FiSCHER
SICHERHEITSTECHNIK
seit 1976

INSiLIA 2
More than just a fire compartment supply!

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INSiLIA2 – more than just a fire compartment supply

» Thanks to SMART technology, emergency luminaires can be operated in mixed operation on the final circuits

» Optional I/O modules can be used on the final circuit like emergency luminaires. This creates the possibility of monitoring general lighting luminaires without additional cabling

» Maximum load 120 W per final circuit

» Supply of up to 320 emergency luminaires

» 48 V system voltage allows up to 500 m final circuit length

» Unique addresses: automated address allocation via one unique address

Mixed operation in each final circuit

SMART
TECHNOLOGY

SELV 48 V

01.01	01.02	01.20
02.01	02.02	02.20
03.01	03.02	03.20
04.01	04.02	04.20
05.01	05.02	05.20
06.01	06.02	06.20
07.01	07.02	07.20
08.01	08.02	08.20
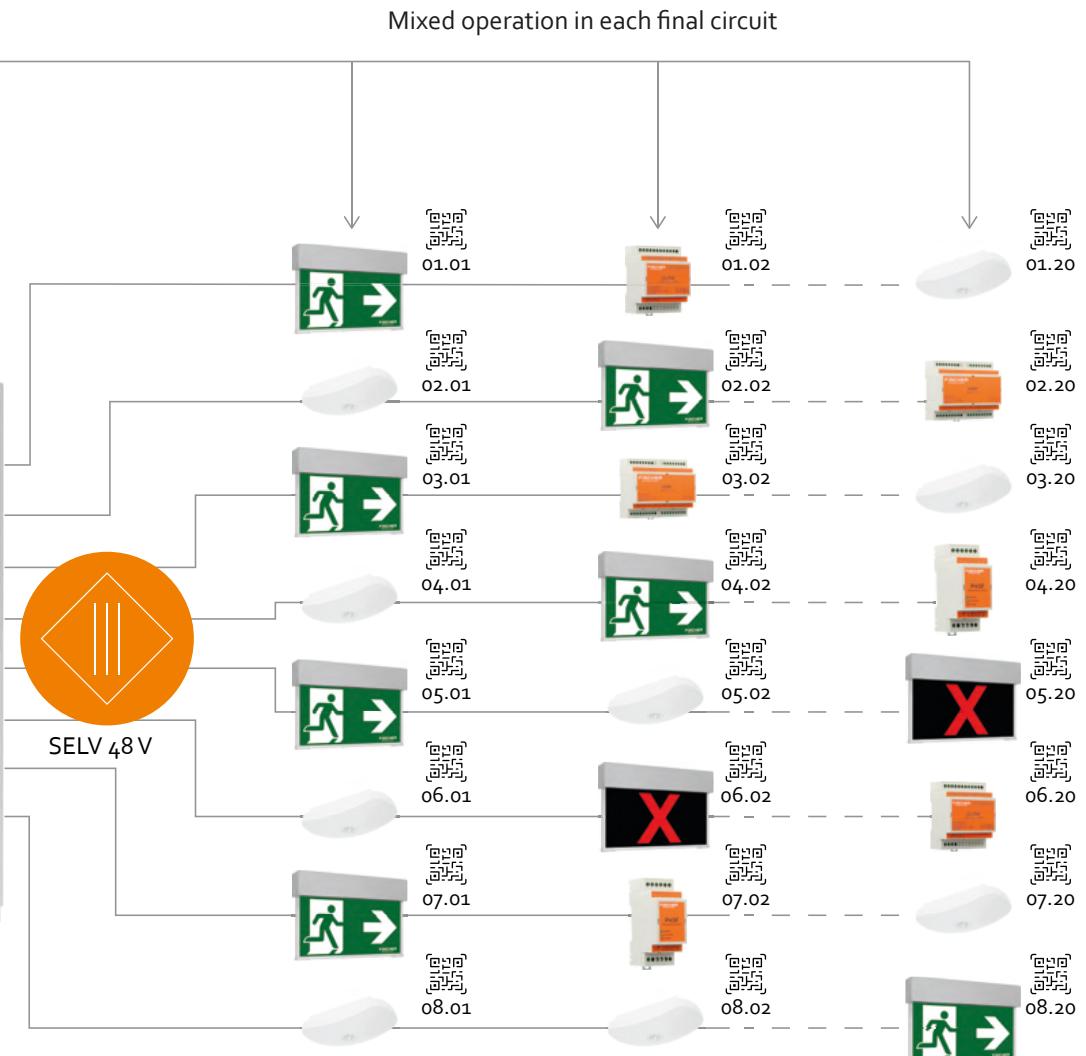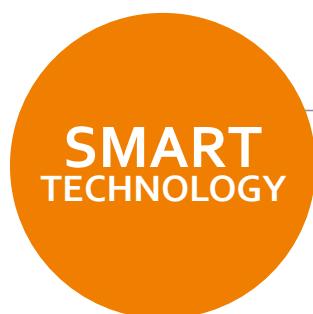
16 — 16 final circuits

20 — 20 luminaires per final circuit

320 — max. 320 luminaires / INSiLIA2

I/O — in the final circuit

— unique adresses

4

Wizard guarantees an easy start-up

As with its predecessor, the INSiLIA2 is started up automatically via the INSiLIA WIZARD.

Follow on-screen instructions

Fastest commissioning on the market

» The luminaires installed on the circuits are recognized by the software according to their function

» In 7 simple steps, all connected escape sign luminaires are switched to continuous operation and all emergency luminaires are switched to stand-by mode

» The basic configuration takes place within 5 minutes

» The installer can name the luminaires in a free text field

| Commissioning time of LPS systems					
Quantity	1 pcs	2 pcs	5 pcs	10 pcs	20 pcs
INSiLIA2	5 minutes	10 minutes	25 minutes	50 minutes	100 minutes
Competition	15 minutes	30 minutes	75 minutes	150 minutes	300 minutes

Operation

When it comes to operation, INSiLIA has always been able to set the standard. Evolution instead of revolution was therefore the requirement for the INSiLIA2. The known elements have been improved where necessary. Others have been added based on our experiences.

» Home screen: displays the most important parameters of the system status directly and clearly arranged
» Touch operation: sensitive 5,7" color display with high resolution, user interface in icon design
» TabView: facilitates the overview and speeds up the configuration
» Web browser/network connection: already included in the standard
» Status display of all luminaires and modules
   (LED on ■ , stand-by-mode ■ , deactivated ■ , switching status I/O module ■)
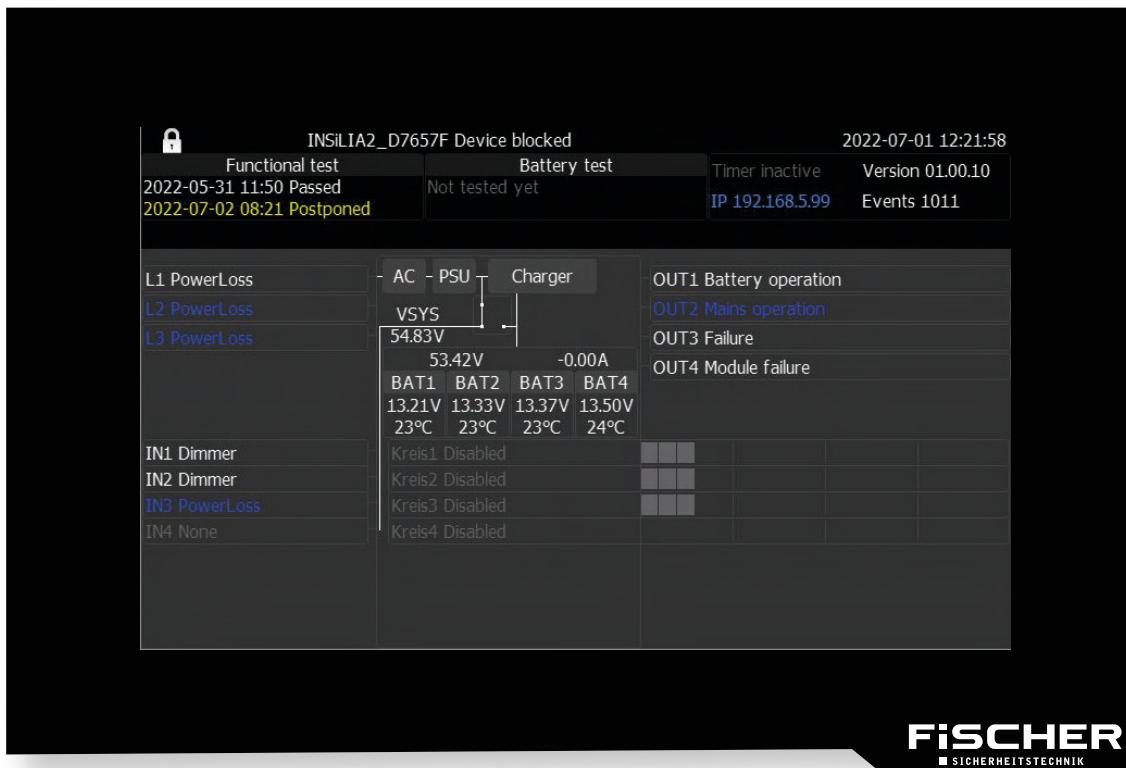
Home screen
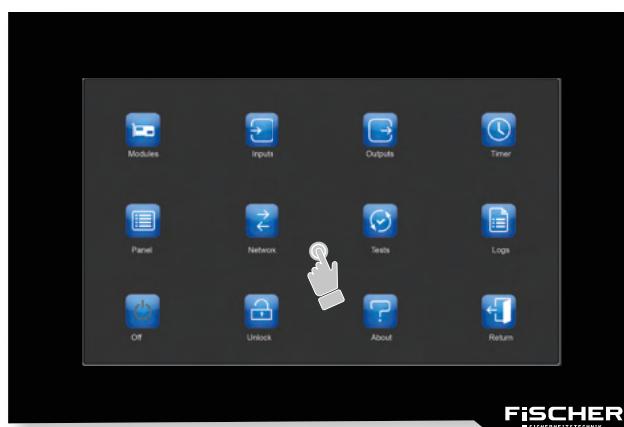
Touch display
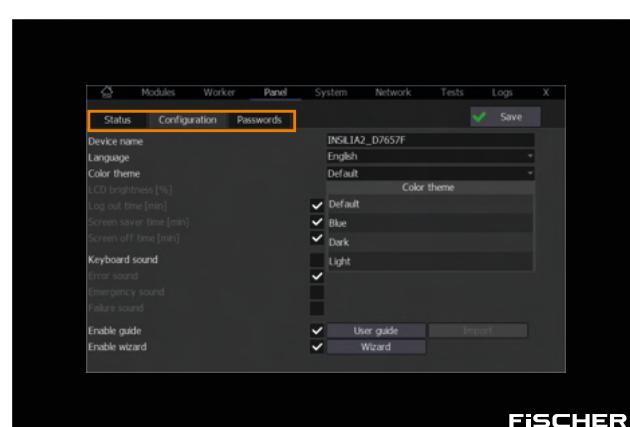
TabView

Optional I/O modules

The data transmission between the optional I/O modules and the INSiLIA2 system takes place via the same cable that also ensures the power supply. The modules are connected directly in the final circuit.

The OUT4F module is a universal output module for operation between electrical devices, the building management system, and the central battery system INSiLIA2. The module has 4 relay outputs for control or signal transmission between any devices.

The IN16F module is equipped with inputs for communication between building installation devices and the INSiLIA2

central battery system. The module has 16 floating inputs with the ability to change the triggering logic.

The PH3F module is used to monitor 230V AC potential signals. Depending on the user's requirements, the device can be used as a phase failure sensor or to control the emergency lighting using a switch. It has 3 potential inputs with programmable triggering logic. The inputs can be programmed to separately monitor the individual protection functions of the general lighting circuits or as a 3PH phase failure monitor. The restart delay function can be assigned to each of the three inputs.

| Technical specifications	output module OUT4F	input module IN16F	phase guard PH3F
Inputs	-	16, potential-free to connect	3 separate inputs
Outputs	4	-	-
Functions	normally open (NO) or normally closed (NC)	active, inactive, short circuit, interval	switch monitoring, monitoring of 3 phases
Communication	via the supply line	via the supply line	via the supply line
Mounting	TH-35 DIN rail	TH-35 DIN rail	TH-35 DIN rail
Dimensions (L x W x D)	71 x 90 x 57 mm	106 x 90 x 57 mm	36 x 90 x 58 mm
Special features	» Monitoring of switches or the mains supply » 4 programmable relay outputs » Easy to install on TH-35 DIN rail	» Up to 16 programmable control inputs (NO, NC, RSER, RPAR) » Easy to install on TH-35 DIN rail	» Monitoring of switches or of the mains supply » Programmable input logic with restart delay » LED status display of each input » Easy to install on TH-35 DIN rail

Situation 1

Situation 2

Dynamic escape route guidance

Traditional escape sign luminaires with a static function guide the way in an emergency. However, there are situations, such as a fire, in which the static display of the same escape route can be disadvantageous. Namely exactly when it is already full of smoke. In this case, it is safer to use dynamic escape route guidance, which can automatically adapt to the dangerous situation and indicate an alternative escape direction. If escape sign luminaires that are specially designed for dynamic escape route guidance are operated on the INSiLIA2 series, the system can switch the pictogram displayed on the luminaires depending on the dangerous situation.

The pictogram change of the luminaires is switched by the INSiLIA2 system according to information for example from the building management system. The system can display different escape route directions or a blocking symbol via the luminaires. The flashing function of the pictograms, which can be set on request, increases the attention of fleeing people even more.

Overview of pictograms that can be displayed:

Situation 1- Normal operation
Escape sign luminaires ❶ and ❷ point in the direction of the shortest escape route.

Situation 2- Fire in the escape route
Escape sign luminaire ❶ points in the direction of the safe escape route.
Escape sign luminaire ❷ blocks the unsafe path.
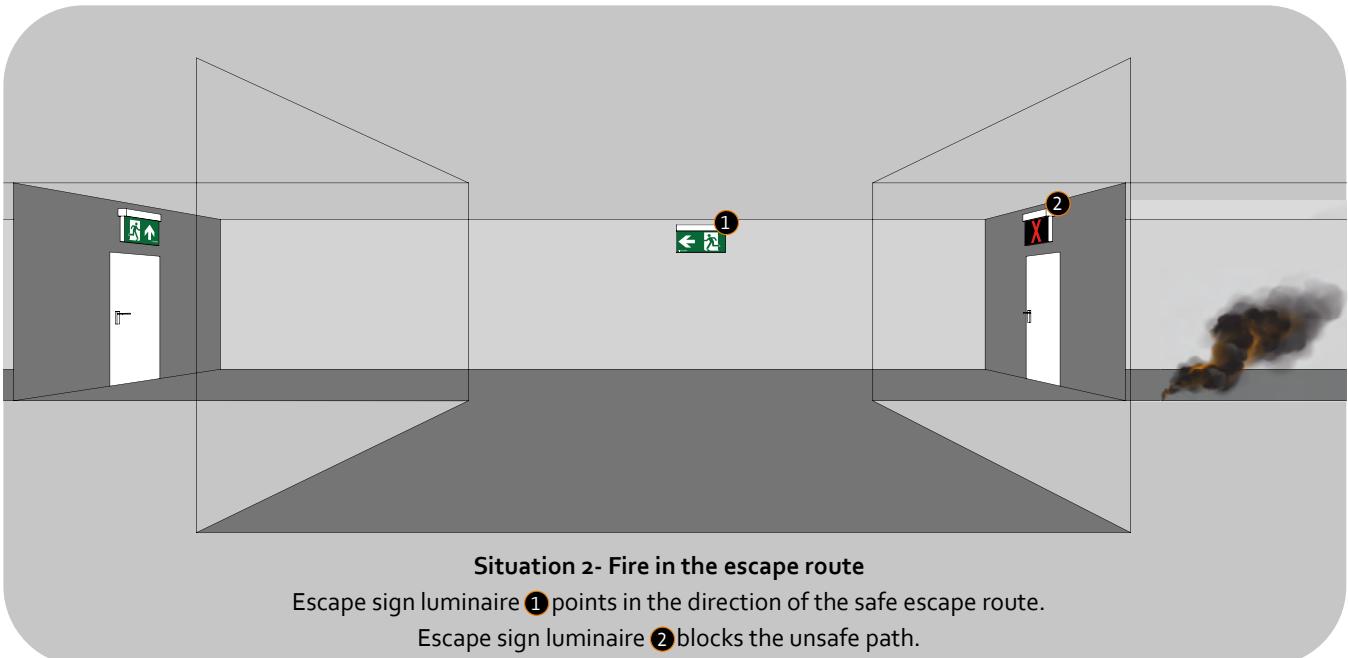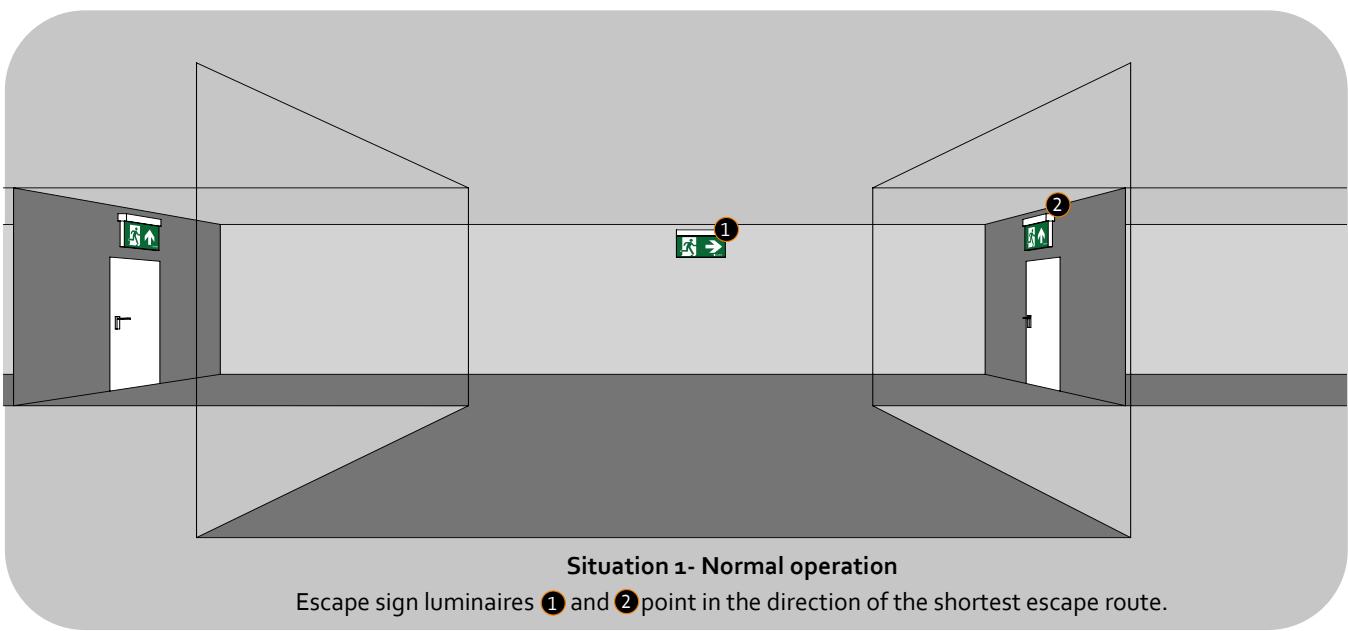
DIMMABLE EMERGENCY AND SAFETY LUMINAIRES
IN PLACES OF PUBLIC ASSEMBLY

In operationally darkened rooms, for example movie theaters, auditoriums, theaters, and sports stadiums, escape sign luminaires in continuous operation with full illumination of the pictogram with 500 cd would considerably hinder the paying guests from watching the respective performances undisturbed.

To avoid such disturbances, it makes sense to dim the responsible luminaires. For this reason systems for central monitoring and supply of emergency and safety lighting from FiSCHER have a function that allows compatible luminaires to be dimmed individually. The illumination of the pictograms remains uniform even in dimmed condition and a recognizability in an emergency is guaranteed.

More on the website:

FiSCHER

COMPATIBLE SYSTEMS

ZB2

INSILIA
24 V

INSILIA2
48V

ECC3
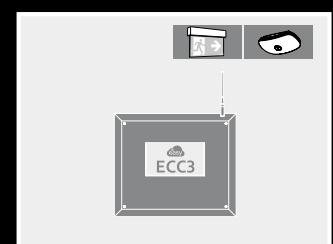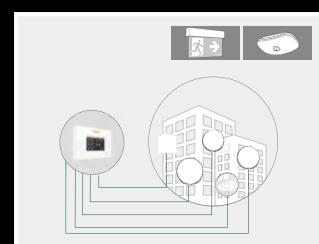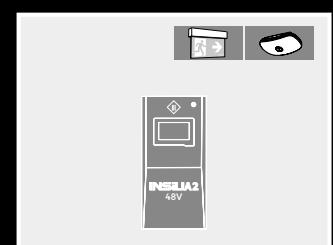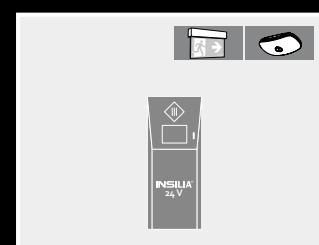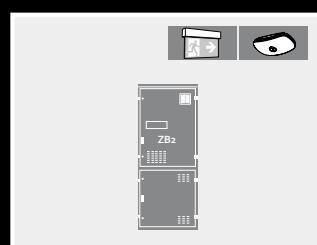
Smart touch controller

Used to control multiple INSiLIA LPS systems from a central location.

Requirements

» The INSiLIA systems to be monitored are in a separately formed network
» We recommend using the INSILIA-VM to ensure the supply even in the event of a power failure

Technical specifications

» 5,7" TFT Color – Touch – LCD
» RJ-45 Ethernet port
» Autonomy time in the event of a power failure
» Operating temperature +5 °C up to +35 °C

Housing

» Material: metal
» Dimensions (HxWxD): 200 x 300 x 41 mm
» Protection class: II
» Degree of protection: IP20

Function

» Running function and battery tests
» Turn system on/off
» Checking status of individual systems


SYSTEM 1

SYSTEM 2

SYSTEM n
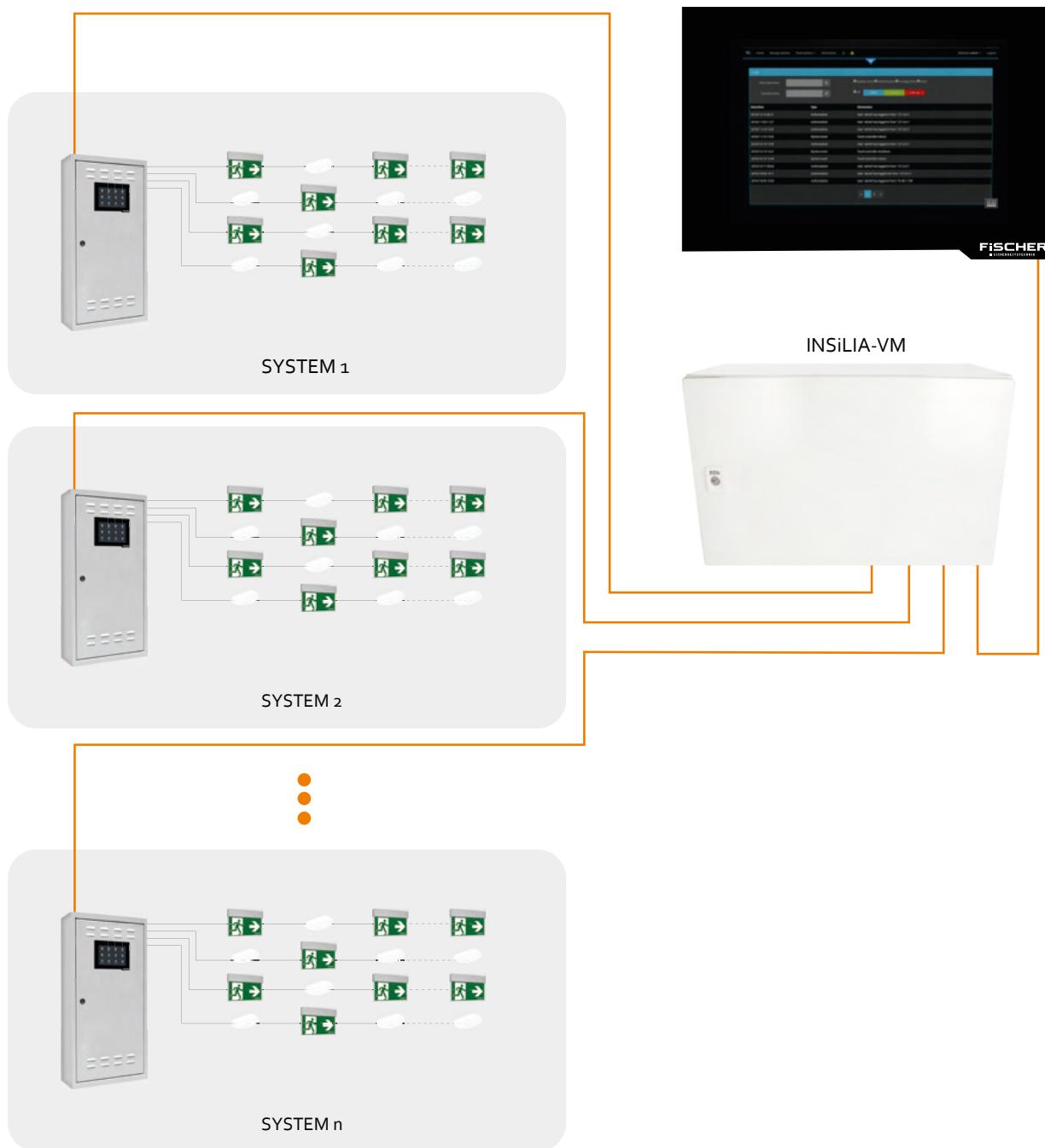
INSiLIA-VM

easy©-NCM

With FiSCHER easy©-NCM, the emergency lighting cloud monitoring, you can connect your INSiLIA2 to the FiSCHER data centre via the Internet of Things (IoT) using a mobile phone connection. Once connected to the data centre, you can access the status of the system from any location via an internet-capable end device with a web browser. In this way, you are immediately informed about the operating status and any fault messages. The use of easy©-NCM is made possible by installing the optional FMS-NB-IOT-IN telecommunication system. In this way, you can either monitor systems in several properties yourself, or delegate the necessary tasks to us by means of a FiSCHER Maintenance Contract Plus. Daily on-site checks are only required when necessary to optimise personnel costs and maximise operational safety.

easy©-NCM does not need access to company or building networks!

FiSCHER Maintenance Contract Plus protects you and we take over the necessary action

Integrated single battery monitoring

It is essential that batteries work reliably. If they do not, emergency lighting or the safety power supply fail to perform their duties in an emergency. Even if not yet required by standards, the monitoring of each individual battery block delivers valuable additional information to timely and appropriately respond to impending damage and failures. Therefore, the current draft of the European CENELEC standard prEN 50171:2019 recommends battery monitoring systems that can monitor individual blocks.

The INSiLIA2 comes with an integrated single block monitoring already in the standard.
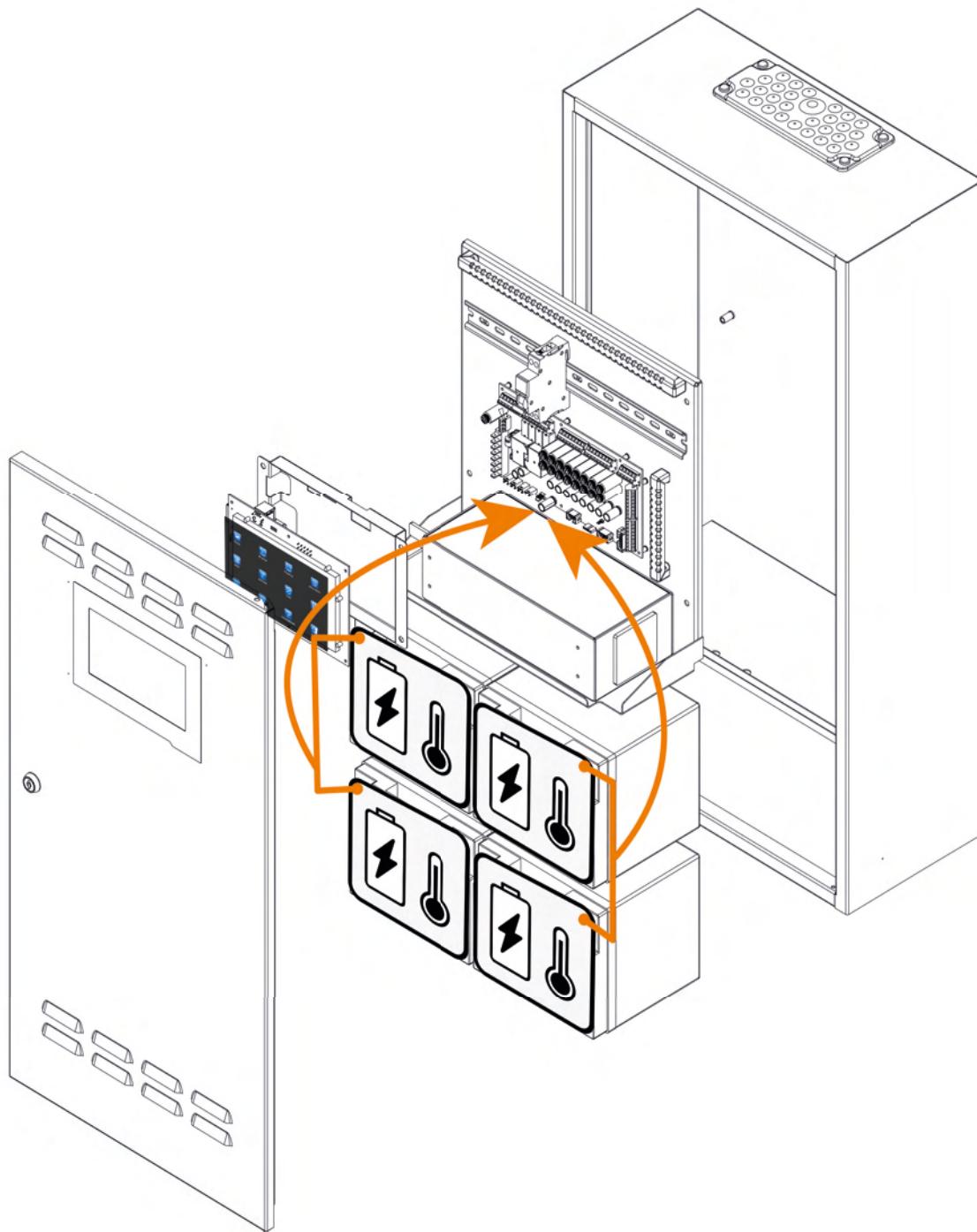
INSiLIA2 E30

Function maintenance-E30

The functional integrity was verified by a type test at the independent Fire Protection Competence Center of the Materialprüfungsamt Universität Stuttgart.

Technical specifications	INSiLIA-40-8.E30	INSiLIA-40-16.E30
Dimensions (H x W x D mm):	1219 x 669 x 425,5	2069 x 669 x 425,5
Weight (kg) :	79,5	312
Ambient temperature:	+5 °C up +30 °C	+5 °C up +30 °C
Protection class:	II	II
Degree of protection:	IP42	IP42
IK-labelling:	IK10	IK10
Fire resistance:	30 min	30 min
Color:	white, similar to RAL 9010	white, similar to RAL 9010

INSiLIA 2

System variants

Technical specifications		INSiLIA2-7-4 Premium	INSiLIA2-12-4 Premium	INSiLIA2-12-4	INSiLIA2-18-8
Dimensions (mm)	Height	680	680	650	870
	Width	330	330	350	460
	Depth	150	150	150	220
Battery nominal capacity		7,2 Ah	12 Ah	12 Ah	18 Ah
Battery life according to EURO BAT (@ 20 °C)		5 years	5 years	5 years	5 years
Number of final circuits		4	4	4	8
Maximum connected load (W)	1 h	166	280	280	423
	3 h	64	110	110	168
	8 h	25	46	46	72
Weight (kg)		18,5	25,5	25,5	45,0
Supply voltage		230 V AC 50/60 Hz ±10% or 216 V DC ±20%			
Degree of protection		IP 20			
Protection class		I			
Output voltage		48 V DC ±20%			
Max. Ø Mains supply		2,5 mm²			
Max. Ø End circuit length		2,5 mm²			
Max. End circuit length		500 m			
Max. power per end circuit		120 W			
Battery compartment in cabinet		yes			
Single battery monitoring		temperature and voltage			
Operating temperature		-5 °C up to 30 °C			

Technical specifications

		INSiLIA2-33-8	INSiLIA2-40-8	INSiLIA2-40-16
Dimensions (mm)	Height	870	870	1500
	Width	460	460	490
	Depth	220	220	280
Battery nominal capacity		33 Ah	40 Ah	40 Ah
Battery life according to EURO BAT (@ 20 °C)		10 years	10 years	10 years
Number of final circuits		8	8	16
Maximum connected load (W)	1 h	734	890	2 x 890
	3 h	309	375	2 x 375
	8 h	137	167	2 x 167
Weight (kg)		60,0	72,5	145
Supply voltage		230 V AC 50/60 Hz ±10% or 216 V DC ±20%		
Degree of protection		IP 20		
Protection class		I		
Output voltage		48 V DC ±20%		
Max. Ø Mains supply		2,5 mm²		
Max. Ø End circuit length		2,5 mm²		
Max. End circuit length		500 m		
Max. Power per end circuit		120 W		
Battery compartment in cabinet		yes		
Single battery monitoring		temperature and voltage		
Operating temperature		-5 °C up to 30 °C		

F1UE83I2

TECHNICAL SPECIFICATIONS

Recognition distance:	27 m
Degree of protection:	IP54
Protection class:	III
Lamp:	Power-LED
Mounting type:	universal (wall/ceiling)
Housing material:	plastic
Luminaire dimensions:	283 mm x 50 mm x 186 mm (L x B x H)
Color:	white
Operating temperature:	-5 °C up to 35 °C

SKUE83I2

TECHNICAL SPECIFICATIONS

Recognition distance:	21 m
Degree of protection:	IP40
Protection class:	II
Lamp:	Power-LED
Mounting type:	universal (wall/ceiling)
Housing material:	plastic
Luminaire dimensions:	217 mm x 42 mm x 154 mm (L x B x H)
Color:	white
Operating temperature:	-5 °C up to 35 °C

ULUE83I2

TECHNICAL SPECIFICATIONS

Recognition distance:	16 m
Degree of protection:	IP54
Protection class:	III
Lamp:	Power-LED
Mounting type:	universal (wall/ceiling)
Housing material:	plastic
Luminaire dimensions:	360 mm x 92 mm x 125 mm (L x B x H)
Color:	white
Operating temperature:	-5 °C up to 35 °C

BSUE15I2 (BSUE19I2)

TECHNICAL SPECIFICATIONS

Power of the LED:	1 W
Luminous flux	
- BSU15I2	132 lm
- BSU19I2	127 lm
Degree of protection:	IP42
Protection class:	III
Housing material:	plastic
Luminaire dimensions:	192 mm x 102 mm x 57 mm (L x B x H)
Mounting type:	ceiling
Operating temperature:	-5 °C up to - 35 °C

BREE25I2 (BREE29I2)

TECHNICAL SPECIFICATIONS

Power of the LED:	2 W
Luminous flux	
- BREE25I2	268 lm
- BREE29I2	251 lm
Degree of protection:	IP42/20
Protection class:	III
Housing material:	sheet steel
Luminaire dimensions:	30 mm x 68 mm x 68 mm (L x B x H)
Mounting type:	ceiling
Operating temperature:	-0 °C up to -40 °C

MXDE125I2 (MXDE129I2)

TECHNICAL SPECIFICATIONS

Power of the LED:	13,2 W
Luminous flux	
- MXDE125I2	1360 lm
- MXDE129I2	1375 lm
Degree of protection:	IP65
Protection class:	III
Housing material:	Aluminium
Luminaire dimensions:	235 mm x 155 mm x 44mm (L x B x H)
Mounting type:	ceiling
Operating temperature:	-25 °C up to -50 °C

■ **FiSCHER Akkumulatorentechnik GmbH** ■ **Sicherheitstechnik** ■ **Service**

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