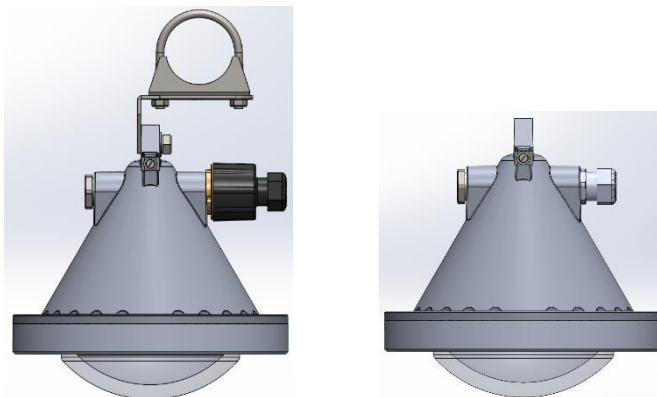


0401.35 LED 30



## 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 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.

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### 1. NAMJENA

Protueksplozijski zaštićena LED svjetiljka, tip 0401.35 LED 30 namijenjena je za upotrebu u industrijskim prostorima 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.

### 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 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.

### 3. TEHNIČKI PODACI

Certifikat	FIDI 19 ATEX 0046
Oznaka kategorije i protueksplozijske zaštite uređaja:	 II 2G Ex eb mb op is IIC T4 Gb II 2D Ex tb op is IIIC T80°C Db
Temperatura okoline:	-40°C ≤ Tamb ≤ +40°C
Mehanička zaštita:	IP 66
Otpornost na udar:	IK 08
Klasa zaštite:	I (PE - zaštitno uzemljenje)
Nazivni napon Un:	230 V AC, 50 Hz
Radni napon:	220 - 240 V ± 10%, 50.....60 Hz
Nazivna snaga Pn:	30 W
Nazivna struja In:	130 mA
Faktor snage:	>0,95
LED izvor:	Acric3 30W, tip:AM030FL-A0, ACRO-SOLUTIONS Co., Ltd

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### 1. PURPOSE

Explosion protected light fitting, type 0401.35 LED 30 is intended for general lighting in industrial areas with potentially explosive atmosphere Zones 1, 2, 21, 22 in accordance with EN 60079-10-1 and EN 60079-10-2.

### 2. PRODUCT CONFORMITY

The product complies with the standards:

- EN IEC 60079-0:2018,
- 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. TECHNICAL DATA

Certificate:	FIDI 19 ATEX 0046
Category and explosion protection:	 II 2G Ex eb mb op is IIC T4 Gb II 2D Ex tb op is IIIC T80°C Db
Ambient temperature:	-40°C ≤ Tamb ≤ +40°C
Mechanical protection:	IP66
Resistance to shock:	IK 08
Class of protection:	I (PE - protective earthing)
Rated voltage Un:	230 V AC, 50 Hz
Service voltage:	220 - 240 V ± 10%, 50.....60 Hz
Rated power Pn:	30 W
Rated current In:	130 mA
Power factor:	>0,95
LED light source:	Acric3 30W, tip:AM030FL-A0,

OVP zaštita:	IEC 61000-4-5, EN 62031 3kV/1min udarni prenapon 8/20 $\mu$ s 6kV/3kA
OCP zaštita:	2,5AT, prekidna moć 1500A, IEC 60127
OTP zaštita:	Tsmax=70°C, povratno, IEC 60730-1
Svjetlosni tok LED izvora:	3020 lm
Svjetloni tok svjetiljke:	2720 lm
Efikasnost LED izvora:	101 lm/W
Efikasnost svjetiljke:	85 lm/W
Koeficijent izlaznog svjetlosnog toka svjetiljke:	0,9
Temperatura boje svjetlosti:	4000 K
Indeks uzvratna boje (CRI):	>80
Očekivana životna dob LED-a:	50 000 radnih sati pri tamb=25°C – L70/B10/C10
Priljučne stezaljke:	- CMC 1-2, 0,5-4mm <sup>2</sup> za priključak faznog i neutralnog vodiča - jednožilni, višežični - moguće prolazno ožičenje max. 16A za ožičenje 2,5mm <sup>2</sup> -stezaljka za unutarnje i vanjsko uzemljenje (izjednačenje potencijala) - max. 2 x 6mm <sup>2</sup> - jednožilni, višežični, mnogožični
Uvodi:	- 2xISO 20 sukladno EN 60423
Ex e uvodnica i čep:	- jedna odgovarajuće ATEX certificirana II 2G/D Ex eb/tb IP66 kabela uvodnica M20x1,5 i jedan odgovarajuće ATEX certificiran II 2G/D Ex eb/tb IP66 čep M20x1,5 za područje radne temperature od -40°C do +80°C sukladno EN 50262, sastavni su dijelovi svjetiljke
Momenti pritezanja:	Vijci M6x30 za pričvršćenje okvira stakla: 4 Nm Tijelo Ex eb uvodnice i čepa 3,5 Nm
Osnovne mjere:	250x250 mm (H,Ø)
Montaža na cijev:	limeni nosač pričvršćen vijčanim priborom M6 sa jednom obujmicom, mogućnost vertikalnog rotiranja za 180°
Masa:	cca 6,5kg

#### 4. TIPNA OZNAKA

- Svjetiljka, tip 0401.35 LED 30 – 0 (2xISO20 uvoda bez uvodnice i čepa)  
Svjetiljka, tip 0401.35 LED 30 – 1 (1xM20 čep i 1xM20 uvodnica)  
Svjetiljka, tip 0401.35 LED 30 – 2 (2xM20 uvodnica)

	ACRO-SOLUTIONS Co., Ltd
OVP protection:	IEC 61000-4-5, EN 62031 3kV/1min impulse overvoltage 8/20 $\mu$ s 6kV/3kA
OCP protection:	2,5AT, breaking capacity 1500A, IEC 60127
OTP protection:	Tsmax=70°C, resettable, IEC 60730-1
Luminous flux LED:	3020 lm
Luminous flux light fitting:	2720 lm
LED Efficacy	101 lm/W
System Efficacy	85 lm/W
Light output ratio of luminaire:	0,9
Light colour:	4000 K
Refractive index(CRI):	>80
Estimated service life:	50 000 working hours Tamb = 25°C L70/B10/C10
Connection terminal:	CMC 1-2, 0,5-4mm <sup>2</sup> for connection of phase and neutral Conductor, Single-core, stranded Possible through-wiring max. 16A for 2.5mm <sup>2</sup> wiring Terminal for internal and external grounding, max 2 x 6 mm <sup>2</sup> sol(r), sol(s), f
Cable entries:	2xISO20, according to EN 60423
Ex e cable gland and plug:	One ATEX certificated II 2G/D Ex eb/tb IP66 cable glands M20x1,5 and one ATEX certificated II 2G/D Ex eb/tb IP66 plug for ambient temperature -40°C to +80°C according to EN 50262, are integral parts of lamps
Tightening torques values:	Screws M6x30 for fixing the glass frame 4 Nm Body of the Ex eb glands and plug: 3.5 Nm
Basic measures:	250x250 mm (H,Ø)
Pipe mounting:	sheet metal bracket attached with screw kit M6 with one clamp possible vertical rotation 180°
Weight:	cca 6,5 kg

#### 4. TYPES

- Light fitting, type 0401.35 LED 30 – 0 (2xISO20 without cable gland and plug)  
Light fitting, type 0401.35 LED 30 – 1 (1xM20 plug and 1xM20 cable gland)  
Light fitting, type 0401.35 LED 30 – 2 (2xM20 cable gland)

## 5. MONTAŽA

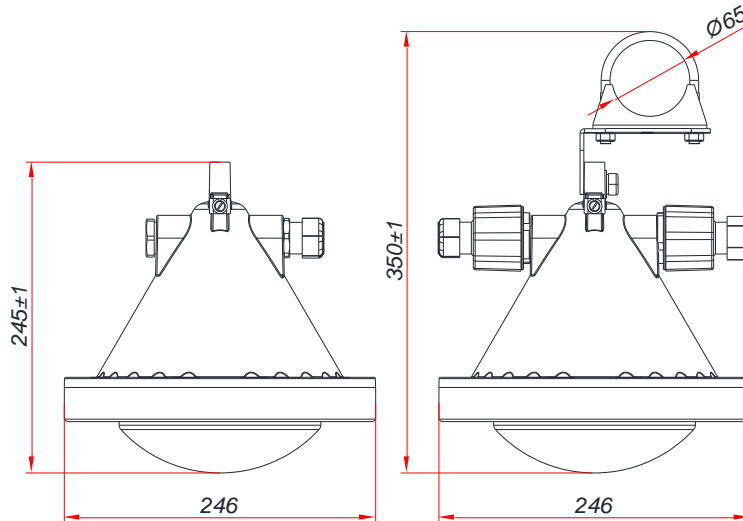
Montaža i instaliranje svjetiljke se izvodi prema podacima na natpisnim pločicama na svjetiljci, ovim i dodatnim uputama proizvođača, nacionalnim Propisima i Pravilnicima, kao i prema općenito priznatim pravilima tehnike. Samo uz taj uvjet osigurana je tipnim certifikatom potvrđena protueksplozijska zaštita svjetiljke.

Montaža svjetiljke na podlogu vrši se preko nosača vijčanim priborom M6.

Montaža svjetiljke na cijev vrši se preko jednog limenog nosača i obujmice vijčanim priborom M6 koji se isporučuje uz svjetiljku. Otvaranje kućišta se vrši odvrtanjem četiri vijka M6x30. Priključni kabel se uvodi 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. Neiskorišteni uvod, na isti način, obavezno treba zatvoriti čepom. Električno spajanje vrši se spajanjem vodiča L1, N i PE na priključne stezaljke na DIN nosaču. Moguće je prolazno ožičenje do max. 16A

Zatvaranje kućišta se izvodi na opisani način, suprotnim redoslijedom radnji.

## 6. DIMENZIJE



## 7. PREGLED, ODRŽAVANJE, POPRAVAK I OBNAVLJANJE

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 kućište, svi dijelovi kućišta, zaštitno staklo i brtve bez puknuća i oštećenja,
- da je kućište potpuno zatvoreno sklopom zaštitnog stakla,
- da su uvodnica, čep, vijci okvira stakla, vijak stezaljke za uzemljenje 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.

## 5. INSTALATION

Installation and putting into operation have to be done according to technical and certification data on warning label on lamp, this user manual, national regulations and laws. Only with that, explosion-proof protection of bulkhead light fitting is ensured with EC-type examination certificate.

Installation of lamp (on wall or ceiling) is done with steel brackets with M6x30 screws.

Installation of lamp on tube is done with one steel carrier and clamp using screw set which is integral parts of lamps.

Opening of Ex e enclosure is done by unscrewing four screws M6x30. Special attention must be dedicated to selection of inner gasket sealing ring of Ex e cable glands according to diameter of connecting cable. Pressure nut and intermediate gland must be tightened with nominal torque. Unused cable entries must be closed with plug. The electric connecting is performing by connecting power supply cable (L, NE, PE) on the connection terminals and terminal for internal grounding. It is possible through-wiring for max. 16A

The closing of the Ex e enclosure should be done by a reverse sequence of action.

## 6. DIMENSIONS

## 7. INSPECTION, MAINTENANCE, REPAIR AND OVERHAUL

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:

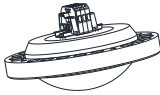

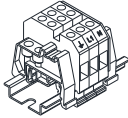


- that the housing, all part of housing, protective glass and gasket are without rupture and damage,
- that the housing is completely closed with set of protective glass
- that the cable gland, plug, connecting terminals, screws of flange frame are tightened with nominal torque.

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.

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

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.

## 8. REZERVNI DIJELOVI I PRIBOR

SKICA SKETCH	OPIS DESCRIPTION	OZNAKA ZA NARUDŽBU ORDER CODE	SKICA SKETCH	OPIS DESCRIPTION	OZNAKA ZA NARUDŽBU ORDER CODE
	Set okvira stakla Glass frame set 0401.35 - LED	0401.35 LED 30 10-110		II 2G/D Ex eb/tb uvodnica/cable gland M20	0401.35 LED 30 20-110
	Set stezaljki Terminal set 0401.35 - LED	0401.35 LED 30 10-120		II 2G/D Ex eb/tb čep/plug M20	0401.35 LED 30 20-120
				Nosač za cijev / Tube mounting bracket Ø65mm	0401.35 LED 30 20-130

## 8. SPARE PARTS AND ACCESSORIES

## 9. 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:

- 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
- 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.

## 10. SKLADIŠTENJE I TRANSPORT

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

## 11. JAMSTVO PROIZVOĐAČA

Proizvođač daje jamstvo na proizvod u trajanju od godine dana prema odredbama Zakona o obveznim odnosima. Ova izjava ima snagu Jamstvenog lista.

## 9. 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:

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

## 9. STORAGE AND TRANSPORT

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

## 10. MANUFACTURER'S WARRANTY

The manufacturer provides a warranty on the product for a period of one year under the provisions of this user manual and the law on obligations. This statement has the force of Warranty sheet.

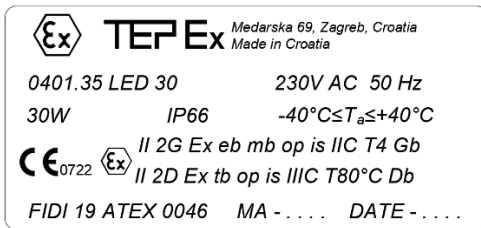
## 12. OZNAČAVANJE

Protueksplozijski zaštićena zidna svjetiljka, tip 0401.35 LED označena je s vanjskom označnom pločicom i unutarnjom naljepnicom:

- natpisnom pločicom upozorenja na kućištu svjetiljke



- natpisnom naljepnicom unutar kućišta



## 11. MARKING

Explosion protected light fitting, type 0401.35 LED is marked with the external and the inner label with technical data:

- external technical label on housing of the lamp



- internal technical label on housing of the lamp

