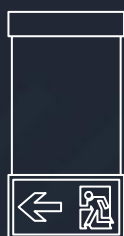
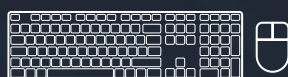


EMERGENCY LIGHTING SYSTEMS

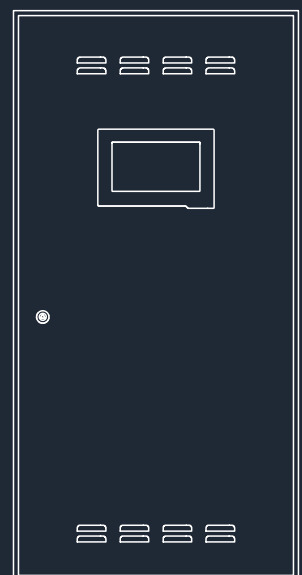
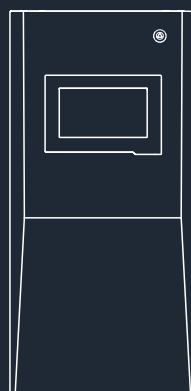
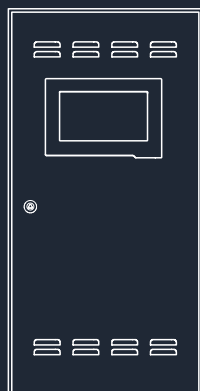
VER 19.1





FZLV II CENTRAL BATTERY SYSTEM

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FZLV II CENTRAL BATTERY SYSTEM

SYSTEM OVERVIEW

The AWEX's FZLV II is a group emergency lighting system in protection class III and intended to supply up to 160 emergency escape luminaires. Each of the luminaires connected to the system can operate independently in different switching modes. The luminaires are supplied with safe low nominal voltage of 48V through a two-wire cable. The communication between the luminaires and the system takes place via the supply line, without use of additional communication cabling. Each luminaire (address module) has its own unique identification address. This address is assigned logically in the system and can be assigned the appropriate control. The programmable controller shows the current status of the system and its components on the touch screen display. Using the display, each luminaire can be assigned its own description as well as its control can be changed (password required). The unit has a SD card slot to save the event log and system configuration.



TOUCH PANEL

7" touch panel with intuitive menu



WIZZARD CONFIG

single-button easy and fast auto-configuration



WEB SERVER

inbuilt web server

01.005
00-1A-121A-0143

UNIQUE ADDRESSES

factory pre-programmed addresses



IBMS

individual battery monitoring system



I/O MODULES

potential/potential-free input/output modules installed directly on the circuits



BACNET COMPATIBILITY

inbuilt BACnet compatibility with BMS



MODBUS COMPATIBILITY

inbuilt Modbus compatibility with BMS



FZLV II CENTRAL BATTERY SYSTEM

Four installed programmable relay outputs allow sending the system status messages outside. The system has a built-in RJ-45 connector to enable remote access through the Web server (web page) or Smart Visio software. The system can be expanded to include a number of external modules installed on the supply lines, and this group may include input modules, output modules and phase loss sensors.

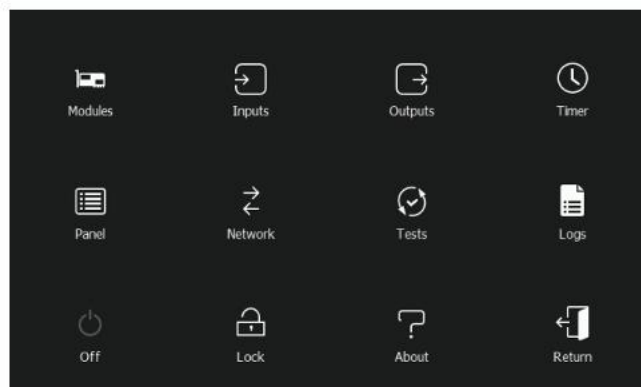
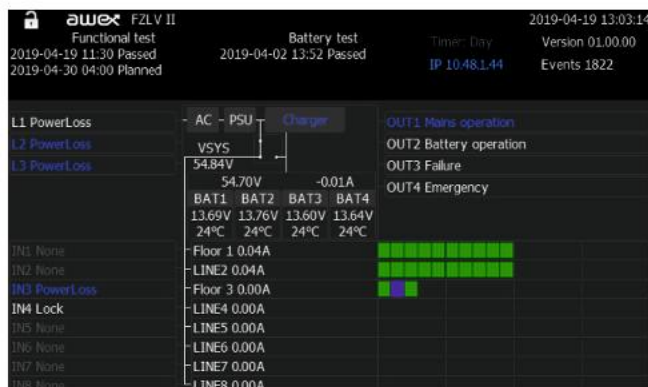


FZLV II CENTRAL BATTERY SYSTEM

CONTROL MODULE

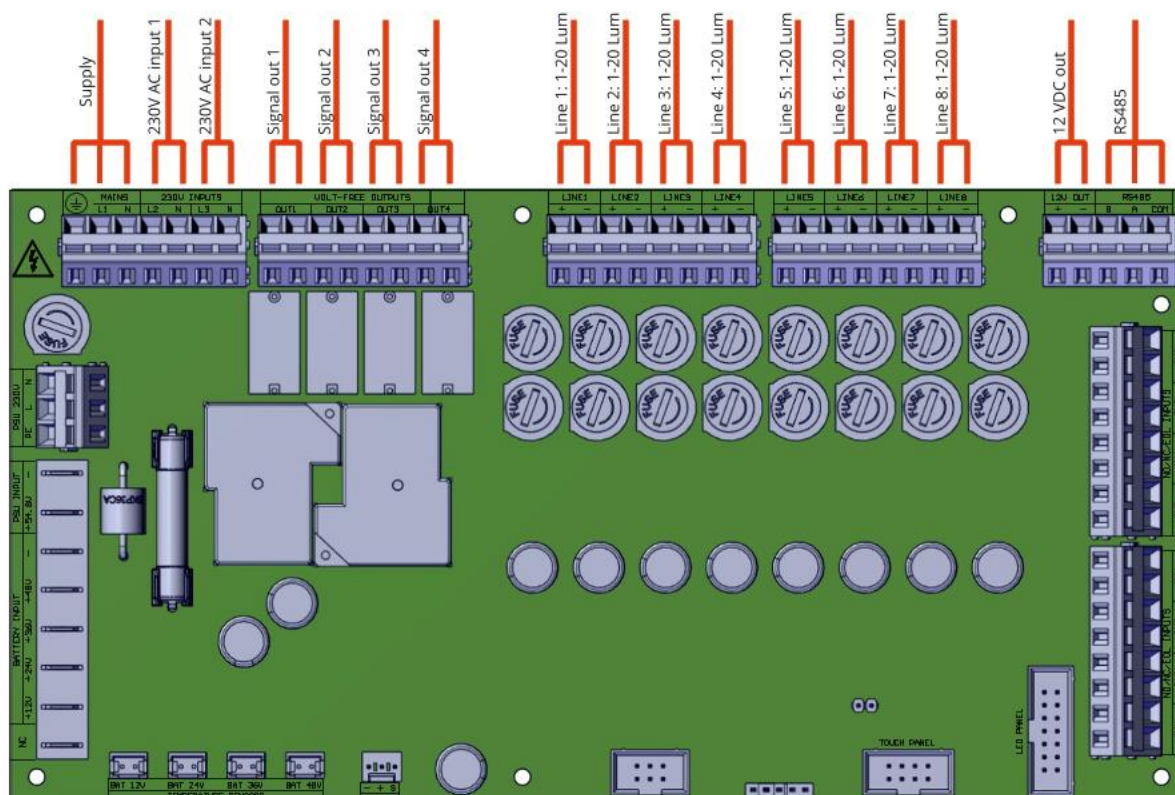
The system control module is equipped with a large touch screen panel which displays information on the current operating status of the system and luminaire circuits and enables setting up and modifying all system parameters via a graphic user interface. The statuses are displayed using text and graphics.

Each luminaire integrated within the system can be assigned a name to facilitate its identification.



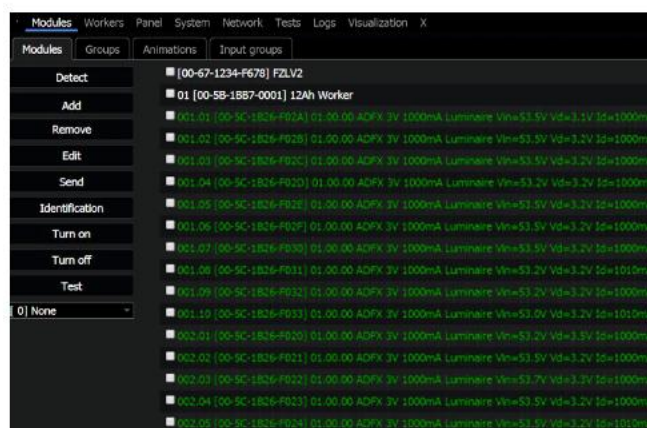
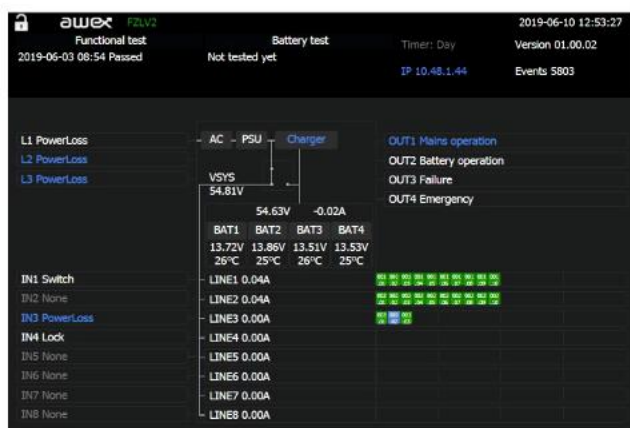
Features:

- Non-volatile memory to store all events and tests results for at least 2 years
- Control menu with language selection
- Registration of system configuration parameters and events on an SD card
- Standard Ethernet interface for remote control and monitoring via a web browser
- Integrated ModBUS protocol to communicate with a BMS
- System status display
- Automatic detection and integration of new luminaires in the system
- Automatic or manual activation of short or long tests of the whole system
- Operating mode and control configuration for each luminaire
- Setting brightness and emergency duration for each luminaire separately
- Assigning names to luminaires
- Assigning design addresses to luminaires
- Adjustable daytime/nighttime operation timer
- Connection of up to 8 phase loss sensors
- Built-in clock and calendar with DST adjustment and synchronization with a time server
- Remote luminaire diagnostics
- Remote notification of the system status by e-mail

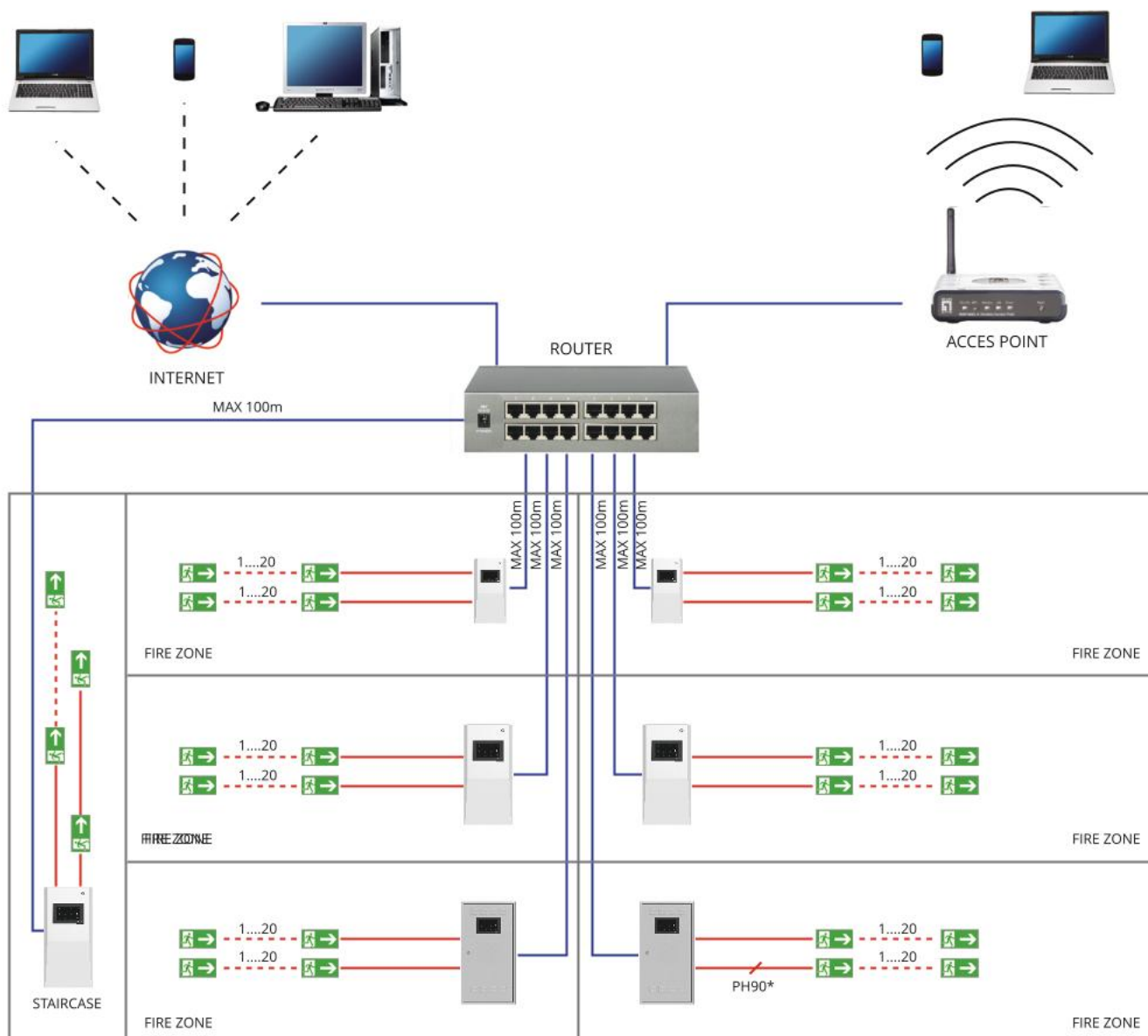


FZLV II CENTRAL BATTERY SYSTEM

The FZLV II system is equipped with an Ethernet port as standard. The connection enables remote checking of the status and setting up of the system via a dedicated website. This solution provides the user with the ability to control and monitor the system from a computer with a web browser installed. To check the system status using a computer, the user only needs to log in to the structural network of the facility or building where the CBS is installed. Each unit, circuit and luminaire can be monitored via the Internet. The access to the dedicated website is password protected.



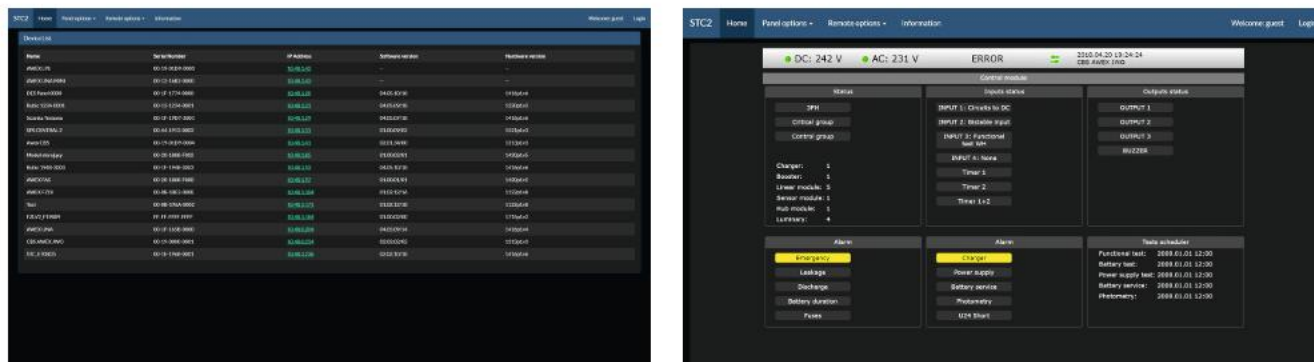
Remote control - example menu screens



FLZV II CENTRAL BATTERY SYSTEM

TOUCH CONTROLLER TC-02

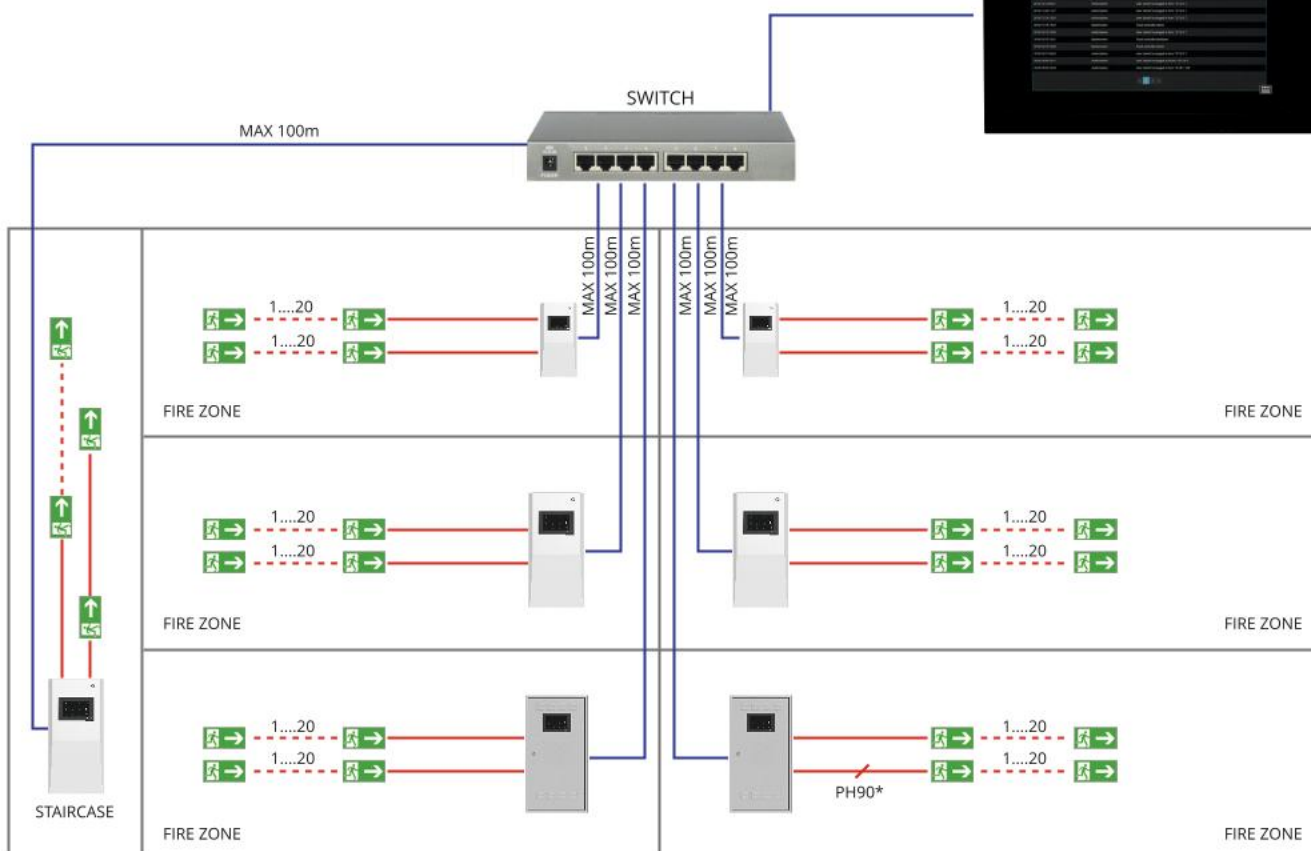
The TC-02 TOUCH controller enables remote control and monitoring of any number of units from a single location. The controller provides remote monitoring, configuration and reading of events for each connected FLZV II unit.



TC-02 TOUCH control panel – sample menu

Features:

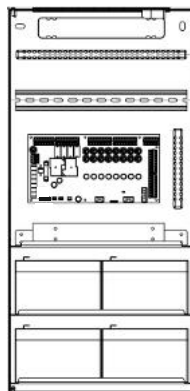
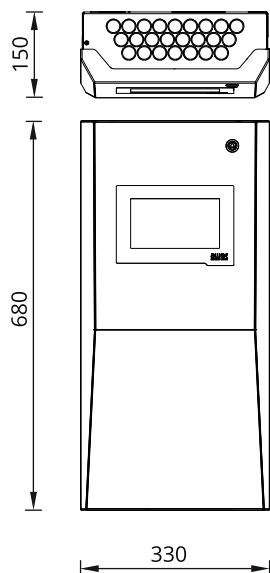
- Functional test/Battery test activation for each device
- Global system locking/unlocking
- Password-protected access to the controller
- Checking the status of individual systems
- Full remote configuration of all systems
- Active list of systems enabling quick status checks
- Four globally configured inputs and outputs
- Standard fitted Ethernet interface to enable remote control and visualization of the system via a web browser



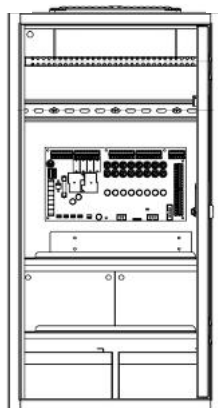
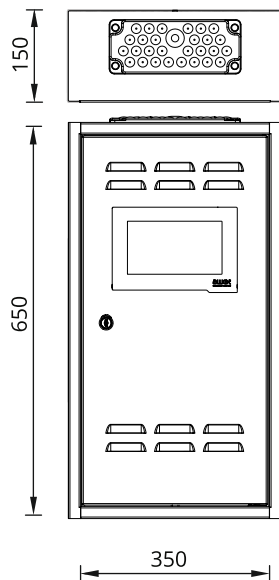
FZLV II CENTRAL BATTERY SYSTEM

COMPARISON OF FZLV II SYSTEMS

PREMIUM cabinet dimensions [mm]: FZLV II - 7,2Ah, FZLV II - 12 Ah

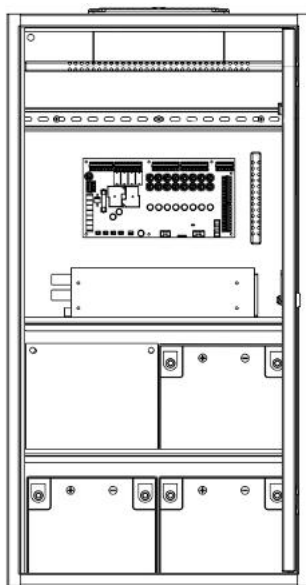
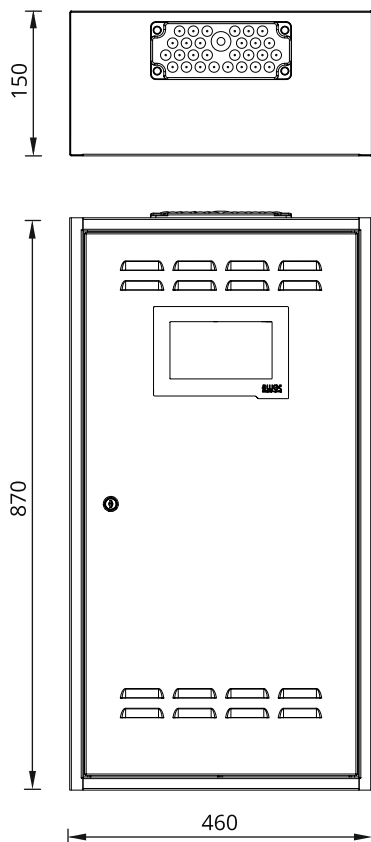


STANDARD cabinet dimensions [mm]: FZLV II - 7,2Ah, FZLV II - 12 Ah



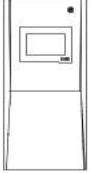
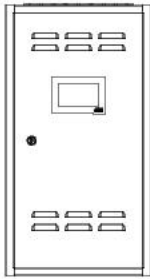
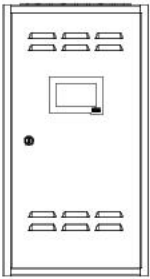
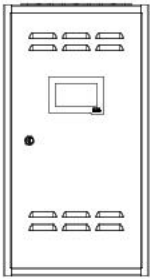
FZLV II CENTRAL BATTERY SYSTEM

STANDARD cabinet dimensions [mm]: FZLV II - 18Ah, FZLV II - 26 Ah, FZLV II - 33 Ah, FZLV II - 40 Ah



FZLV II CENTRAL BATTERY SYSTEM

TECHNICAL SPECIFICATIONS - FZLV II

Technical specifications	FZLV II - 7,2 Ah	FZLV II - 12 Ah	FZLV II - 18 Ah	FZLV II - 26 Ah	FZLV II - 33 Ah	FZLV II - 40 Ah
Protection class: I IP rating: IP20 Voltage: 48 V ± 20% Ambient temperature: -5°C to 30°C	     					
Supply voltage	AC: 230V ± 10%, 50/60Hz or DC: 216V ± 20%	AC: 230V ± 10%, 50/60Hz or DC: 216V ± 20%	AC: 230V ± 10%, 50/60Hz or DC: 216V ± 20%	AC: 230V ± 10%, 50/60Hz or DC: 216V ± 20%	AC: 230V ± 10%, 50/60Hz or DC: 216V ± 20%	AC: 230V ± 10%, 50/60Hz or DC: 216V ± 20%
Battery capacity	7,2Ah	12Ah	18Ah	26Ah	33Ah	40Ah
Max. power output⁽¹⁾						
1h	166W	280W	423W	600W	734W	890W
3h	64W	110W	168W	241W	309W	375W
8h	25W	46W	72W	106W	137W	167W
Number of circuits	4	4/8	8	8	8	8
Maximum circuit load	120W	120W	120W	120W	120W	120W
Additional connection						
Battery Sensor	4	4	4	4	4	4
LAN	1	1	1	1	1	1
BACnet/Modbus	1	1	1	1	1	1
12V power output	1	1	1	1	1	1
230V potential input	2	2	2	2	2	2
Potential free input ⁽²⁾	4	4/8	8	8	8	8
Signal output	4	4	4	4	4	4
Cable glands	24 x M20 or MC 35 Multigate	24 x M20 or MC 35 Multigate	MC 35 Multigate	MC 35 Multigate	MC 35 Multigate	MC 35 Multigate
Cabinet	S - Standard P - Premium	S - Standard P - Premium	S - Standard	S - Standard	S - Standard	S - Standard
Weight [kg]	18,5 kg	25,5 kg	45,0 kg	52,3 kg	60,0 kg	72,5 kg
Dimensions [mm]	S: 650x350x150 P: 680x330x150	S: 650x350x150 P: 680x330x150	S: 870x460x220	S: 870x460x220	S: 870x460x220	S: 870x460x220
Code for Main Central	FZLV2/7/4/S FZLV2/7/4/P	FZLV2/12/4/S FZLV2/12/4/P FZLV2/12/8/S FZLV2/12/8/P	FZLV2/18/8/S	FZLV2/26/8/S	FZLV2/33/8/S	FZLV2/40/8/S
Code for Sub-Central⁽³⁾ (without screen)	FZLV2/7/4/S/W FZLV2/7/4/P/W	FZLV2/12/4/S/W FZLV2/12/4/P/W FZLV2/12/8/S/W FZLV2/12/8/P/W	FZLV2/18/8/S/W	FZLV2/26/8/S/W	FZLV2/33/8/S/W	FZLV2/40/8/S/W

⁽¹⁾ loss of power in luminaire supply cables is not considered

⁽²⁾ number of potential free inputs depends on the number of circuits

⁽³⁾ works in cooperation with the Main Central

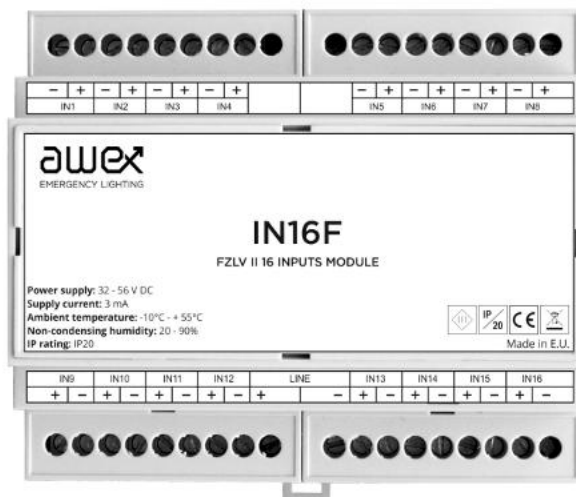
FZLV II CENTRAL BATTERY SYSTEM

ACCESSORIES

IN16F EXTERNAL MODULE

The IN16F module is the input device intended for the co-operation between building devices and the AWEX Central Battery FZLV II system. It is intended for the operation on the central battery FZLV II circuits. The IN16F modules are equipped with 16 monitored potential free inputs.

The module has a data transmission by circuit power supply. It is possible to connect a panel with buttons and LEDs to signal and test the operation of the inputs.



Features:

- communication with FZLV II central unit via power supply cable
- up to 16 potential-free inputs
- possible to change single input modes: active, inactive, short-circuit, break
- indicated status of each single input on central unit
- assembly on DIN rail (TH-35)
- possible to connect a panel with buttons and LEDs
- the module can be powered by FZLV II system only.

Technical specifications

Power supply	32 - 56 V DC
Supply current	3 mA
Insulation class	III
IP rating	IP21
Operating temperature range	from -10°C to 55°C
Free potential inputs	16
Input function	active, inactive, short-circuit, break
Data transmission	power line
Assembly	DIN rail
Dimensions (LxWxD) mm	106x90x57
Connectors	2,5mm ²

PH3F EXTERNAL MODULE

The PH3F sensor module is used for monitoring of 230V AC potential signals from primary lighting switches in order to activate an emergency luminaire control group along with the primary lighting. The module has 3 potential inputs with programmable logic.

The inputs can be used to monitor individual circuit protections. The PH3F module can also serve as a phase loss sensor. The control inputs can be assigned the recovery delay function. The module uses a power line for communication.



Features:

- monitoring of primary lighting switches or functioning as a phase loss sensor
- communication with FZLV II central unit via power supply cable
- programmable inversion of the action logic of individual inputs
- possibility of monitoring individual primary lighting protections
- test button
- the module can be powered by FZLV II system only
- status indicators

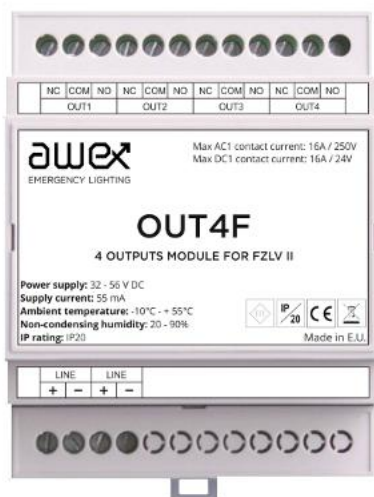
Technical specifications

Power supply	32 - 56 V DC
Supply current	3,0 mA
Insulation class	III
IP rating	IP21
Operating temperature range	from -10°C to 55°C
Potential inputs	Three isolated inputs
Phase loss control	Monitoring of up to 3 phases
Data transmission	power line
Switching threshold	as per 60598-2-22
Dimensions (LxWxD) mm	36x90x58
Connectors	2,5mm ²

FZLV II CENTRAL BATTERY SYSTEM

OUT4F EXTERNAL MODULE

The OUT4F module is the universal output device intended for the co-operation between electrical device example, fire-fighting devices and the AWEX Central Battery FZLV II system. It is intended for the operation on the central battery FZLV II circuits.



The OUT4F modules are equipped with 4 relay outputs. The module uses a power line for communication. The device can cooperate with emergency exit doors, smoke venting systems, automatic extinguishing systems, and other devices intended for the fire protection.

Features:

- communication with FZLV II central unit via power supply cable
- 4 relay outputs
- assembly on DIN rail (TH-35)
- the module can be powered by FZLV II system only.

Technical specifications

Power supply	32 - 56 V DC
Supply current	55 mA
Insulation class	III
IP rating	IP21
Operating temperature range	from -10°C to 55°C
Relay outputs	4
Outputs parameters	AC contact load capacity: 16A / 250 V DC contact load capacity: 16A / 24 V
Data transmission	power line
Assembly	DIN rail
Dimensions (LxWxD) mm	71x90x57
Connectors	2,5mm ²

DYNAMIC ADDRESS MODULE ADFD

ADFD address module is used to monitor and control dynamic luminaires. The module works with LED light sources manufactured by AWEX. It is designed for use in circuits supplied from the FZLV II system (connector

The ADFD module is installed directly in the dynamic luminaires and supports light sources manufactured by AWEX (up to 6W), which are connected using the block marked "Display".



Features:

- each ADFD module has its unique address
- automatic search for connected modules by FZLV II control unit
- possibility to program any dynamic scenario
- automated testing of modules
- remote module firmware update
- communication with FZLV II system over the supply line

Technical specifications

Supply voltage	range: 32-56 V DC
Input current	Max 195 mA
Output voltage	up to 4.2 VDC
Mounting	In luminaires manufactured by AWEX

FZLV II CENTRAL BATTERY SYSTEM

EMERGENCY ESCAPE LUMINAIRES

AXN FZLV series

Luminaire type	Surface-mounted, ceiling, wall, C, R, O, U, A optics
Light source	PowerLED 1W, 2W, 3W or 6W (SE)
IP Rating	IP42 or IP65

AXP FZLV series

Luminaire type	Recessed-mounted, ceiling, wall, C, R, O, U, A optics
Light source	PowerLED 1W, 2W, 3W
IP Rating	IP20 or IP65/20

LOVATO II FZLV series

Luminaire type	Surface-mounted, ceiling, C, R, O, U, A optics
Light source	PowerLED 1W, 2W, 3W
IP Rating	IP41

LOVATO P FZLV series

Luminaire type	Recessed-mounted, ceiling, C, R, O, U, A optics
Light source	PowerLED 1W, 2W, 3W
IP Rating	IP20

EYE LED FZLV series

Luminaire type	Recessed-mounted, ceiling, R and U optics
Light source	PowerLED 1W, 2W, 3W
IP Rating	IP20

SPY FZLV series

Luminaire type	Inside the primary luminaire
Light source	PowerLED 1W, 2W, 3W
IP Rating	IP20

MICRO SPOT FZLV series

Luminaire type	Inside the primary luminaire
Light source	PowerLED 1W, 2W, 3W
IP Rating	IP20

OUTDOOR LED FZLV series

Luminaire type	Surface-mounted, wall
Light source	LED 3x1W
IP Rating	IP66

EXIT FZLV series

Luminaire type	Surface/Recessed-mounted, ceiling, wall
Light source	LED 1W, 2W, 3W
IP Rating	IP65

HELIOS FZLV series

Luminaire type	Surface-mounted, ceiling, wall
Light source	LED 3W, 3x1W, 6x1W
IP Rating	IP42/IP65

TIGER FZLV series

Luminaire type	Surface/Recessed-mounted, ceiling, wall
Light source	LED 3W
IP Rating	IP22

SK-8 FZLV series

Luminaire type	Surface-mounted, ceiling, wall
Light source	LED 1W, 2W, 3W
IP Rating	IP44

INFINITY II FZLV series

Luminaire type	Surface-mounted, wall
Light source	LED 3W
IP Rating	IP40

AXNC, AXNR, AXNO, AXNU, AXNA

	24V DC	LED	IP42	IP65
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AXPC, AXPR, AXPO, AXPU, AXPA

	24V DC	LED	IP20	IP65/20
---	--------	-----	------	---------



LV2C, LV2R, LV2O, LV2U, LV2A

	24V DC	LED	IP41	
---	--------	-----	------	--



LVPC, LVPR, LVPO, LVPU, LVPA

	24V DC	LED	IP20	
---	--------	-----	------	--



EY, EYR, EYU, EYK, EYKR, EYKU

	24V DC	LED	IP20	
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SP2

	24V DC	LED	IP20	
--	--------	-----	------	--



SP2

	24V DC	LED	IP20	
---	--------	-----	------	--



ODB

	24V DC	LED	IP66	
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ETS, ETE, ETL

	24V DC	LED	IP65	
---	--------	-----	------	--



HL, HHP, HW

	24V DC	LED	IP42	IP65
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TL

	24V DC	LED	IP22	
---	--------	-----	------	--



SK-8

	24V DC	LED	IP44	
---	--------	-----	------	--



IF2BWD

	24V DC	LED	IP40	
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FZLV II CENTRAL BATTERY SYSTEM

ARROW N FZLV series

Luminaire type	Surface-mounted, ceiling, O or C optics
Light source	LED 1W, 2W, 3x1W
IP Rating	IP40

ARROW P FZLV series

Luminaire type	Recessed-mounted, ceiling, O or C optics
Light source	LED 1W, 2W, 3x1W
IP Rating	IP40

ARNO, ARNC, ARNS

	24V DC	LED	IP40
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ARPO, ARPC, ARPS

	24V DC	LED	IP40
---	-----------	-----	------



*current list of CNBOP fire protection approvals is available at www.awex.eu

**current list of products with Kitemark and ENEC is available at www.awex.eu

FZLV II CENTRAL BATTERY SYSTEM

ESCAPE ROUTE LUMINAIRES

SK-8 FZLV series

Luminaire type	Surface-mounted, ceiling
Light source	LED 1W, 2W
IP Rating	IP44

ARROW N FZLV series

Luminaire type	Surface-mounted, wall, ceiling
Light source	LED 1W, 2W
IP Rating	IP40

ARROW P FZLV series

Luminaire type	Recessed-mounted, ceiling
Light source	LED 1W, 2W
IP Rating	IP40

TWINS FZLV series

Luminaire type	Surface-mounted, wall, ceiling
Light source	LED 1W
IP Rating	IP41

PLEXI LED FZLV series

Luminaire type	Recessed-mounted, ceiling
Light source	LED 1W
IP Rating	IP20

ESCAPE FZLV series

Luminaire type	Surface-mounted, ceiling
Light source	LED 1W
IP Rating	IP20

TIGER FZLV series

Luminaire type	Surface/Recessed-mounted, ceiling
Light source	LED 1W
IP Rating	IP22

TIGER P FZLV series

Luminaire type	Surface/Recessed-mounted, ceiling
Light source	LED 1W
IP Rating	IP22

TIGER DS FZLV series

Luminaire type	Surface/Recessed-mounted, ceiling
Light source	LED 1W
IP Rating	IP22

HELIOS FZLV series

Luminaire type	Surface-mounted, ceiling
Light source	LED 1W
IP Rating	IP42/IP65

HELIOS P FZLV series

Luminaire type	Surface-mounted, ceiling
Light source	LED 1W
IP Rating	IP42/IP65

HELIOS DS FZLV series

Luminaire type	Surface-mounted, ceiling
Light source	LED 1W
IP Rating	IP42/IP65

EXIT FZLV series

Luminaire type	Surface/Recessed-mounted*, wall, ceiling**
Light source	LED 1W, 2W
IP Rating	IP65

*requires an accessory for recessed mounting

**requires an accessory - plexi glass

SK-8			
	24V DC	LED	IP44

ARN			
	24V DC	LED	IP40

ARP			
	24V DC	LED	IP40

TW			
	24V DC	LED	IP41

PL			
	24V DC	LED	IP20

E			
	24V DC	LED	IP20

TL			
	24V DC	LED	IP22

TPL			
	24V DC	LED	IP22

TSL			
	24V DC	LED	IP22

HL			
	24V DC	LED	IP42 IP65

HPL			
	24V DC	LED	IP42 IP65

HDL			
	24V DC	LED	IP42 IP65

ETE			
	24V DC	LED	IP65



FZLV II CENTRAL BATTERY SYSTEM

SCREEN FZLV series

Luminaire type	Surface-mounted, wall
Light source	LED 3x1W, 3.2W, 2x3.2W
IP Rating	IP40

SCREEN DS FZLV series

Luminaire type	Surface-mounted, ceiling
Light source	LED 3x1W, 3.2W, 2x3.2W
IP Rating	IP40

INFINITY II A FZLV series

Luminaire type	Surface/Recessed-mounted*, ceiling
Light source	LED 1W, 2W
IP Rating	IP40

*requires an accessory for recessed mounting

INFINITY II A FZLV series

Luminaire type	Surface/Recessed-mounted*, wall
Light source	LED 1W, 2W
IP Rating	IP40

*requires an accessory for recessed mounting

INFINITY II A FZLV series

Luminaire type	Surface/Recessed-mounted*, ceiling
Light source	LED 1W, 2W
IP Rating	IP40

*requires an accessory for recessed mounting

INFINITY II B FZLV series

Luminaire type	Surface/Recessed-mounted*, wall
Light source	LED 1W, 2W
IP Rating	IP40

*requires an accessory for recessed mounting

SC30, SC40, SC60

	24V DC	LED	IP40
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SCS30, SCS40, SCS60

	24V DC	LED	IP40
---	--------	-----	------



IF2ACS

	24V DC	LED	IP40
---	--------	-----	------



IF2AWS

	24V DC	LED	IP40
---	--------	-----	------



IF2ALS

	24V DC	LED	IP40
---	--------	-----	------



IF2BWS

	24V DC	LED	IP40
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*current list of CNBOP fire protection approvals is available at www.awex.eu

**current list of products with Kitemark and ENEC is available at www.awex.eu



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