XEN602EG32	7TCA091350R4047	11
XEN603EG32	7TCA091350R4049	11
XEN606EG32	7TCA091350R4052	11
XEN605EG32	7TCA091350R4053	11
EG-T4SG	7TCA091360R0939	11
EG-T4VG	7TCA091360R0943	11
SR2-CCAW	7TCA091360R0880	12
XEN2W	7TCA091350R3509	13
XEN3W	7TCA091350R3510	13
XEN6W	7TCA091350R3512	13
XEN5W	7TCA091350R3511	13
XLF802W	7TCA091350R3526	13
XLF803W	7TCA091350R3527	13
OW/BCM	7TCA091360R0735	13
OW/BWA	7TCA091360R0737	13

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