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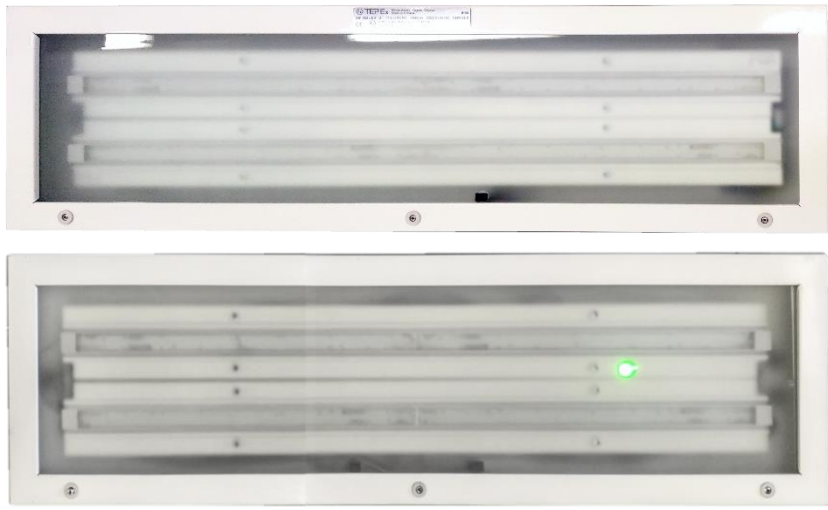
CE 0722

Linear LED svjetiljka
SIF 152 LED, SIF 252 LED
Linear LED sigurnosna svjetiljka
SIF 152 LED/E, SIF 252 LED/E

Linear LED light fitting
SIF 152 LED, SIF 252 LED
Emergency linear light fitting
SIF 152 LED/E, SIF 252 LED/E



Upute za uporabu

⚠ U P O Z O R E N J E !

Upute za uporabu sadrže osnovne informacije o proizvodu. Montaža, instaliranje, uporaba i održavanje trebaju biti izvedeni prema ovoj Uputi kako bi bio osiguran siguran rad unutar nazivnih karakteristika. Ovu Uputu nadopunjuju nacionalni Pravilnici i norme. Odgovorna osoba korisnika je dužna osigurati njihovo provođenje. Neprovođenje može umanjiti protueksplozijsku zaštitu uređaja i dovesti u opasnost ljude, imovinu i okoliš. Svako neispravno i nedozvoljeno postupanje kao i nepoštivanje odredbi ove Upute isključuje svaku odgovornost proizvođača.

Prije ugradnje/puštanja u pogon:
- Pažljivo pročitati cijelu Uputu za uporabu,
- Izvršiti odgovarajuću obuku odgovornog osoblja,
- Provjeriti da je sadržaj ove Upute u potpunosti razumljiv odgovornim osobama,
- Uvjeriti se da su primijenjeni svi zahtjevi nacionalnih Pravilnika i posebne sigurnosne mjere ukoliko postoje.

U slučaju nejasnoća:
- Kontaktirati proizvođača.

Tijekom pogona:
- Osigurati da ove Upute za uporabu i druge radne upute korisnika budu vidljivo istaknute i dostupne odgovornom osoblju cijelo vrijeme,
- Provjeravati provođenje ove Upute i svih drugih sigurnosnih uputa korisnika.

User manual

⚠ W A R N I N G !

The user manual contains basic information about the product. Mounting, installation, usage and maintenance should be carried out under this user manual to provide and ensure safe operation within the nominal characteristics. This user manual complement national Regulation and Standards. The responsible person shall ensure their implementation. Failure off implement this user manual can reduce explosion protection and endanger people, property and the environment. Any improper and illegal actions as well as non-compliance with the provisions of this user manual excludes all responsibility by manufacturer side.

Before installation/commissioning:
- Carefully read all instructions,
- Execute proper training of responsible personnel,
- Check that the contents of these instructions is fully understandable by the responsible personnel,
- Make sure that all the requirements and national Regulations as well as all special security measures are applied.

In lack of understanding:
- Contact the manufacturer.

During operation:
- Ensure that this user manual and other work instructions are available to the responsible staff at all times,
- Check the implementation of these instructions and all other safety user's instructions

SADRŽAJ:

CONTENTS:

1. NAMJENA

Protueksplozijski zaštićene linear LED svjetiljke SIF 152 LED / SIF 252 LED namijenjene su za opću rasvjetu, a linear LED svjetiljke u slučaju opasnosti SIF 152 LED/E / SIF 252 LED/E za opću rasvjetu i rasvjetu u slučaju opasnosti (sigurnosna i nadomjesna) u industrijskim prostorima na mjestima s potencijalno eksplozivnom atmosferom plinova, para i prašine u zonama opasnosti 1, 2, 21, 22 sukladno normama EN 60079-10-1 i EN 60079-10-2.

1. PURPOSE

Explosion proof linear LED light fittings type SIF 152 LED / SIF 252 LED are intended for general lighting and emergency linear LED light fitting SIF 152 LED/E / SIF 252 LED/E are intended for emergency and general lighting in industrial areas with potentilly explosive atmosphere in Zones 1, 2, 21, 22 according to EN 60079-10-1 and EN 60079-10-2.

2. SUKLADNOST PROIZVODA

Proizvod je sukladan Pravilniku o opremi i zaštitnim sustavima namijenjenim za uporabu u potencijalno eksplozivnim atmosferama, NN br. 33/16.
Proizvod je sukladan normama:

- EN IEC 60079-0:2018,
- EN 60079-1:2014,
- EN IEC 60079-7:2015/A1:2018,
- EN 60079-18:2015/A1:2017,
- EN 60079-28:2015,
- EN 60079-31:2014.

Proizvod je razvijen, proizveden i ispitan prema postojećem stanju tehnike, sukladno normama EN ISO 9001, EN ISO 80079-34 i EN ISO 14001.
Proizvod je sukladan ATEX Direktivi 2014/34/EU.
Proizvod je sukladan LVD Direktivi 2014/35/EU.
Proizvod je sukladan RoHS Direktivi 2011/65/EU.
Proizvod je sukladan EMC Direktivi 2014/30/EU.

2. PRODUCT COMPLIANCE

The product complies with the standards:

- EN IEC 60079-0:2018,
- EN 60079-1:2014,
- EN IEC 60079-7:2015/A1:2018,
- EN 60079-18:2015/A1:2017,
- EN 60079-28:2015,
- EN 60079-31:2014.

The product has been developed, manufactured and tested according to the existing state of technique accordance with the standards EN ISO 9001, EN ISO 80079-34 and EN ISO 14001.
The product is in compliance with the ATEX Directive 2014/34/EU.
The product is in compliance with the LVD Directive 2014/35/EU.
The product is in compliance with the RoHS Directive 2011/65/EU.
The product is in compliance with the EMC Directive 2014/30/EU.

3. STUPANJ ZAŠTITE I TEHNIČKI PODACI

Linear LED svjetiljka SIF 152 LED, SIF 252 LED

Certifikat:	FIDI 20 ATEX 0023
Oznaka kategorije i protueksplozijske zaštite uređaja:	CE 0722 Ex II 2G Ex db eb mb op is IIC T5 Gb II 2D Ex tb op is IIIC T80°C Db
Temperatura okoline:	-20°C ≤ T_a ≤ +50°C
Mehanička zaštita:	IP66
Otpornost na udar:	IK 08
Klasa zaštite:	I (PE - zaštitno uzemljenje)

3. DEGREE OF PROTECTION AND TECHNICAL DATA

Linear LED light fitting SIF 152 LED, SIF 252 LED

Certificate:	FIDI 20 ATEX 0023
Category and explosion protection:	CE 0722 Ex II 2G Ex db eb mb op is IIC T5 Gb II 2D Ex tb op is IIIC T80°C Db
Ambient temperature:	-20°C ≤ T_a ≤ +50°C
Mechanical protection:	IP66
Resistance to shock:	IK 08
Class of protection:	I (PE – protective earthing)

Nazivni napon U_n:	110V – 240V AC ± 10%; 50/60Hz 220V – 250V DC ± 10%
Nazivna snaga:	SIF 152 LED – P_{in} = 52W, P_{out} = 47W SIF 252 LED – P_{in} = 104W, P_{out} = 94W
Svjetlosni tok LED modula na T_{amb} = 20°C	SIF 152 LED – 6367 lm SIF 252 LED – 12250 lm
Svjetlosni tok svjetiljke na T_{amb}=20°C	SIF 152 LED – 5286 lm SIF 252 LED – 10171 lm
Koeficijent izlaznog svjetlosnog toka svjetiljke:	0,83
Efikasnost LED modula:	130-135 lm/W
Efikasnost svjetiljke:	108-112 lm/W
Nazivna životna dob L70B10C10:	$T_{amb\ max}$ – 35,000h $T_{amb\ max}$ – 10°C – 60,000h $T_{amb\ max}$ – 20°C – 70,000h
Temperatura boje:	4000K (6500K na zahtjev)
Stupanj reprodukcije boja (CRI):	80
LED strip:	LLE G4 24x560mm 4000lm 840 2T ADV5, Tridonic GmbH
LED driver:	ELG-75-C500A, MeanWell
Faktor snage:	λ=0,95
Kabelski uvodi:	Tri uvoda Ø25,5 sukladno sa EN 62444 s ugrađene dvije uvodnicama ISO 25, Ex eb M25 x 1,5 za kabel Ø7-15mm i jedan čep ISO 25, Ex eb M25 x 1,5
Priključne stezaljke:	5 x max. 4mm^2
Prolazno ožičenje:	5 x 2,5 mm^2 Prolazno ožičenje ≤ 10A za T_{amb}=50°C 10A ≤ Prolazno ožičenje ≤ 16A za T_{amb}=40°C
Kućište:	varena čelična konstrukcija, dvoslojno plastificirana epoksidnim prahom RAL 9000
Staklo:	borosilikatno ravno kaljeno staklo 6 mm
Nazivni momenti pritezanja:	pritisne matice uvodnice – 2,5 Nm tijela uvodnice u kućište – 3,5 Nm čepa u kućište – 4 Nm vijak priključne stezaljke – 0,5 Nm
Duljina skidanja izolacije priključnih vodiča:	9 mm
Osnovne mjere:	1340 x 378 x 95 mm (D x Š x V)
Masa:	SIF 152 LED – 20kg SIF 252 LED – 24kg

Rated voltage U_n:	110V – 240V AC ± 10%; 50/60Hz 220V – 250V DC ± 10%
Rated wattage:	SIF 152 LED – P_{in} = 52W, P_{out} = 47W SIF 252 LED – P_{in} = 104W, P_{out} = 94W
Luminous flux LED module T_a=20°C	SIF 152 LED – 6367 lm SIF 252 LED – 12250 lm
Luminous flux light fitting T_a=20°C	SIF 152 LED – 5286 lm SIF 252 LED – 10171 lm
Light output ratio of luminaire:	0,83
LED modul efficacy:	130-135 lm/W
System efficacy:	108-112 lm/W
Estimated service life L70B10C10	$T_{amb\ max}$ – 35,000h $T_{amb\ max}$ – 10°C – 60,000h $T_{amb\ max}$ – 20°C – 70,000h
Corrected color temperature (CCT):	4000K (6500 on request)
The color rendering index (CRI):	80
LED strip:	LLE G4 24x560mm 4000lm 840 2T ADV5, Tridonic GmbH
LED driver:	ELG-75-C500A, MeanWell
Cable entry:	Tree cable entries Ø25,5 in accordance with EN 62444 with built-in two cable glands ISO 25, Ex eb M25x1,5 for cable diameter Ø7-15mm and one ISO 25, Ex eb M25x1,5 plug
Connection terminals:	5 x max. 4mm^2
Through wiring:	5 x 2,5 mm^2 Throught wiring ≤ 10A – $T_{amb\ max}$ 10A ≤ Throught wiring ≤ 16A – $T_{amb\ max}$ – 10°C
Housing:	Welded steel structure, two-layer plasticized with epoxy powder, RAL 9000
Glass	borosilicate flat tempered glass 6 mm
Tightening torque:	pressure screw – 2,5 Nm intermediate gland and plug – 3,5 Nm plug in housing – 4 Nm screw terminals – 0,5 Nm
Isolation stripping length of the wires:	9mm
Dimension:	1340 x 378 x 95 mm (D x Š x V)
Weight:	SIF 152 LED – 20kg SIF 252 LED – 24kg

Linear LED sigurnosna svjetiljka SIF 152 LED/E, SIF 252 LED/E

Certifikat:	FIDI 20 ATEX 0023
Oznaka kategorije i protueksplozijske zaštite uređaja:	CE 0722 Ex II 2G Ex db eb mb op is IIC T5 Gb II 2D Ex tb op is IIIC T80°C Db
Temperatura okoline:	-20°C ≤ T_a ≤ +40°C
Mehanička zaštita:	IP66
Otpornost na udar:	IK 08
Klasa zaštite:	I (PE - zaštitno uzemljenje)
Nazivni napon U_n:	230V AC, 50Hz
Nazivna snaga u mrežnom radu:	SIF 152 LED/E – P_{in} = 56W, P_{out} = 50,5W SIF 252 LED/E – P_{in} = 108W, P_{out} = 97,5W
Nazivna snaga u baterijskom radu:	SIF 152 LED/E – P_{out} = 8W SIF 252 LED/E – P_{out} = 8W
Svjetlosni tok LED modula na T_{amb} = 20°C	SIF 152 LED/E – 6817 lm mrežni rad – 1080 lm baterijski rad SIF 252 LED/E – 12675 lm mrežni rad – 1040 lm baterijski rad
Svjetlosni tok svjetiljke na T_{amb} = 20°C	SIF 152 LED/E – 5656 lm mrežni rad – 896 lm baterijski rad SIF 252 LED/E – 10530 lm mrežni rad – 864 lm baterijski rad

Linear LED emergency light fitting SIF 152 LED/E, SIF 252 LED/E

Certificate:	FIDI 20 ATEX 0023
Category and explosion protection:	CE 0722 Ex II 2G Ex db eb mb op is IIC T5 Gb II 2D Ex tb op is IIIC T80°C Db
Ambient temperature:	-20°C ≤ T_a ≤ +40°C
Mechanical protection:	IP66
Resistance to shock:	IK 08
Class of protection:	I (PE – protective earthing)
Rated voltage U_n:	230 V AC, 50 Hz
Rated wattage main ligfting:	SIF 152 LED/E – P_{in} = 56W, P_{out} = 50,5W SIF 252 LED/E – P_{in} = 108W, P_{out} = 97,5W
Rated wattage battery ligfting:	SIF 152 LED/E – P_{out} = 8W SIF 252 LED/E – P_{out} = 8W
Luminous flux LED module T_a=20°C	SIF 152 LED/E – 9100 lm mrežni rad – 1365 lm baterijski rad SIF 252 LED/E – 17560 lm mrežni rad – 1365 lm baterijski rad
Luminous flux light fitting T_a=20°C	SIF 152 LED/E – 5656 lm main mode – 896 lm emergency mode SIF 252 LED/E – 10530 lm main mode – 864 lm emergency mode

Koeficijent izlaznog svjetlosnog toka svjetiljke:	0,83
Efikasnost LED modula:	130-135 lm/W
Efikasnost svjetiljke:	108-112 lm/W
Nazivna životna dob L70B10C10:	$T_a \leq 20°C$: > 130 000 h; $T_a \leq 30°C$: 100 000 h; $T_a \leq 40°C$: 50 000 h
Temperatura boje:	4000K (6500K na zahtjev)
Stupanj reprodukcije boja (CRI):	80
Faktor snage:	λ=0,95
LED strip:	LLE G4 24x560mm 4000lm 840 2T ADV, Tridonic GmbH
LED driver:	Luxtronic Emergency lighting unit, Hadler Gmbh
Baterijski zaštitni modul BSM 01	Zaštita od druge greške
Baterija:	Ni-Mh Saft VHT D, 6V 10Ah ugrađena u svjetiljku, mikroprocesorski upravljano punjenje, pražnjenje i nadzor baterije
Nazivna autonomija:	3 sata pri $-10°C \leq T_a \leq +40°C$
Napon prelaska s mrežnog na baterijsko napajanje:	$U < 0,8\ U_N$ u trajanju više od 0,5 s
Napon prelaska s baterijskog na mrežno napajanje:	$U > 0,9\ U_N$ u trajanju više od 1 s
Režim punjenja:	Standardno punjenje: 400mA Trickle charge: 170mA Uvjet punjenja: $-10°C \leq T_a \leq +40°C$
Režim pražnjenja:	Struja pražnjenja: 2A pri naponu baterije 6V Min. napon pražnjenja: 4,8V Uvjet pražnjenja: $-10°C \leq T_a \leq +40°C$
Maksimalan broj svjetiljaka (kom.) po jednom automatskom instalacijskom prekidaču:	Automatski instalacijski prekidač: 1p B 10A: 7; 1p C 10A: 12; 1p B 16A: 11; 1p C 16A: 19
Kabelski uvodi:	Tri uvoda Ø25,5 sukladno sa EN 62444 s ugrađene dvije uvodnice ISO 25, Ex eb M25 x 1,5 i jednim čepom ISO 25, Ex eb M25 x 1,5
Priključne stezaljke:	8 x max. 4mm²
Prolazno ožičenje:	5 x 2,5 mm² Prolazno ožičenje ≤ 10A
Kućište:	varena čelična konstrukcija, dvoslojno plastificirana epoksidnim prahom
Staklo:	borosilikatno ravno kaljeno staklo 6 mm
Nazivni momenti pritezanja:	pritisne matice uvodnice – 2,5 Nm tijela uvodnice u kućište – 3,5 Nm čepa u kućište – 4 Nm vijak priključne stezaljke – 0,5 Nm
Duljina skidanja izolacije s priključnih vodiča:	9 mm
Osnovne mjere:	1340 x 380 x 95 mm (D x Š x V)
Masa:	SIF 152 LED – 22kg SIF 252 LED – 26kg

Svjetiljka se isporučuje s max. napunjenim baterijama i otvorenim poklopcem. Moguće je prilikom dužeg skladištenja (više od 6mj te je svjetiljka zatvorena bez priključka na napon) da LED indikator ne proradi odmah. Nakon toga je potrebno regenerirati baterije (puniti baterije oko 2 sata) i tada će LED indikator proraditi. Također prilikom skladištenja i transporta nužno je da poklopac svjetiljke bude otvoren jer je u suprotnom moguće pražnjene baterija.

Light output ratio of luminaire:	0,83
LED modul efficacy:	130-135 lm/W
System efficacy:	108-112 lm/W
Estimated service life L70B10C10	$T_a \leq 20°C$: > 130 000 h; $T_a \leq 30°C$: 100 000 h; $T_a \leq 40°C$: 50 000 h
Corrected color temperature (CCT):	4000K (6500K on request)
The color rendering indeks (CRI):	80
Power factor:	λ=0,95
LED strip:	LLE G4 24x560mm 4000lm 840 2T ADV5, Tridonic GmbH
LED driver:	Luxtronic Emergency lighting unit, Hadler Gmbh
Battery security module BSM 01	Protection from second faults
Battery:	Ni-Mh Saft VHT D, 6V 10Ah built-in lighting, microprocessor controlled charging, discharging and battery monitoring
Rated autonomy:	3 hours at $-10°C \leq T_a \leq +40°C$
Charge-over battery operation:	$U < 0,8\ U_N$ for more than 0,5 s
Charge-over mains supply operation:	$U > 0,9\ U_N$ for more than 1 s
Charge mode:	Standard charge: 400mA Trickle charge: 170mA Condition charge: $-10°C \leq T_a \leq +40°C$
Discharge mode:	Discharge current: 2A at battery voltage 6V Min. charge voltage: 4,8V Condition charge: $-10°C \leq T_a \leq +40°C$
Maximum number of lamps (pieces) per one automatic circuit breaker:	Automatic circuit breaker: 1p B 10A: 7; 1p C 10A: 12; 1p B 16A: 11; 1p C 16A: 19
Cable entry:	Tree cable entries Ø25,5 in accordance with EN 62444 with built-in two cable glands ISO 25, Ex eb M25x1,5 for cable diameter Ø7-15mm and one ISO 25, Ex eb M25x1,5 plug
Connection terminal:	8 x max. 4 mm²
Throught wiring:	5 x 2,5 mm² Throught wiring: ≤ 10A
Housing:	welded steel structure, two-layer plasticized with epoxy powder
Glass:	borosilicate flat tempered glass 6 mm
Tightening torque:	pressure screw – 2,5 Nm intermediate gland and plug – 3,5 Nm plug in housing – 4 Nm screw terminals – 0,5 Nm
Isolation stripping length of the wires:	9mm
Dimension:	1340 x 380 x 95 mm (D x Š x V)
Weight:	SIF 152 LED – 22kg SIF 252 LED – 26kg

The light fitting is supplied with max. charged batteries and opened cover. It's possible during prolonged storage (lamp is closed more than six months without connection to the voltage) that the LED indicator doesn't work immediately. At that moment it's necessary to regenerate the batteries (recharge the batteries for approx. 2 hours) and then the LED indicator will start to work properly. Also, during storage and transport, it is necessary that the cover is always open, otherwise the battery may be discharged.

4. TIP

Svjetiljka LED, tip SIF . 52 LED / E - .

- osnovna tipna oznaka
- broj LED modula
  - 1- jedan LED modul LEDEx 03
  - 2- dva LED modula LEDEx 03
- snaga LED modula
- dodatna tipna oznaka
  - E- oznaka LED svjetiljke u slučaju opasnosti
- način motaže
  - 1- ovjesna svjetiljka
  - 2- ugradbena svjetiljka za čiste prostore

4. TYPE

LED Light fitting, type SIF . 52 LED / E - .

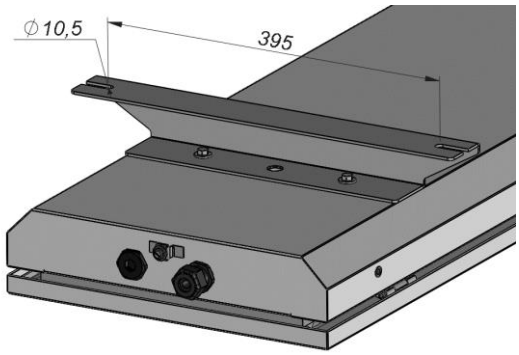
- basic type
- number of LED modules
  - 1- one LED module LEDEx 03
  - 2- two LED module LEDEx 03
- wattage of LED modules
- additional type
  - E- label of LED emergency light fittings
- mounting
  - 1- pendant light fittings
  - 2- recessed mounting in clear area

TIP / TYPE	SNAGA / WATAGE	RADNI NAPON / SERVICE VOLTAGE	SVJETLOSNI TOK SVJETILJKE / LUMINOUS FLUX LIGHT FITTING	
			MR. RAD / MAIN	EM. RAD / BATTERY
SIF 152 LED	1x52W LED	110-240 V AC 220-250 V DC	5286 lm	-
SIF 252 LED	2x52W LED		10171 lm	-
SIF 152 LED/E	1x56W LED	220-240 V AC	5656 lm	896 lm
SIF 252 LED/E	1x56W + 1x52W LED		10530 lm	864 lm

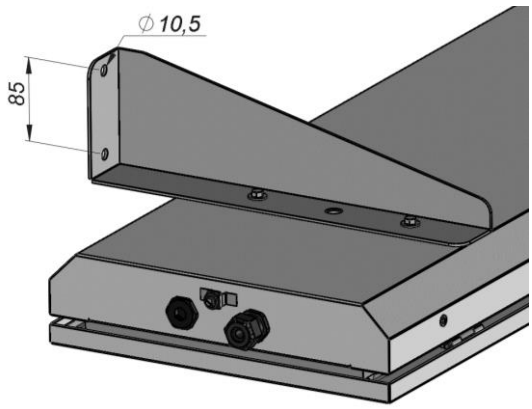
6. MONTAŽA

Montažu i instaliranje svjetiljke treba vršiti prema uputama proizvođača, nacionalnim Propisima i Pravilnicima kao i prema općenito priznatim pravilima tehnike.
Kvaliteta upotrijebljenih materijala jamči funkcionalnost sukladnu normi u normalnoj industrijskoj atmosferi. Treba onemogućiti rad svjetiljke pri temperaturi okoline iznad maksimalno dozvoljene.
Za granične slučajeve molimo obratiti se proizvođaču.
Uz proizvod se isporučuju dva vijka M8 DIN 580 s prstenastom glavom za montažu svjetiljke ovješenjem. Razmak vijaka je 900 mm.
Na posebnu narudžbu proizvođač će isporučiti:

- pribor za direktno učvršćenje na strop (pribor SIF 20 140)



- pribor za direktno učvršćenje na zid (pribor SIF 20 160)



6. MOUNTING

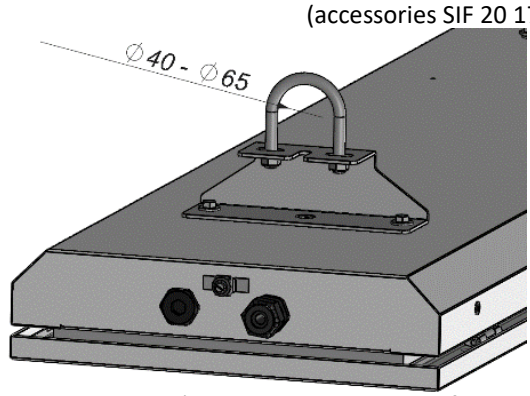
Mounting and installation of lamps is should be carried out according to the technical data marking plate of the lamp, and the additional manufacturer's instructions, national rules and regulations, as well as the generally recognized rules of technique.
The quality of the used materials ensures compliance in the standard industrial atmosphere. For special requirements please contact the drive manufacturer.
The lamp comes standard with two ring bolt M8 DIN 580 for pendant mounting. Distance between screw is 900 mm.
For special order producer will delivery:

- accessories for celing mounting (accessories SIF 20 140)

- accessories for wall mounting (accessories SIF 20 160)

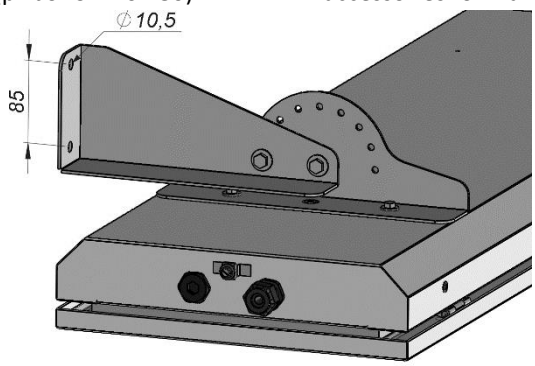
- pribor za učvršćenje na stup ili cijev Ø40, Ø50, Ø60, Ø65mm (pribor SIF 20 170)

- accessories for tube mounting Ø40, Ø50, Ø60, Ø65mm (accessories SIF 20 170)



- pribor za učvršćenje na zid pod kutem (pribor SIF 20 180)

- accessories for wall mounting at the angle (accessories SIF 20 180)



- pribor za ugradnju u spušteni strop u otvor 1350x430mm (pribor SIF 20 150)

Kabeli se uvode u kućište kroz predviđene uvodnice. Pri tome treba provjeriti da su kabeli čisti i neoštećeni. Posebnu pažnju treba posvetiti odabiru unutarnjeg brtvenog prstena uvodnice prema vanjskom promjeru kabela. Pritisnu maticu uvodnice i tijelo uvodnice treba pritegnuti nazivnim momentom prema vrijednostima u tehničkim podacima. Neiskorišteni uvod obavezno treba zatvoriti predviđenim čepom.

Električno spajanje se vrši priključkom vodiča na stezaljke priključne letvice L1, L2, L3, N, PE i pritezanjem vijka stezaljke nazivnim momentom. Kod trofaznog prolaznog ožičenja treba paziti na simetriranje faza i po potrebi prespojiti fazne priključke predspojne naprave.

- accessories for recessed mounting in the opening 1350x430mm (accessories SIF 20 150)

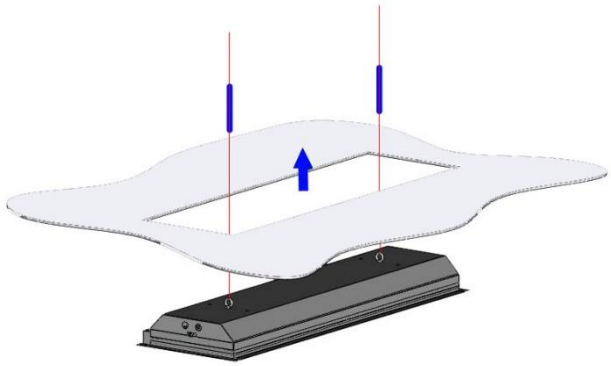
Cables should be instaled in housing via provided cable gland. It is necessary to check that the cables are clean and undamaged. Particular attention should be paid to the selection of the inner sealing rings of the cable glands to the outside diameter of the cable. Pressure screw and intermediate gland have to be tightened with nominal torque. Unused entries should be closed by provided Ex d plug.

Electrical connection is made with connecting cables on mentle terminals L1, L2, L3, N, PE and tightening the clamps with nominal torque. At the tree-phase through wiring should be taken of the balancing phase and optionally reconnect phase connections electronic balast.

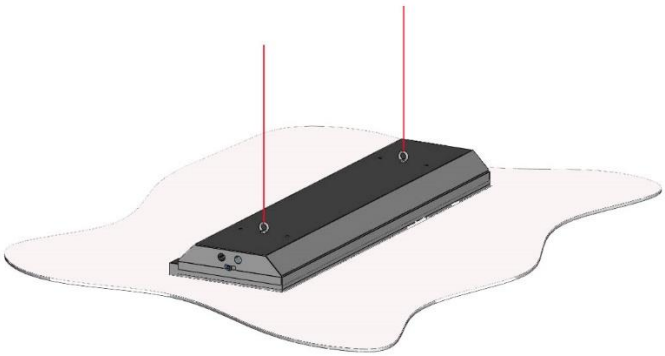
Montaža ugradbene svjetiljke za čiste prostore:

Slika prikazuje način montaže LED svjetiljke u otvor stropa 1350x430mm. Svjetiljka se pozicionira i učvršćuje uz pomoć čeličnog užeta ili lanca, a precizno podešavanje visine vrši se uz pomoć zatezača. Moguća je i montaža preko nosača za ugradbenu montažu. Rub okvira svjetiljke mora biti prislonjen na vanjsku stranu spuštenog stropa (slika ispod).

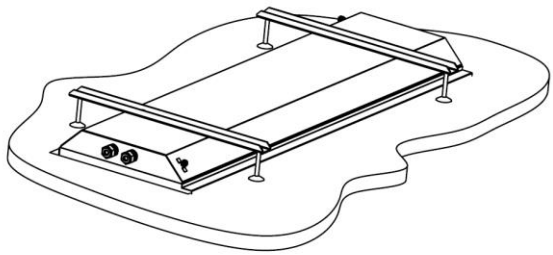
Recessed mounting in clean area:



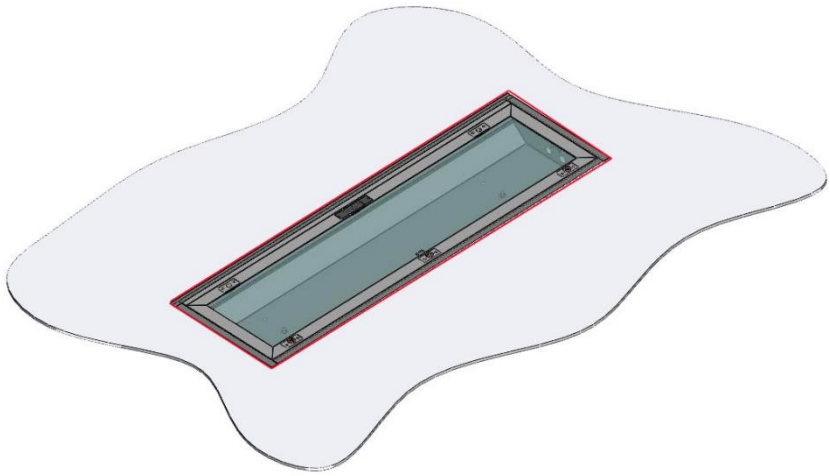
The picture shows the way of installing the LED lamp in the ceiling opening 1350x430mm. The lamp is positioned and secured with the help of a steel rope or chain, and precise height adjustment is performed with the tensioner. Mounting is also possible with the use of mounting bracket. The edge of the lamp frame must be aligned with the outside of the lowered ceiling (figure below).



Nakon pozicioniranja i učvršćivanja svjetiljke, zazor između okvira svjetiljke i stropa popunjava se silikonom (slika ispod).

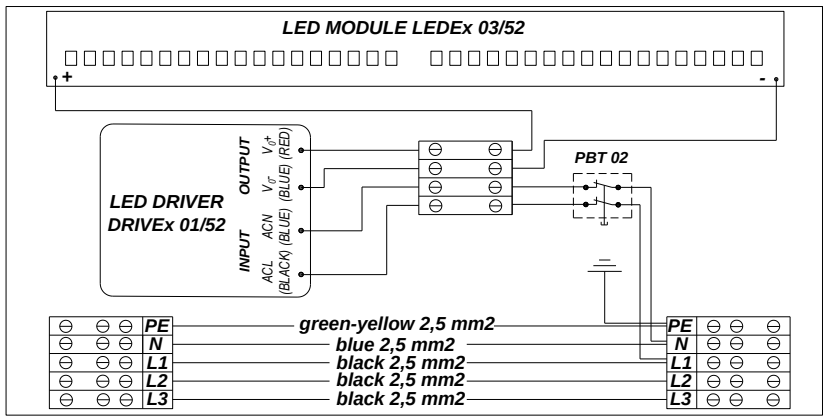


After positioning and fixing the lamp, the gap between the lamp and ceiling frame is filled with silicon (figure below).



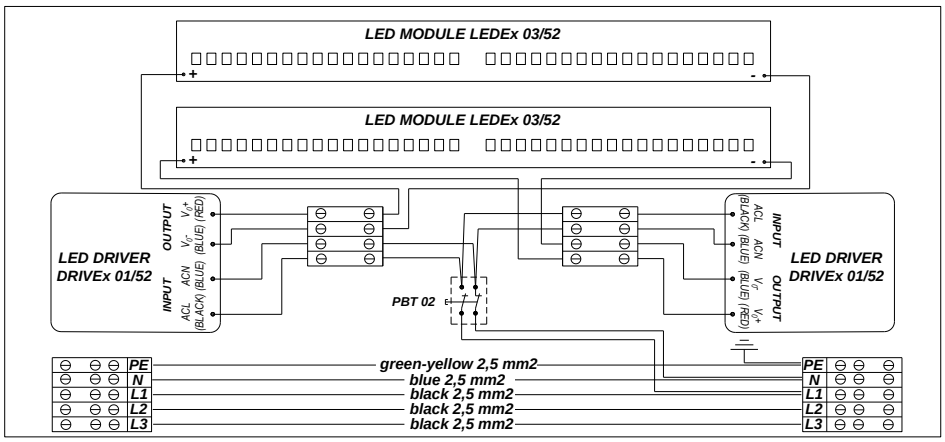
Električna shema spajanja SIF 152 LED

Wiring diagram SIF 152 LED



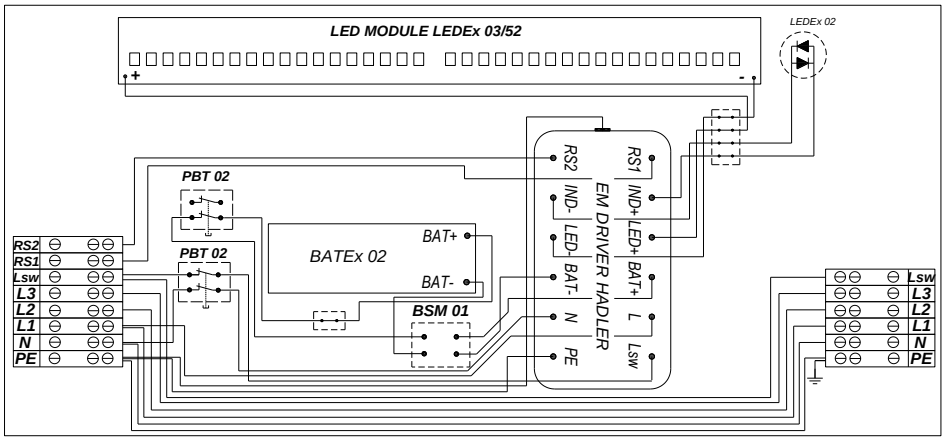
Električna shema spajanja SIF 252 LED

Wiring diagram SIF 252 LED



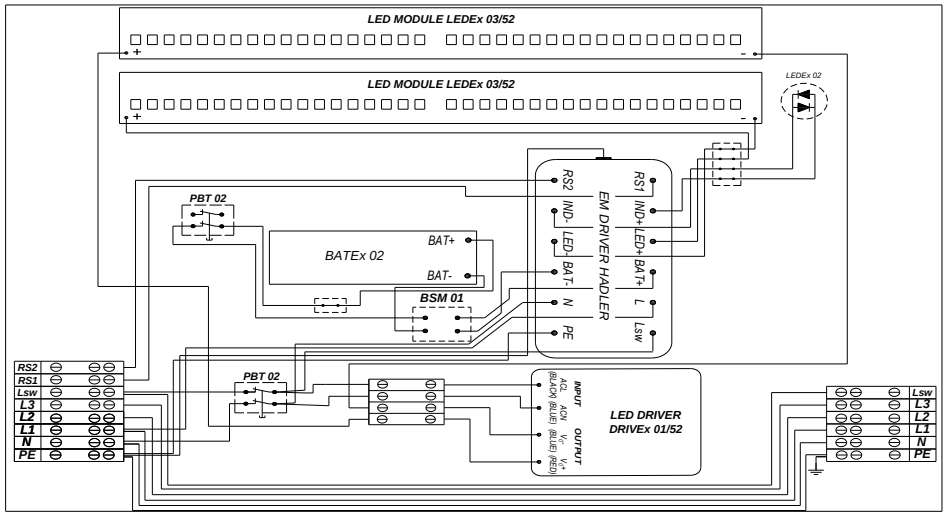
Električna shema spajanja SIF 152 LED/E

Wiring diagram SIF 152 LED/E



Električna shema spajanja SIF 252 LED/E

Wiring diagram SIF 252 LED/E

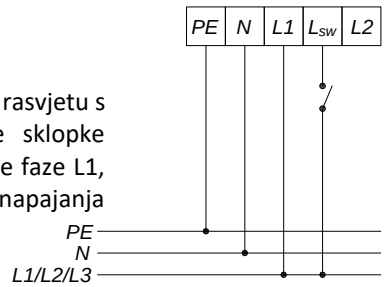


7. NAČIN RADA I INSTALIRANJE SIF 152 LED/E, SIF 252 LED/E

Moguć je rad u dvije vrste spoja:

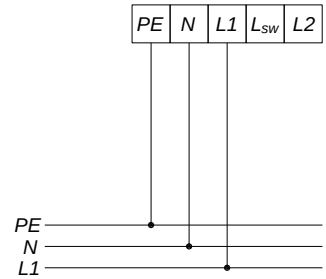
a) Trajan spoj (Dauerschaltung, maintained)

Svjetiljka se može koristiti za opću i orjentacijsku rasvjetu s mrežnim napajanjem Lsw preko instalacijske sklopke korisnika. U slučaju pada napona ili ispada trajne faze L1, bez obzira na stanje sklopke u krugu mrežnog napajanja Lsw (uključeno ili isključeno mrežno napajanje), svjetiljka svijetli u režimu baterijskog napajanja.



b) Pripravan spoj (Bereitschaftschaltung, non maintained)

Svjetiljka ne može raditi na mrežnom napajanju već isključivo u režimu baterijskog napajanja u slučaju pada napona ili ispada trajne faze L1



Svjetiljka ima funkciju *Remote switch.*
Korisnik sam upravlja tom funkcijom.
Remote switch ON: baterijski rad aktiviran
Remote switch OFF: baterijski rad deaktiviran
U slučaju dužega prekida napajanja, remonta pogona, servisa potrebno je isključiti *Remote switch funkciju* te prekinuti baterijski mod rada.

Svjetiljka ima dvije funkcije:

1. test funkcionalnosti: provjerava ispravnost sigurnosne rasvjete
   - prvi test pokreće se 1h nakon priključenja na napon

7. OPERATING MODES AND INSTALLATION SIF 152 LED/E, SIF 252 LED/

The lamp can operate with two types of connection:

a) Maintained (Dauerschaltung)

The light fitting can be used for general and orientation lighting with main power supply via Lsw (installation switch). In case of voltage drop or an interruption in the mains power supply L1, the light fitting will continue to operate in battery-powered mode, regardless of the status of installation switch Lsw.

b) Non maintained (Bereitschaftschaltung)

In case of voltage drop or an interruption in the mains power supply L1, the light fitting will operate only in battery-powered mode.

The light fitting has *Remote switch* function.
The user manages this function himself.
Remote switch ON: emergency mode activated
Remote switch OFF: emergency mode deactivated
In the event of a longer power supply interruption, overhaul orservice it is necessary to turn off the *Remote switch function* and interrupt the battery mode.
The light fitting has two functions:

1. Function test: verifies the functionality of emergency lighting
   - first test is started 1h after power supply

- ako je test prošao uspješno, svaki sljedeći pokreće se za 7 dana
2. test kapaciteta baterija: provjerava trajanje autonomije
- prvi test pokreće se 7 dana nakon priključenja na napon

ako je test prošao uspješno, svaki sljedeći pokreće se za 365 dana

- if the test has passed successfully, each next runs in 7 days
2. Capacity test: verifies the emergency time
- first test is started 7 days after power supply
- if the test has passed successfully, each next runs in 365 days

Svjetiljka je izvedena s elektroničkim sklopom sa samonadzorom funkcionalnosti nužne rasvjete i signalizacijom stanja. Samonadzor je trajan. Signalizacija stanja vrši se crvenom i zelenom signalnom LED-om u stanju svjetiljke kada ona ne svijetli.

The light fitting is equipped with an electronic set for emergency lighting self-monitoring function and status signalling function. Self-monitoring is permanent. Status signalization is indicated with red and green indicator LED when the light fitting does not work.

Signalizacija LED indikatora sukladna EN 62034:

LED indicator signaling in accordance with EN 62034:

OPIS	Status LED indicator	DESCRIPTION
Test funkcionalnosti ili test kapaciteta baterija je u tijeku	●○●○●○●○	Function or Capacity test ongoing
Greška LED izvora (kratki spoj, prazni hod…)	●●●●●●●●	Lamp failure (short circuit, open loop)
Greška baterije (napon, kapacitet)	●●●●○○○○	Battery failure (Voltage, Capacity)
Baterijski rad je deaktiviran	●●●●●●●●	Emergency Mode deactivated (Inhibit Mode)
Mrežni rad, punjenje	●●●●●●●●	Normal Mode, Charging
Svaka točkica označava vrijeme od 256ms / Every dot correspond to 256 ms of time		

Razlozi nefunkcionalnosti mogu biti slijedeći (po vjerojatnosti događanja):
- baterije su prazne. Treba ostaviti svjetiljku na mrežnom napajanju. Nakon nekog vremena signalizacija će sama preći u zeleni LED svjetlo i nužna rasvjeta će postati funkcionalna,
- centralna blokadna sklopka nije adekvatno zategnuta – svjetiljka je u beznaponskom stanju. Treba adekvatno zategnuti centralnu blokadnu sklopku i signalizacija će sama preći u zeleni LED svjetlo i nužna rasvjeta će postati funkcionalna,
- električki priključak je izveden pogrešno. Priključak treba izvršiti prema shemi spajanja,
- baterije su stare, trajno se pune nazivnom strujom punjena i pregrijavaju se. Potrebno je zamijeniti baterijski modul BATEx 01/10,
- baterije su stare i ne mogu dosegnuti potreban napon punjenja i kapacitet. Potrebno je zamijeniti baterijski modul BATEx 01/10,
- temperatura okoline je izvan danih granica.

Samonadzor ne uključuje kontrolu ispravnosti LED-a.

Opis oznake na svjetiljci | X | 1 | ABCD | 180 |, sukladno EN 60598-2-22:

X - sigurnosna svjetiljka s baterijama ugrađenim u svjetiljku,
1 - sigurnosna svjetiljka u trajnom spoju,
A - sigurnosna svjetiljka sa samonadzorom i signalizacijom stanja,
B - sigurnosna svjetiljka s mogućnosti rada na mreži i automatskog uključenja nakon povrata napajanja,
C - sigurnosna svjetiljka s „Remote switch“ funkcijom,
D - sigurnosna svjetiljka za prostore s posebnim opasnostima,
180 - sigurnosna svjetiljka s autonomijom max. 3h.

Reasons for this may include some of the following (the probability of events):
- batteries are empty. The lamp should be left on the main power supply. After a while the signalization will by itself transfer into green LED lights and emergency lighting will become functional
- central interlocking switch is not adequately tightened – light fitting is in non load condition. It should adequately tightened central interlocking switch and green light and emergency lighting becomes functional,
- connection is made incorrectly. Connection should be made according to the connection scheme
- batteries are old, permanently charged with rated current and are overheating. It is necessary to replace the battery module BATEx 01/10,
- batteries are old and can't reach the required charging voltage and capacity. It is necessary to replace the battery module BATEx 01/10,
- ambient temperature is outside specification limits.

Self-monitoring does not include a control of the LEDs validity.

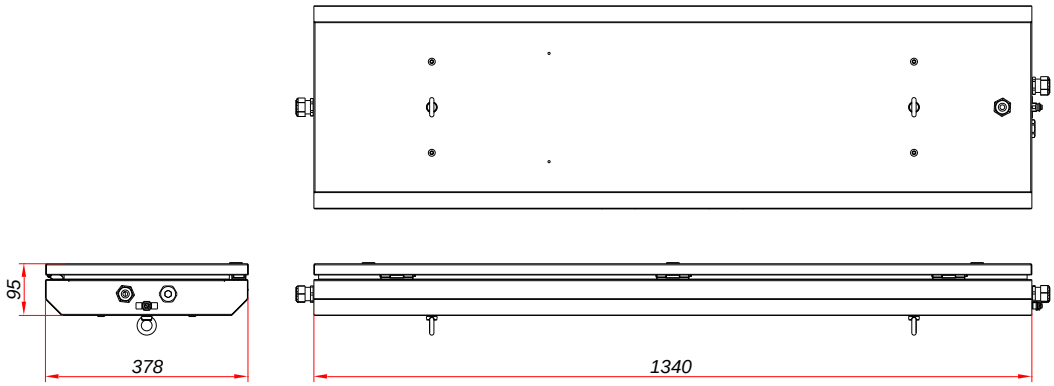
Description of tag on the light fitting | X | 1 | ABCD | 180 |, according to EN 60598-2-22:

X - emergency light fitting with built-in batteries
1 - emergency light fitting in a permanent connection
A - emergency light fitting with self-monitoring and status signalling function
B - Emergency light fitting with main power supply option and automatically turn ON after power return option
C - emergency light fitting with „Remote switch“ function
D - emergency light fitting for use in areas with special hazards
180 - emergency light fitting with autonomy of max. 3h.

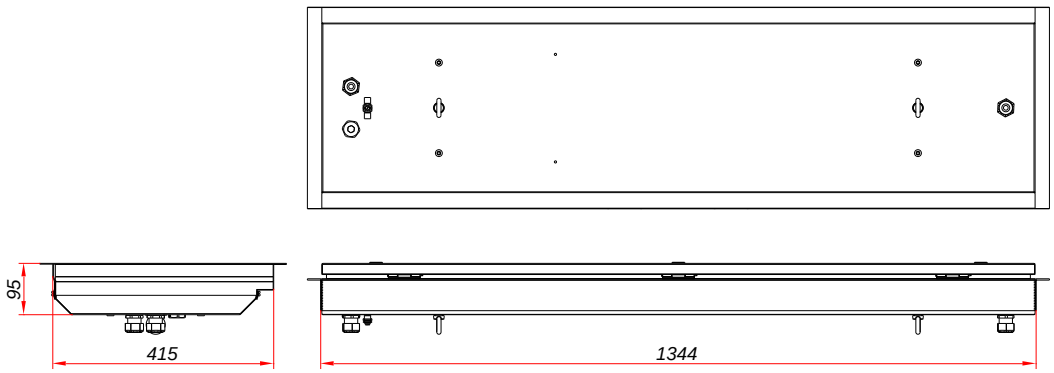
8. DIMENZIJE

8. DIMENSIONS

Ovjesna svjetiljka / Pendant light fitting

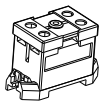
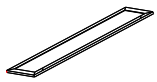
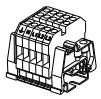
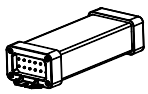
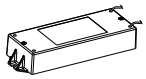


Ugradbena svjetiljka za čiste prostore / Recessed mounting in clear area



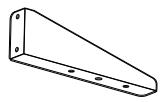
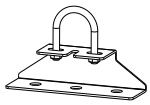
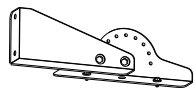
9. REZERVNI DIJELOVI

9. SPARE PARTS

SKICA / SKETCH	OPIS / DESCRIPTION	OZNAKA ZA NARUDŽBU / MODEL CODE	SKICA / SKETCH	OPIS / DESCRIPTION	OZNAKA ZA NARUDŽBU / MODEL CODE
	Brtva SIF Gasket SIF	SIF 10-130		Baterijski zaštitni modul Battery security module	BSM 01
	Sklop okvira stakla SIF Glass cover SIF	SIF 10-140		Signalni LED indikator Signal LED indicator	LEDEx 02
	LED modul LED module	LEDEx 03/52-1		Redne stezaljke 5 x 0,5-4mm^2, set Connection terminals	SIF 10-130
	LED driver LED driver	DRIVEx 01/52-1 DRIVEX 02		Ex eb kabelska uvodnica Ex eb cable glands	SPU 25
	Baterijski modul Battery module	BATEx 02		Ex eb čep Ex eb plug	SPC 25

10. PRIBOR

10. ACCESORIES

SKICA / SKETCH	OPIS / DESCRIPTION	OZNAKA ZA NARUDŽBU / MODEL CODE	SKICA / SKETCH	OPIS / DESCRIPTION	OZNAKA ZA NARUDŽBU / MODEL CODE
	Okasti vijak M8 Ring bolt M8	SIF 20-130		Nosač za ugradbenu montažu Recessed mounting set	SIF 20-150
	Nosač za učvršćenje na strop Carrier for celing mounting	SIF 20-140		Nosač za učvršćenje na zid Carrier for wall mounting	SIF 20-160
	Nosač za učvršćenje na stup ili cijev Ø40, Ø50, Ø60, Ø65mm	SIF 20 170		Nosač za učvršćenje na zid pod kutem Carrier for wall mounting at the angle	SIF 20 180

11. ODRŽAVANJE, POPRAVAK, OBNAVLJANJE I PREGRADNJA

Potrebno je obavljati preglede i održavanje svih dijelova o kojima ovisi protueksplozijska zaštita sukladno normi EN 60079-17, općim i posebnim uvjetima proizvođača i Pravilnicima korisnika, a naročito:

- da su kućište, svi dijelovi kućišta, staklo i brtva kompletni bez puknuća i oštećenja,
- da su vijci prihvatnih stezaljki pritegnuti nazivnim momentima,
- da su uvodnice i čepovi instalirani prema uputama proizvođača i da su brtve uvodnica neoštećene, a pritisne matice pritegnute nazivnim momentom.

U opseg održavanja ulazi i zamjena dijelova koje proizvođač osigurava i navodi u popisu rezervnih dijelova.

Svi drugi zahvati imaju karakter popravka. Popravak obavlja proizvođač ili od proizvođača ovlaštena pravna osoba, originalnim dijelovima prema proizvodnoj dokumentaciji, a sve sukladno normi EN 60079-19.

Pregradnja i obnavljanje nisu dozvoljeni.

Ukoliko popravak ili bilo koji drugi zahvat na proizvodu obavlja neovlaštena osoba, prestaje svaka odgovornost proizvođača za proizvod, a jamstvo i deklaracija sukladnosti proizvođača postaju nevažeći.

11. INSPECTION, MAINTENANCE, REPAIR AND OVERHAUL

Inspections are carried out in accordance with EN 60079-17, general and special conditions of manufacturer and users Regulations and includes supervision of parts on which the explosion protection depends, especially:

- the housing, all part of housing, glass and seal are without rupture and damage,
- the screws of connecting terminals are tightening with nominal torque,
- the glands, plugs, terminals, pressure screw, intermediate gland, screw of the glass cover are without rupture and damage and tightening with nominal torque

All the repairs are performed by the manufacturer or the manufacturer's authorized personal and the original parts must be provided according to the product documentation, all in accordance with EN 60079-19.

Overhaul and modifications are not allowed.

If repair or any other procedure are performed on the product by unauthorized person, all producer responsibility for the product and the warranty and the manufacturer's declaration of conformity becomes invalid.

12. ODGOVORNOSTI I OVLAŠTENJA

Ova Uputa predstavlja najvažniju informaciju o proizvodu. Nadopunjuju ju odgovarajući nacionalni zakoni i propisi. Proizvodnja, uporaba, certifikacija i nadzor određene su na nacionalnoj razini:

a) Pravilnikom o opremi i zaštitnim sustavima namijenjenim za uporabu u prostorima ugroženim eksplozivnom atmosferom (NN br. 33/16, odnosno EU Direktiva ATEX 2014/34/EU) i

b) Pravilnikom o najmanjim zahtjevima sigurnosti i zaštite zdravlja radnika te tehničkom nadgledanju postrojenja, opreme, instalacija i uređaja u prostorima ugroženim eksplozivnom atmosferom (NN br. 39/06, 106/07.), odnosno EU Direktivi 1999/92/EC (ATEX 137).

Odgovorna osoba dužna je osigurati njihovo provođenje u pogonu.

12. RESPONSIBILITY AND AUTHORIZATION

This instruction is the basic information about the product. It is completed by the corresponding national laws and regulations.

Production, use, certification and supervision are determined at the national level:

a) Regulations concerning equipment and protective systems intended for use in potentially explosive atmospheres EU directive 2014/34/EU and

b) Regulations on minimum requirements for safety and health protection of workers and technical inspection of facilities, equipment, installations and equipment in hazardous areas EU directive 1999/92/EC (ATEX 137).

The responsible person shall ensure their implementation at the working facility.

13. SKLADIŠTENJE I TRANSPORT

Transport i skladištenje treba vršiti samo u originalnoj ambalaži, na način istaknut na kartonskoj kutiji.

13. STORAGE AND TRANSPORT

Transportation and warehousing of the lamps is only allowed in the original packaging, as outlined in a cardboard box.

14. JAMSTVO PROIZVOĐAČA

Proizvođač daje jamstvo na svjetiljku u trajanju od dvije godine te jamstvo na baterije u trajanju od šest mjeseci od trenutka preuzimanja proizvoda prema odredbama Zakona o obveznim odnosima. Ova izjava ima snagu Jamstvenog lista.

14. MANUFACTURER'S WARRANTY

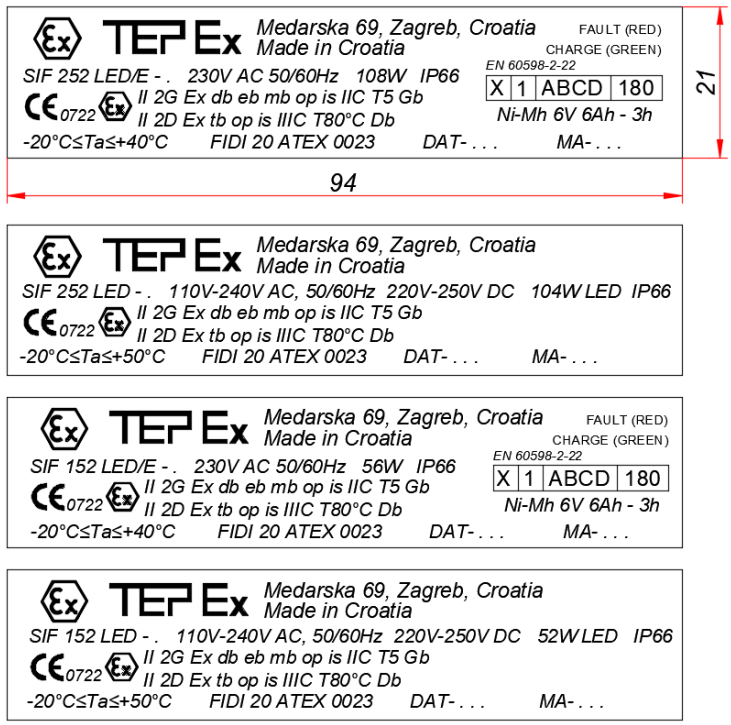
The manufacturer provides a warranty on the light fitting for a period of two years and a warranty on batteries for a period of six months starting from the moment of taking over the product under the provisions of this user manual and the law on obligations. This statement has the force of Warranty sheet.

15. OZNAČAVANJE

Protueksplozijski zaštićena LED svjetiljka SIF označena je natpisnom pločicom na okvir kućišta:

15. MARKING

Explosion proof LED light fitting type SIF is marked with marking plate on frame of housing:



Protueksplozijski zaštićena LED svjetiljka SIF označena je natpisnom naljepnicom u unutrašnjosti kućišta

Explosion proof LED light fitting type SIF is marked with marking label inside housing: