

FLXE 118 LED-N



Upute za uporabu User manual



UPOZORENJE

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.



WARNING

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 complements 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.

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1. NAMJENA

Protueksplozijski zaštićena sigurnosna svjetiljka tip FLXE 118 LED-N ./ s autonomnim napajanjem namijenjena je za nužnu (sigurnosnu i nadomjesnu) i opću rasvjetu u industriji na mjestima s potencijalno eksplozivnom atmosferom plinova, para i prašina u zonama opasnosti 1, 2, 21, 22, sukladno normama EN 60079-10-1 i EN 60079-10-2.

Svjetiljka omogućuje projektiranje i izvođenje nužne rasvjete prema svjetlotehničkim i elektrotehničkim zahtjevima sukladno normama EN 1838 i EN 50172.

2. SUKLADNOST PROIZVODA

Proizvod je sukladan zahtjevima normi EN 60598-1/A11, EN 60598-2-22, EN 62034, EN 62031, EN 62471 i svim povezanim normama.

Proizvod je sukladan ATEX Direktivi 2014/34/EU i normama:

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

Proizvod je razvijen, proizveden i ispitan prema postojećem stanju tehnike sukladno normama EN ISO 9001, EN ISO/IEC 80079-34 i EN ISO 14001.

Proizvod je sukladan LVD Direktivi 2014/35/EU.

Proizvod je sukladan RoHS Direktivi 2011/65 EU.

Proizvod je sukladan EMC Direktivi 2014/30/EU.

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1. PURPOSE

Explosion protected emergency luminaire type FLXE 118 LED-N ./ with autonomous power supply is intended for emergency and general lighting in areas with a potentially explosive atmosphere of gases, vapours and dust in hazardous areas 1, 2, 21, 22, according to EN 60079-10-1 and EN 60079-10-2.

Explosion protected emergency luminaire allows planning and execution of emergency lighting and electrical requirements in accordance with EN 1838 and EN 50172 standard.

2. PRODUCT CONFORMITY

The product complies with the EN 60598-1 / A11, EN 60598-2-22, EN 62034, EN 62031 and EN 62471 and all related regulations. The product complies with the ATEX Directive 2014/34 EU and standards:

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

The product is developed, manufactured and tested according to the prior art in accordance with EN ISO 9001, EN ISO/IEC 80079-34 and EN ISO 14001.

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. TEHNIČKI PODACI

Certifikat:	FIDI 19 ATEX 0028
Oznaka kategorije i protueksplozijske zaštite uređaja:	 II 2G Ex db IIC T6 Gb ili II 2G Ex db eb IIC T6 Gb II 2D Ex tb IIIC T80°C Db
Temperatura okoline (EN 60079-0):	$-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$
Radna temperatura okoline (EN 60598-2-22):	$-20^{\circ}\text{C} \leq T \leq +50^{\circ}\text{C}$
Mehanička zaštita:	IP66
Otpornost na udar:	IK 08
Klasa zaštite:	I (PE - zaštitno uzemljenje)
Nazivni napon U_n :	220-240 V / 50-60Hz
Faktor snage:	$\cos \phi > 0,95$
Nazivna autonomija:	3 sata
Maksimalna potrošnja energije (pri punjenju baterija, radu grijača i radu LED izvora):	10,8 VA
Snaga i tip izvora u mrežnom i baterijskom radu:	LED traka SMD 1,4 W
Svjetlosni tok; baterijski i mrežni rad:	250 lm
Temperatura boje svjetlosti:	4000 K
Index uzvrat boje (CRI):	$R_a > 80$
Očekivana životna dob LED-a:	$\geq 50\,000$ radnih sati - L80/B10
Uočljivost (EN 1838)	22 m
Efikasnost svjetiljke u radu:	$\sim 80\%$
Napon prelaza s mrežnog na baterijsko napajanje:	$U < 0,8 U_n$ u trajanju više od 0,5 sec
Napon prelaza s baterijskog na mrežno napajanje:	$U > 0,9 U_n$ u trajanju više od 1 sec
Baterija 9,6 V / 1,5 Ah:	3 litij-ion sekundarne ćelije LiFePO4 3,2 V / 1,5 Ah, tip ICR19/66 prema EN 61960-3, ugrađena u svjetiljku, mikroprocesorski upravljano punjenje, pražnjenje, grijanje i nadzor
Grijač:	2 x grijača ukupne snage 6 W Uključuju se kada je temperatura na baterijama $< 5^{\circ}$ i trajno održavaju temperaturu na baterijama $> 5^{\circ}$
Životna dob baterija:	min. 2000 ciklusa punjenja odnosno min. 4 godine u nazivnim pogonskim uvjetima

3. TECHNICAL DATA

Certificate:	FIDI 19 ATEX 0028
Category and explosion protection:	 II 2G Ex db IIC T6 Gb or II 2G Ex db eb IIC T6 Gb II 2D Ex tb IIIC T80°C Db
Ambient temperature (EN 60079-0):	$-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$
Operating ambient temperature (EN 60598-2-22):	$-20^{\circ}\text{C} \leq T \leq +50^{\circ}\text{C}$
Degree of protection:	IP66
Impact resistance:	IK 08
Class of protection:	I (protective earthing)
Rated operating voltage:	220-240 V / 50-60Hz
Power factor:	$\cos \phi > 0,95$
Rated autonomy:	3 hours
Maximal power consumption (when charging batteries, heater and LED source are operating):	10,8 VA
Rated power and type of luminaire in main and battery mode:	LED strip SMD 1,4 W
Luminous flux; battery and main mode:	250 lm
Correlated colour temperature:	4000 K
Color rendering index (CRI):	$R_a > 80$
Average rated lifetime of LED:	$\geq 50\,000$ working hours - L80/B10
Visibility (EN 1838)	22 m
Operation efficiency:	$\sim 80\%$
Switch-over Battery operation:	$U < 0,8 U_n$ for more than 0,5 sec
Mains supply operation:	$U > 0,9 U_n$ for more than 1 sec
Battery 9,6 V / 1,5 Ah:	3 lithium-ion secondary cells LiFePO4 3.2 V / 1.5 Ah, type ICR19 / 66 according to EN 61960-3, built into the lamp, microprocessor-controlled charging, discharging, heating and monitoring
Heater:	2 x heaters, total power 6 W They are switched on when the temperature on the batteries is $< 5^{\circ}$ and permanently maintain the temperature on the batteries $> 5^{\circ}$
Battery life:	min. 2000 charging cycles or min. 4 years in nominal operating conditions

Vrijeme punjenja baterija:	15 sati (12 sati > 90% nazivne autonomije), trajno dopunjavanje baterija	Charging time:	15 hours (12 hours > 90% nominal autonomy), continuous battery recharge
Uvodi:	- dva Ex d uvoda, M20x1,5-6H, sukladno EN 60079-1, ISO 965-1, ISO 965-3 ili - dva Ex d uvoda, 3/4"NPT, sukladno ANSI/ASME B1.20.1	Entries:	- two Ex d entries, M20x1,5-6H, according to EN 60079-1, ISO 965-1, ISO 965-3 or - two Ex d entries, 3/4"NPT, according to ANSI/ASME B1.20.1
Ex db eb adapter:	- tip ADP 24/1 i tip ADP 22/1 II 2G Ex db eb IIC T6 Gb II 2D Ex tb IIC T85°C Db, - uvodnica ISO 25 za kabele Ø _v 7-15 mm, FIDI 19 ATEX 0014X	Ex db eb adapter:	- type ADP 24/1 and type ADP 22/1 II 2G Ex db eb IIC T6 Gb II 2D Ex tb IIC T85°C Db, - cable gland ISO 25 for cables Ø _v 7-15 mm, FIDI 19 ATEX 0014X
Priključne stezaljke:	FLXE 118 LED-N 0 /., FLXE 118 LED-N 1 /. - priključni kontakti za mrežno napajanje L, L', N, PE, DALI 4 mm ² maks. po stezaljci, jednožični, mnogožični, finožični - sol (r), s (r), f	Connection terminals:	FLXE 118 LED-N 0 /., FLXE 118 LED-N 1 /. - snap-in terminals for mains supply L, L', N, PE, DALI 4 mm ² max. per terminal, solid, stranded, flexible - sol(r), s(r), f
	FLXE 118 LED-N 2 /. - vijčane stezaljke, Ex db eb adapter ADP, za mrežno napajanje L, L', N, PE kontakti FLXE 118 LED-N 3 /., - vijčane stezaljke, Ex db eb adapter ADP, za mrežno napajanje L, L', N, PE kontakti i Ex db eb adapter ADP, za DALI priključak, FLXE 118 LED-N 4 /., - vijčane stezaljke, dva Ex db eb adaptera ADP, za mrežno napajanje L, L', N, PE te prolazno ožičenje -2,5 mm ² maks. po stezaljci, jednožični, mnogožični, finožični - sol (r), s (r), f -nazivni moment pritezanja 1,2Nm - Ex eb kabelska uvodnica ISO 25 na adapteru ADP za kabele ø7-15mm; - nazivni moment pritezanja 2,5 Nm		FLXE 118 LED-N 2 /. - screw terminals, of Ex db eb adapter ADP, for mains supply L, L', N, PE, DALI connectors FLXE 118 LED-N 3 /. - screw terminals, of Ex db eb adapter ADP, for mains supply L, L', N, PE and Ex db eb adapter ADP, for DALI connection, max.2,5 mm ² FLXE 118 LED-N 4 /. - screw terminals, two Ex db eb adapter ADP, for mains supply L, L', N, PE and trough-wiring - 2,5mm ² max. per terminal, solid, stranded, flexible - sol(r), s(r), f - nominal fastening torque 1,2Nm - Ex eb cable gland ISO 25 on adapter ADP for cable ø7-15mm; - nominal fastening torque 2,5 Nm
Stezaljka za uzemljenje:	- vanjska stezaljka za uzemljenje: max. 2 x 6 mm ² po stezaljci jednožični, višezični, finožični - sol(r), s(r), f -moment pritezanja vijka stezaljke 2,2 Nm - unutarnja stezaljka za uzemljenje: Uzemljenje metalnih dijelova preko vodiča 1mm ² – vijčana stopica na spojnoj šipki I PE stezaljci	Earthing terminal:	- earthing terminal (external) (equipotential): 2 x 6mm ² max. per terminal, solid, stranded, flexible - sol(r), s(r), f; - nominal fastening torque 2,2 Nm - earthing terminal (internal) grounding of the metal parts with a 1mm ² conductor - screw lug on the connecting rod and PE terminal
Momenti pritezanja:	- tijela Ex db eb provodne čahure i Ex d čepa 3,5 Nm - pritisne matice uvodnice adaptera 2,5 Nm - vijaka priključne stezaljke 1,2 Nm - vijaka priključne stezaljke adaptera 1,2 Nm	Tightening torques:	- Ex db eb cable gland and Ex d plug 3.5 Nm - adapter cable gland fitting nut 2.5 Nm - connection terminal screws 1,2 Nm - connection terminal screws of the adapter 1,2 Nm

Skladištenje:

- max. 4 mjeseca na temperaturi +5 °C: +25 °C i vlazi 65 ± 5%,
- max. 1 mjesec na temperaturi -20 °C: +5 °C ili +25 °C: +70 °C i vlazi 65 ± 5 %

Storage:

- max. 4 months on temperature +5 °C: +25 °C and humidity 65 ± 5%,
- max. 1 month on temperature - 20 °C: +5 °C or +25 °C: +70 °C and humidity 65 ± 5 %

Kod izvedbe sa montiranim Ex db eb adapterom (FLX 118 LED-N 2/., FLX 118 LED-N 3/., FLX 118 LED-N 4/.) postoje specifični uvjeti uporabe:

- korisnik mora osigurati adekvatno učvršćenje kabela izvan uvodnice zato jer je kabela uvodnica višezilnog provodnog izolatora s priključnom komorom ispitana s manjom silom izvlačenja sukladno tč. A.3.1.1 norme EN IEC 60079-0,
- uređaj mora biti ugrađen na mjesta s manjom opasnosti od udara zato što je višezilni provodni izolator s priključnom komorom ispitan nižom energijom udara sukladno EN IEC 60079-0.

For type with mounting Ex db eb adapter (FLX 118 LED-N 2/., FLX 118 LED-N 3/., FLX 118 LED-N 4/.) there are specific conditions of use:

- the user shall provide additional clamping of the cable outside the cable glands because multi-core bushing with connection chamber was tested with lower tensile strength according to A.3.1.1. of standard EN IEC 60079-0,
- the product shall be installed in areas with a lower risk of impact because multi-core bushing with connection chamber was tested with lower impact energy according to EN IEC 60079-0.

Vijčani raspori:

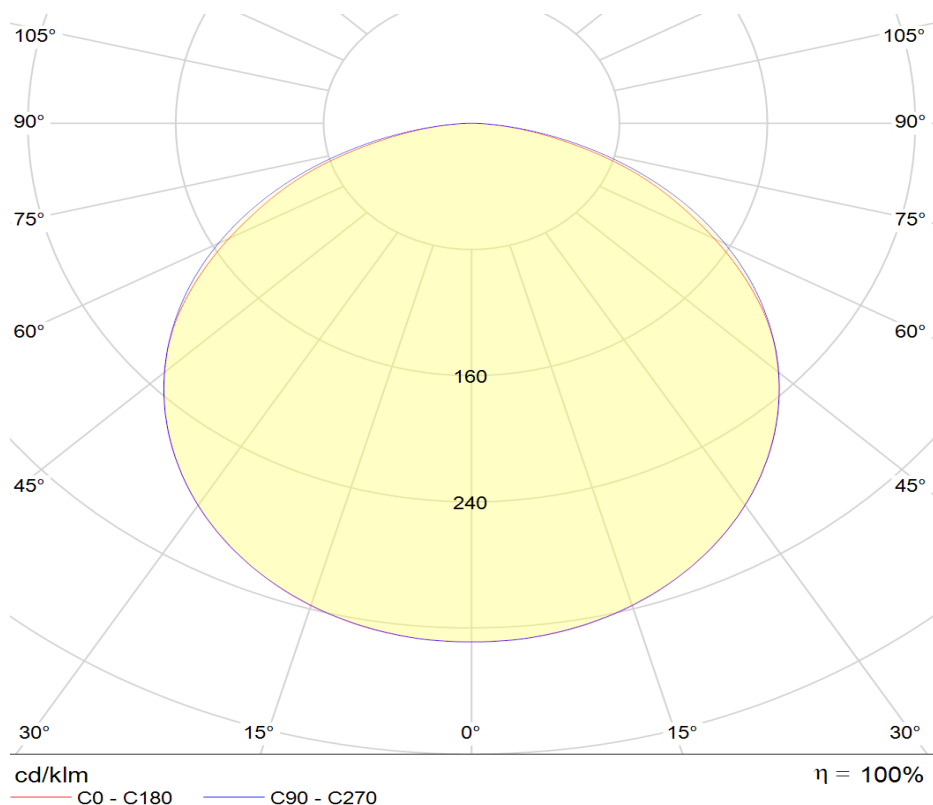
- M120x 1,5 - 6H/6g, prema ISO 965-1, navoj DIN 13 T.24, 12 punih navoja,
- M20 x 1,5 - 6H/6g, prema ISO 965-1, navoj ISO 965-3, 12 punih navoja
- 3/4" NPT prema ANSI/ASME B1.20.1, 10 punih navoja.

Threaded joint:

- M120x 1,5 - 6H/6g, according to ISO 965-1, thread DIN 13 T.24, 12 full threads,
- M20 x 1,5 - 6H/6g, according to ISO 965-1, thread ISO 965-3, 12 full threads
- 3/4" NPT according to ANSI/ASME B1.20.1, 10 full threads.

4. SVJETLOTEHNIČKA KARAKTERISTIKA

4. LUMINAIRE CHARACTERISTICS



FLXE 118 LED-N - / -

Osnovna tipna oznaka:**Oznaka tipa uvida:**

- **0** - Ex db kabelski uvod 2 x M20, ISO 965-1, ISO 965-3
Ex db cable entry 2 x M20, ISO 965-1, ISO 965-3
- **1** - Ex db kabelski uvod 2 x 3/4"NPT, ANSI/ASME B1.20.1
Ex db cable entry 2 x 3/4"NPT, ANSI/ASME B1.20.1
- **2** - Ex db kabelski uvod 2 x M20, ISO 965-1, ISO 965-3 s jednim ugrađenim Ex db eb adapterom tip ADP 24/1 i jednim Ex db čepom
- Ex db cable entry 2 x M20, ISO 965-1, ISO 965-3 with one installed Ex db eb adapter type ADP 24/1 and one Ex db plug
- **3** - Ex db kabelski uvod 2 x M20, ISO 965-1, ISO 965-3 s jednim ugrađenim Ex db eb adapterom tip ADP 24/1 i jednim ADP 22/1 za DALI priključak
Ex db cable entry 2 x M20, ISO 965-1, ISO 965-3 with one installed Ex db eb adapter type ADP 24/1 and one ADP 22/1 for DALI interface
- **4** - Ex db kabelski uvod 2 x M20, ISO 965-1, ISO 965-3 s dva ugrađena Ex db eb adapterom tip ADP 24/1 za prolazno ožičenje
- Ex db cable entry 2 x M20, ISO 965-1, ISO 965-3 with two installed Ex db eb adapter type ADP 24/1 for true wiring

Piktogram: sukladno sa DIN 4844-2 / according to DIN 4844-2

0	Bez oznake Without marking	5	
1		6	
2		7	
3		8	
4			

6. NAČINI RADA

Svjetiljka može raditi u dvije vrste spoja:

a) Trajni spoj (Dauerschaltung, maintained)

Svjetiljka se može koristiti za opću i orijentacijsku rasvjetu s mrežnim napajanjem L' preko instalacijske sklopke korisnika. U slučaju pada napona ili ispada trajne faze L, bez obzira na stanje sklopke u krugu mrežnog napajanja L' (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 L.

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

Samonadzor ne uključuje kontrolu ispravnosti LED izvora.**Svjetiljka se isporučuje sa napunjenim baterijama.****6. OPERATING MODES**

The luminare can operate with two types of connection:

a) Maintained (Dauerschaltung)

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

b) Non maintained (Bereitschaftschaltung)

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

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.

Self-monitoring does not include a control of the LED source validity.**The light fitting is supplied with charged battery's.**

X 1 ABCD 180**X 1 ABCD 180**

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
 uključanja nakon povrata napajanja,
 C - sigurnosna svjetiljka s RESET funkcijom,
 D - sigurnosna svjetiljka za prostore s posebnim opasnostima,
 180 - sigurnosna svjetiljka s autonomijom 3 sata.

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 RESET function
 D - emergency light fitting for use in areas with special hazards
 180 - emergency light fitting with autonomy of 3 hours

Modovi signalnog indikatora / Indication codes

MOD INDIKATORA / MODULE MODE	LED INDIKATOR / INDICATOR LED	STANJE / STATUS	SIGURNOSNA RASVJETA EMERGENCY LAMP
Opći način rada Stanje mirovanja / Mains operation mode Standby mode	Trajno zelena / Permanent green	Normalno / Normal	Isključena / Off
Test funkcionalnosti u postupku / Function test in progress	Brzo trepteća zelena / Fast flashing green	Normalno / Normal	U funkciji / On
Test nazivne autonomije u postupku / Duration test in progress	Sporo trepteća zelena / Slow flashing green	Normalno / Normal	U funkciji / On
Proces puštanja u rad / Commissioning in progress	Sporo trepteća zelena / Slow flashing green	Normalno / Normal	Isključeno osim kada je test autonomije u postupku / Off except during testing
Mod identifikacije / Identification mode	Sporo trepteća izmjenjivo zelena-crvena Slow flashing green alternating green/red	Normalno / Normal	Isključena / Off
Mod dodatnog rada / Prolong mode	Isključeno / Off	Normalno / Normal	U funkciji / On
Mod isključenja sigurnosne rasvjete / Rest mode	Sporo trepteća duplo pulsirajuća zelena Slow flashing double pulse green	Normalno / Normal	Isključena / Off
Mod isključenja sigurnosne rasvjete / Inhibit mode	Sporo trepteća duplo pulsirajuća zelena Green slow flashing double pulse off	Normalno / Normal	Isključena / Off
Mod sigurnosne rasvjete / Emergency mode	Isključeno / Off	Normalno / Normal	U funkciji / On
Neispravna svjetiljka / Lamp fault	Trajno crvena / Permanent red	Greška / Fault	Isključena / Off
Neispravna baterija ili test / Battery / Test failure	Sporo trepteće crvena / Slow flashing red	Greška / Fault	Isključena / Off
Neuspjelo punjenje baterija / Battery charging failure	Brzo trepteće crvena / Fast flashing red	Greška / Fault	Isključena / Off
Nestanak glavnog ili baterijskoga napajanja / Loss of mains and battery supply	Isključeno / Off	Greška / Fault	Isključena / Off
Mod samo-identifikacije / Self-test reconfigured indication	3 x dva crvena signal te dva zelena signala / 3 x fast double pulse red followed by fast double pulse green	Normalno / Normal	Isključena / Off

Svjetiljka FLXE 118 LED-N sadrži grijače baterije koji služe za održavanje temperature na baterijama $>5^{\circ}\text{C}$.

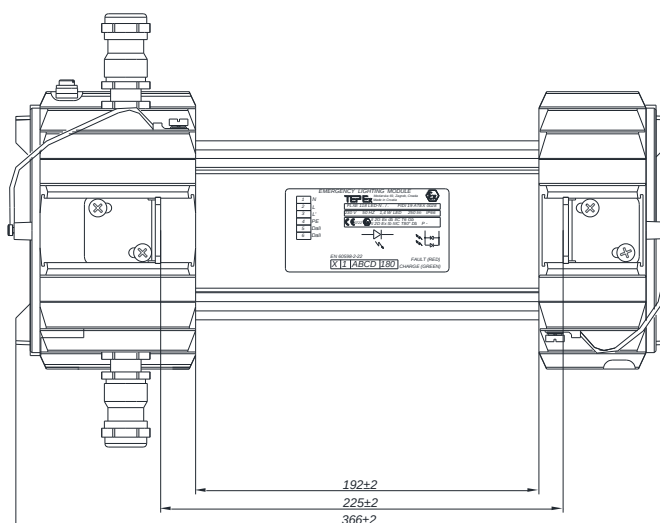
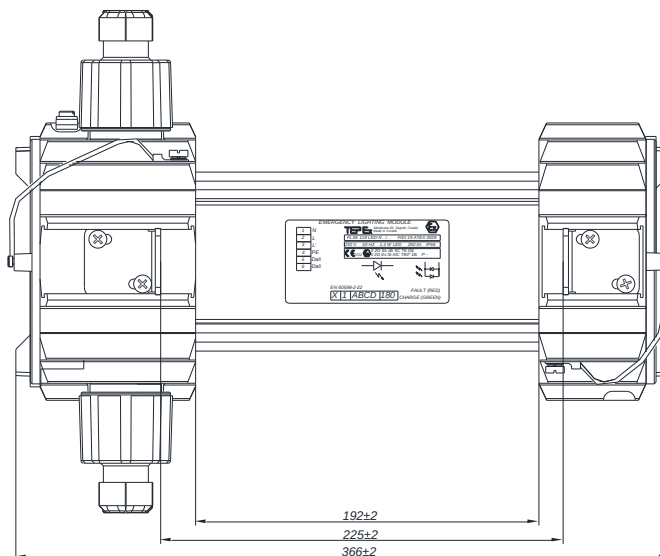
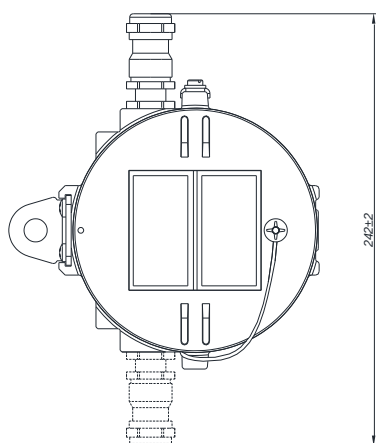
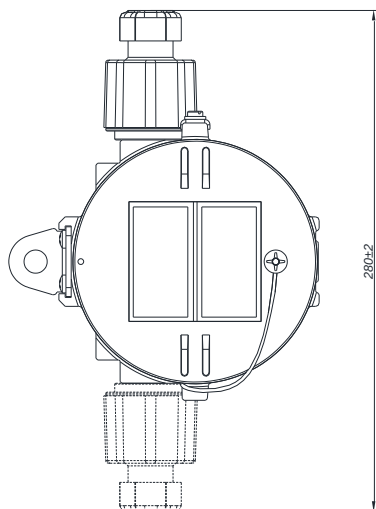
U slučaju kada je temperatura na baterijama $<5^{\circ}\text{C}$, pale se grijači i trajno održavaju temperature baterija $>5^{\circ}\text{C}$.

Svjetiljka također posjeduje DALI sustav kontrole rasvjete.

Light fitting FLXE 118 LED-N contains battery heaters that are used to maintain the temperature on batteries $>5^{\circ}\text{C}$. In case the battery temperature is $<5^{\circ}\text{C}$, the heaters are switched on and maintain battery temperatures $>5^{\circ}$.

The light fitting also has a DALI lighting control system.

7. DIMENZIJE



8. MONTAŽA

Standardna montaža svjetiljke se izvodi ovjesom ili vijčanim učvršćenjem preko ušica s rupom $\varnothing 13$ mm. Uporabom pribora za montažu na zid i strop FLXE 20-170 moguće je direktno učvršćenje svjetiljke za zid ili strop vijčani pribor $\varnothing 8$ na razmaku 230 mm. Uporabom pribora za montažu na cijev FLXE 20-180 moguće je direktno učvršćenje svjetiljke za stup promjera do 2". Kod FLXE 118 LED 0/ i FLXE 118 LED 1/ Ex db uvodnice i Ex db čepovi nisu sastavni dio isporuke već ih osigurava korisnik. Standardna izvedba svjetiljke pretpostavlja zatvaranje uvida sa zaštitnim čepovima.

8. MOUNTING

Standard mounting is performed with suspension or fixing with a screw's through an $\varnothing 13$ mm hole. Using accessories for wall and ceiling mounting FLXE 20-170 can be directly fixed on the wall or ceiling with screw accessories $\varnothing 8$ at a distance of 230 mm. Using accessories for pipe mounting FLXE 20-180 can be directly fixed on the pole with diameter up to 2".

Ex db glands and plugs are not part of the delivery for the types FLXE 118 LED .0 / and FLXE 118 LED .1 / and they must be provided by users. Standard version of the luminaire assumes enclosure of the cable entries with plugs.

Kod FLXE 118 LED 2/. jedan montirani Ex db eb adapter, tip ADP 24/1 i jedan Ex db eb čep su sastavni dio proizvoda.

Kod FLXE 118 LED 3/. i FLXE 118 LED 4/. dva montirana Ex db eb adaptera, tip ADP 24/1 su sastavni dio proizvoda.

Ako korisnik zahtjeva prolazno ožičenje, potrebno je koristiti dva Ex db eb adaptera ili dvije Ex db uvodnice.

U slučaju da se koriste jedan Ex db eb adapter, nije moguće prolazno ožičenje niti DALI opciju.

U slučaju prolaznog ožičenja nije moguća DALI opcija.

U slučaju DALI opcije nije moguće prolazno ožičenje.



Turn Ex db cover (the cover must be closed with the enclosure) / Zatvoriti Ex db poklopac (poklopac mora biti zatvoren do kraja)

Nakon svakog otvaranja, navoj svjetiljke treba zaštititi sa zaštitnom masti.

9. INSTALIRANJE I PUŠTANJE U RAD

Priključak na instalaciju treba izvesti preko bezvijčanih stezaljki koje se nalaze na LED modulu FLXE 10-130 prema shemi spajanja i tehničkim podacima:

Trajni spoj:

Trajnu fazu treba priključiti na stezaljku L (2). Fazni vodič za mrežno napajanje treba preko instalacijske sklopke priključiti na stezaljku L' (3). Pri tome treba paziti da faze L i L' budu ista faza. Neutralni vodič treba priključiti na stezaljku N (1), a zaštitni na stezaljku PE (4).

Pripravni spoj:

Trajnu fazu treba priključiti na stezaljku L (2). Neutralni vodič treba priključiti na stezaljku N (1), a zaštitni na stezaljku PE (4). Stezaljku L' (3) ostaviti praznu.

Vanjsko uzemljenje, izjednačenje potencijala se priključuje na predviđenu vanjsku stezaljku za uzemljenje s vodičem max.6 mm² sol(r), s(r), f.

Natpisna naljepnica sa shemom spajanja nalazi se na LED modulu FLXE 10-130.

Ukoliko se priključak vrši preko Ex db eb adaptera unutarnje ožičenje je izvedeno u tvornici. Priključak na stezaljke adaptera treba izvršiti prema bojama vodiča u adapteru niže danoj shemi spajanja.

Type FLXE 118 LED 2 /. luminare is equipped with an Ex db eb adapter, type ADP 24/1 and one Ex db eb plug and they are standard part of delivery.

Type FLXE 118 LED 3/. and FLXE 118 LED 4/. luminare are equipped with two Ex db eb adaptera, type ADP 24/1 and they are standard part of delivery.

If the user requests through-wiring, it is necessary to use two Ex db eb adapters or two Ex db glands. In case of usage one Ex db eb adapter, through-wiring and DALI option are not possible.

In the case of true-wiring, the DALI option is not possible.

In the case of the DALI option, transient wiring is not possible.



Secure the cover with the M5 blocking screw (unscrewing protection) / Osigurati poklopac sa M5 blokadnim vijkom (zaštita od samo odvrtanja)

After each opening, lamp threads should be protected by protective grease.

9. INSTALLING AND PUTTING INTO OPERATION

Network connection is performed through screwless terminals located on the LED module FLXE 10-130 according to wiring diagram and technical data:

Maintained:

Permanent main line has to be connected to the L(2) terminal. Phase conductor for power supply has to be connected through installation switch to the L'(3) terminal. User should be careful that phase L and L' are the same phase. Neutral conductor has to be connected to the N(1) terminal and protective earth conductor to the PE(4) terminal.

Non maintained:

Permanent main line has to be connected to the L(2) terminal. Neutral conductor has to be connected to the N(1) terminal and protective earth conductor to the PE(4) terminal. L'(3) terminal is not connected.

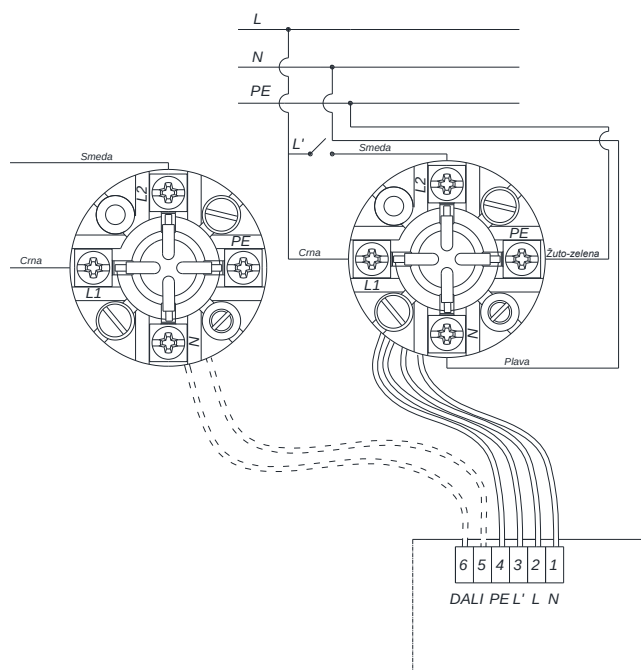
External grounding, equipotential is connected to an external terminal provided with a grounding conductor max.6 mm² solid (r), s (r), f.

Label with a wiring diagram is on the LED module FLXE 10-130.

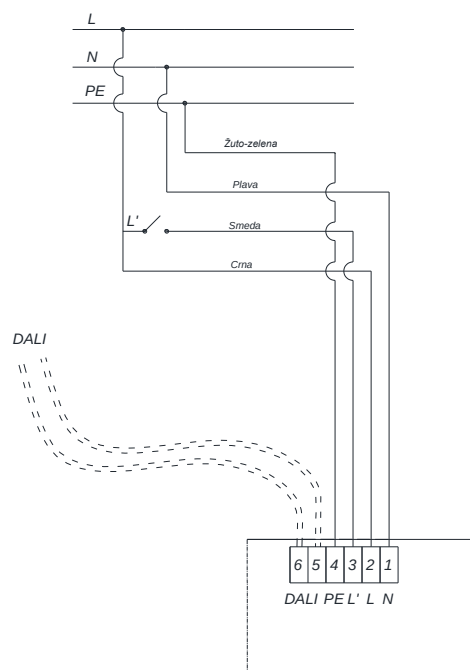
If the electrical connection is performed through Ex db eb adapter, internal wiring is done by the manufacturer.

The electrical connection to the terminals of adapter have to be performed according to wiring diagram below.

INDIREKTAN UVOD - Ex db eb adapter
INDIRECT ENTRY - Ex db eb adapter



DIREKTAN UVOD - Ex db uvodnica
DIRECT ENTRY - Ex db cable gland

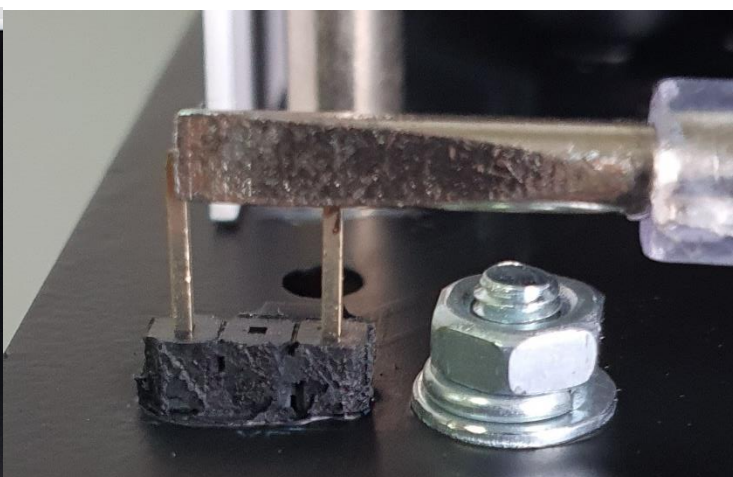
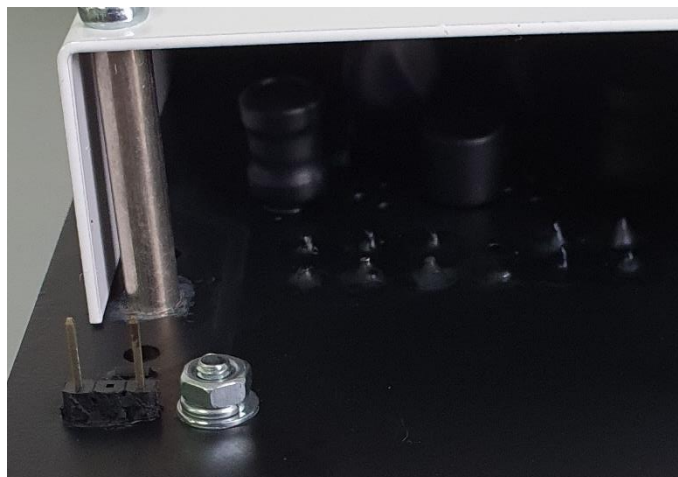


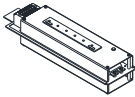
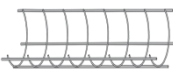
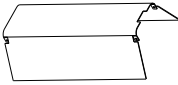
Po potrebi, baterijski rad svjetiljke se može isključiti kratkim spajanjem kontakata sa slike (u slučaju remonta pogona ili transporta svjetiljaka).

Ponovnim spajanjem na mrežni napon svjetiljka nastavlja sa normalnim modom rada te se baterijski mod rada opet aktivira.

If necessary, the battery operation of the lamp can be switched off by short-circuiting the contacts in the picture (in case of overhaul or transport of lamps).

By reconnecting to mains voltage, the lamp resumes normal mode and the battery mode is reactivated.



SKICA SKETCH	OPIS DESCRIPTION	KOD CODE	SKICA SKETCH	OPIS DESCRIPTION	KOD CODE
	Poklopac kućišta kompl. Housing cover assably	FLXE 10-110		Ex db kabelska uvodnica ISO 20 Ex db cable gland ISO 20	FLXE 20-130
	Brtva poklopca Housing cover gasket	FLXE 10-120		Ex db kabelska uvodnica 3/4\"NPT Ex db cable gland 3/4\"NPT	FLXE 20-140
	LED modul kompl. LED module assably	FLXE 10-130		Ex db čep ISO 20 Ex db plug ISO 20	FLXE 20-150
	Zaštitna rešetka Protective grid	FLXE 20-140		Ex db čep 3/4\"NPT Ex db plug 3/4\"NPT	FLXE 20-160
	Vanjski reflector External reflector	FLXE 20-150		Set za montažu na zid i strop Set for wall and ceiling mounting	FLXE 20-170
	Adapter Ex db eb	ADP 10-160		Set za montažu na cijev Set for pipe mounting	FLXE 20-180

Nije moguća zamjena samo baterija, već zamjena cijelog kompleta (LED modul kompl. – FLXE 10-130)
It is not possible to replace only the battery, but to replace the whole set (LED module set - FLXE 10-130)

11. ODRŽAVANJE, POPRAVAK, OBNAVLANJE I PREGRADNJA

11. INSPECTION, MAINTENANCE, REPAIR AND OVERHAUL

Potrebno je obavljati preglede i održavati sve dijelove uređaja o kojima ovisi protueksplozijska zaštita sukladno normi EN 60079-17, općim i posebnim uputama proizvođača i Pravilnicima korisnika, a naročito:

- da su kućišta, zaštitno staklo i brtve bez puknuća i oštećenja,
- da su brtve poklopca bez puknuća i oštećenja te da je poklopac zategnut nazivnim momentom i blokiran od odvrtanja pomoću blokadnog vijka,
- da su uvodnica, čep, adapte, stezaljke, te zaštitna rešetka pritegnuti nazivnim momentom.

Popravak, obnavljanje ili pregradnju kućišta obavlja proizvođač ili od proizvođača ovlaštena pravna osoba, originalnim dijelovima prema proizvodnoj dokumentaciji, a sve sukladno normi EN 60079-19.

Ukoliko popravak i/ili obnavljanje i/ili pregradnju vrši treća osoba, prestaje svaka odgovornost proizvođača za proizvod, a EU Izjava o sukladnosti proizvođača postaje nevažeća.

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

- that the housings, protective glass and gasket are without rupture and damage,
- that the cover gaskets are without rupture and damage and that the cover is tightened with a nominal torque and blocked from unscrewing with a blocking screw,
- that the cable gland, plug, adapter, connecting terminals, screws of protective grid are tightened with nominal torque.

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

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 EU Declaration of conformity becomes invalid.

12. ODGOVORNOSTI I OVLAŠTENJA

12. RESPONSIBILITY AND AUTHORIZATION

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

This Manual represents the most relevant information about the product. Adequate national laws and regulations supplement it. Production, usage, certification and supervision are determined at the national level with:

- 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 Direktiva 1999/92/EC (ATEX 137).
- Odgovorna osoba dužna je osigurati njihovo provođenje u pogonu.

- a) Regulations of Equipment and protective systems intended for use in potentially explosive atmospheres (EU Directive ATEX 2014/34/EU) and
- b) Regulations of minimum requirements for safety and health protection of workers and technical inspection of facilities, equipment, installations and devices in potentially explosive atmospheres EU Directive 1999/92/EC (ATEX 137).
- The responsible person shall ensure their implementation at the facility.

13. SKLADIŠTENJE I TRANSPORT

Transport i skladištenje svjetiljke treba vršiti samo u uvjetima kako je rečeno u ovoj uputi u originalnoj ambalaži, na način istaknut na kartonskoj kutiji.

13. STORAGE AND TRANSPORT

Transport and storage are only allowed in the original packaging, on the way pointed out on the carton box.

14. JAMSTVO PROIZVOĐAČA

Proizvođač daje jamstvo na proizvod u trajanju od godine dana 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 product for a period of one year 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

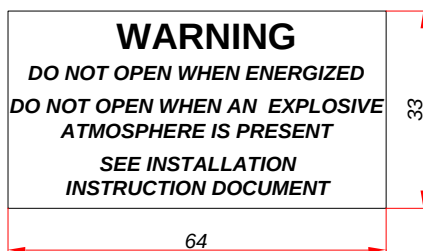
Protueksplozijski zaštićena LED sigurnosna svjetiljka, tip FLXE 118 LED-N označena je s:

- pločicom upozorenja na poklopcu svjetiljke:

15. MARKING

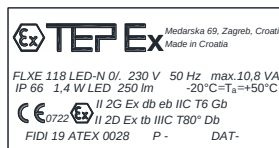
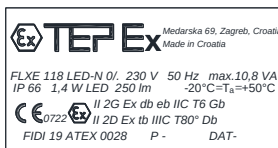
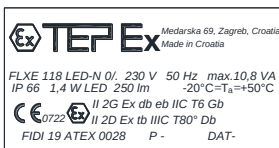
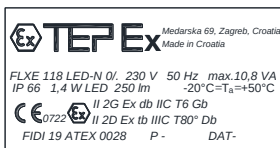
Explosion protected fluorescent light fitting, type FLXE 118 LED-N is labeled with:

- a warning labels with technical data on the housing:



- natpisnom pločicom s tehničkim podacima na poklopcu kućišta:

- a label with technical data on the housing cover:



- natpisnom naljepnicom sa shemom spajanja na LED modulu FLXE 10-130:

- a label with the wiring diagram in the LED module FLXE 10-130:

