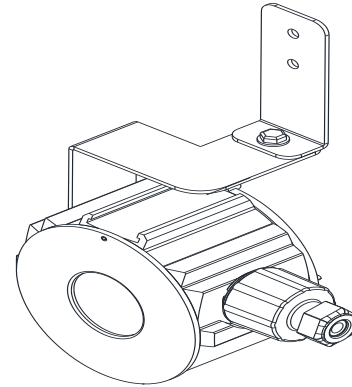


**Protueksplozijski zaštićena  
upravljačka jedinica MDS-L/.****Explosion protected control unit  
MDS-L/.****Upute za uporabu****User manual****UPOZORENJE!**

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 upravljačka jedinica MDS-L/. čine Ex db kućište u koje se ugrađuje „microwave“ senzor pokreta ROLF JQ-L/CN.

Kao cjelina čine protueksplozijski zaštićeni električni uređaj namijenjen za uporabu u prostorima ugroženim eksplozivnim atmosferama plinova, para i prašina u zonama opasnosti 1, 2, 21, 22 sukladno normama EN 60079-10-1 i EN 60079-10-2.

## 2. STUPANJ ZAŠTITE

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

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 i normama:

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



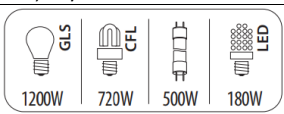
Proizvod je sukladan LVD Direktivi 2014/35/EU.

Proizvod je sukladan RoHS Direktivi 2011/65/EU.

Proizvod je sukladan EMC Direktivi 2014/30/EU.

Certifikat: FIDI 19 ATEX 0032

## 3. TEHNIČKI PODACI

Oznaka kategorije i protueksplozijske zaštite:	 	II 2G Ex db eb IIC T6 Gb ili II 2G Ex db IIC T6 Gb II 2D Ex tb IIIC T85°C Db
Temperatura okoline:	-40°C/-20°C ≤ Tamb ≤ +50°C	
Radna temperatura senzora pokreta:	-5°C ≤ Tser ≤ +40°C	
Nazivni napon:	220-240 VAC, 50/60 Hz	
Maksimalna snaga instaliranog izvora svjetlosti:	 1200W 720W 500W 180W	
Mehanička zaštita:	IP 66	
Otpornost na udar:	IK 10	
Klasa zaštite:	I (PE - protective earthing)	
Senzor pokreta:	ROLF JQ-L/CN microwave motion sensor	

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## 1. PURPOSE

Explosion protected control unit MDS-L/. contains of Ex db enclosure in which ROLF JQ-L/CN microwave sensor detector is installed.

As a whole, they are an explosion protected electrical device intended for use in explosive atmospheres of gases, vapors and dusts in hazardous areas 1, 2, 21, 22 in accordance with EN 60079-10-1 and EN 60079-10-2.

## 2. TYPE OF PROTECTION

The product has been developed, manufactured and tested according to the existing state of technique, in accordance with EN ISO 9001, EN ISO 80079-34 and EN ISO 14001. The product complies with ATEX Directive 2014/34 / EU and with the following standards:

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

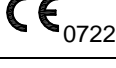

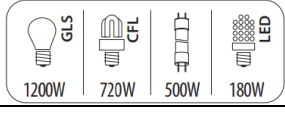
The product complies with LVD Directive 2014/35 / EU.

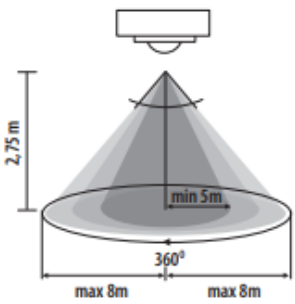
The product complies with RoHS Directive 2011/65 / EU.

The product complies with EMC Directive 2014/30 / EU.

Certificate: FIDI 19 ATEX 0032

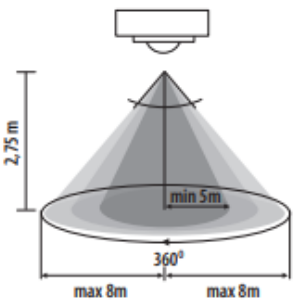
## 3. TECHNICAL DATA

Category and explosion protection:	 	II 2G Ex db eb IIC T6 Gb ili II 2G Ex db IIC T6 Gb II 2D Ex tb IIIC T85°C Db
Ambient temperature:	-40°C/-20°C ≤ Tamb ≤ +50°C	
Motion sensor operating temperature :	-5°C ≤ Tser ≤ +40°C	
Rated voltage:	220-240 V, 50/60 Hz	
Total maximum load power:	 1200W 720W 500W 180W	
Mechanical protection:	IP 66	
Resistance to impact:	IK 10	
Class of protection:	I (PE - protective earthing)	
Motion sensor:	ROLF JQ-L/CN microwave motion sensor	

Prostorni kut djelovanja senzora pokreta:	
Stezaljka za unutarnje uzemljenje:	1x2,5mm <sup>2</sup> max.
Stezaljka za vanjsko uzemljenje:	max. 2 x 6mm <sup>2</sup> - jednožilni, višezilni, mnogožilni
Učvršćenje ugradbene komponente u kućištu:	Vijčanim priborom unutar kućišta
Uvodi:	ISO 20 sukladno EN 62444 i NPT 1/2" sukladno ANSI/ASME B1.20.1
Adapter:	ADP 24/1, FIDI 19 ATEX 0014X
Uvodnica za armirane kabele: (Tamb ≥ -40°C)	ATEX certificirana Ex db/Ex tb uvednica
Vijčani navoji:	M 120x 1,5 - 6H/6g, srednja tolerancija prema ISO 965-1/98, navoj DIN 13 T.24/83, minimalno 9 punih navoja M 120x 1,5 - 6H/6g, srednja tolerancija prema ISO 965-1/98, navoj DIN 13 T.24/83, minimalno 8 punih navoja M 20 x 1,5 - 6H/6g, srednja tolerancija prema ISO 965-1/98, navoj ISO 965-3/98, minimalno 8 punih navoja 1/2" NPT prema ANSI/ASME B1.20.1, 8 punih navoja
Boja:	siva, RAL 7001
Montaža na podlogu:	preko nosača za fiksnu montažu sa dva vijka M8 na razmaku 30 mm
Masa praznog kućišta bez uvednica:	cca 2,1 kg (bez adaptera i/ili uvednica)

Kod izvedbe sa montiranim Ex db eb adapterom (MDS-L/1) postoje specifični uvjeti uporabe:

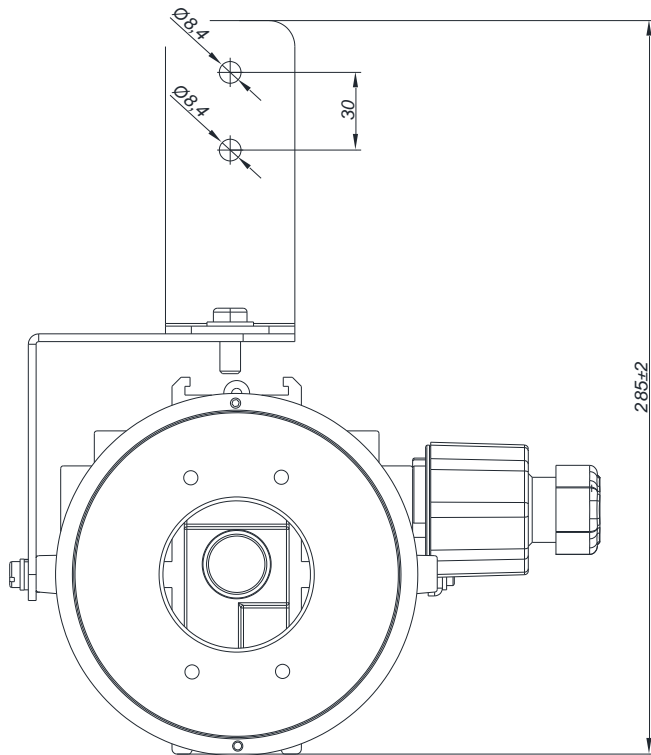
- korisnik mora osigurati adekvatno učvršćenje kabela izvan uvednice zato jer je kabela uvednica višezilnog provodnog izolatora s priključnom komorom ispitana s manjom silom izvlačenja sukladno tč. A.3.1.1 norme EN IEC 60079-0,
- uređaj mora biti ugrađen na mjesta s manjom opasnosti od udara zato jer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

Motion sensor detector angle range:	
Terminal for internal grounding:	1x2,5mm <sup>2</sup> max.
Terminal for external grounding:	max. 2 x 6mm <sup>2</sup> – solid, stranded, flexible
Mounting of the components inside housing:	With screw assembly inside the housing
Entry's:	ISO 20 according to EN 62444 and NPT 1/2" according to ANSI/ASME B1.20.1
Adapter:	ADP 24/1, FIDI 19 ATEX 0014X
Cable gland for armored cables: (Tamb ≥ -40°C)	ATEX certificated Ex db/Ex tb cable gland
Threads:	M 120x 1,5 - 6H/6g, tolerance according to ISO 965-1/98, thread according to DIN 13 T.24/83, minimum 9 full threads M 120x 1,5 - 6H/6g, tolerance according to ISO 965-1/98, thread according to DIN 13 T.24/83, minimum 8 full threads M 20 x 1,5 - 6H/6g, tolerance according to ISO 965-1/98, thread according to ISO 965-3/98, minimum 8 full threads 1/2" NPT according to ANSI/ASME B1.20.1, 8 full threads
Color:	grey, RAL 7001
Mounting:	using lamp carrier for fixed mounting with two M8 screws on 30mm distance
Mass of empty housing without cable glands or adapter	cca 2,1 kg (without adapter and/or cable gland)

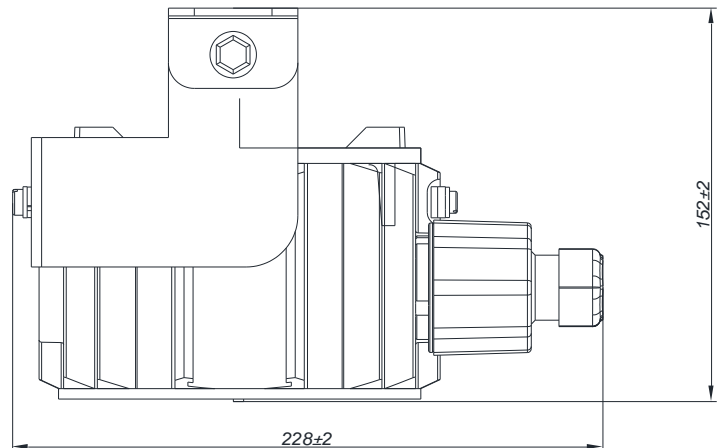
With the Ex db eb adapter (MDS-L/1) mounted, there are specific conditions of use:

- the user must ensure that the cable is properly secured outside the cable gland because the cable gland of the multi-core conductor insulator with the connection chamber is tested with a lower pulling force in accordance with A.3.1.1 of EN IEC 60079-0,
- the apparatus must be installed in places with a lower risk of impact because the multi-core conductor insulator with the connection chamber is tested with lower impact energy in accordance with EN IEC 60079-0.

#### 4. DIMENZIJE



#### 4. DIMENSIONS



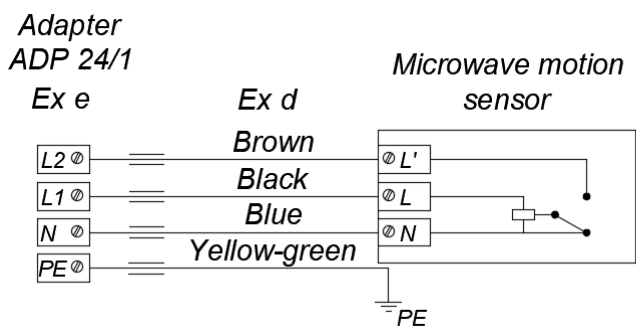
#### 5. TIPNA OZNAKA

MDS-L/.

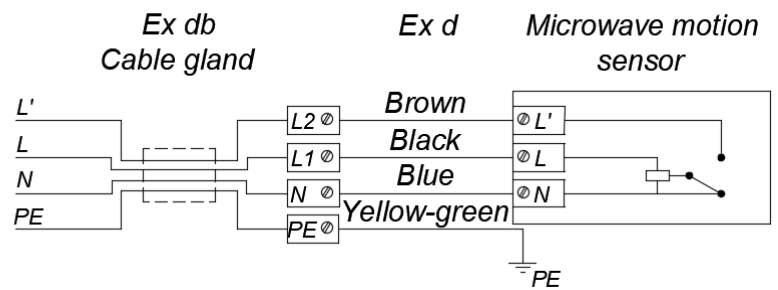
- osnovna tipna oznaka (basic type)
- tip uvoda (entry type)
  - 1 – 1 x ADP 24/1 (Ex db eb) (-20°C ≤ t<sub>amb</sub> ≤ +50°C)
  - 2 – 1 x ISO20x1,5 (Ex db) (-40°C ≤ t<sub>amb</sub> ≤ +50°C)
  - 3 – 1 x NPT 1/2" (Ex db) (-40°C ≤ t<sub>amb</sub> ≤ +50°C)

#### 5. TYPE

#### 6. SHEMA SPAJANJA



#### 6. CONNECTION DIAGRAM



#### 7. PREGLED, ODRŽAVANJE, POPRAVAK, OBNAVLJANJE

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

- da su kućište, poklopac, okvir stakla i brtve poklopca te okvira stakla bez puknuća i oštećenja,

#### 7. 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:

- that the housing, cover, glass frame and gasket of cover and glass frame are without rupture and damage,

- da su uvodnice, adapter i čepovi pritegnuti s 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 izjava sukladnosti proizvođača postaje nevažeća.

## 8. 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.

## 9. SKLADIŠTENJE I TRANSPORT

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

## 10. JAMSTVO PROIZVOĐAČA

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

## 11. OZNAČAVANJE

Razvodna kutija, tip MDS-L/. označena je natpisnom pločicom na poklopcu te natpisnom naljepnicom unutar kućišta.

- that the cable glands, adapters and plugs are fastened 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.

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

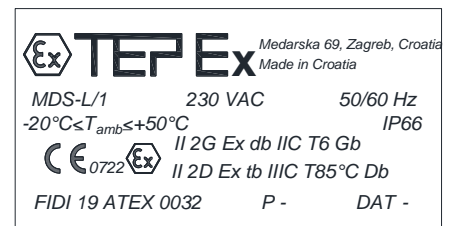
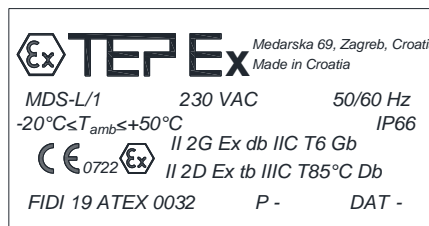
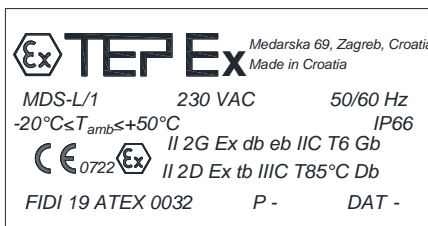
## 10. MANUFACTURER'S WARRANTY

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.

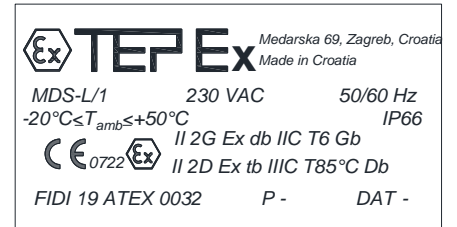
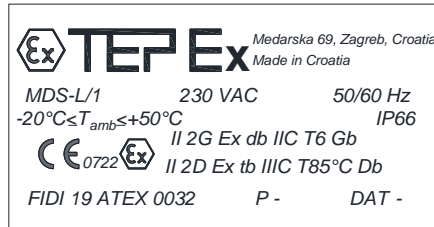
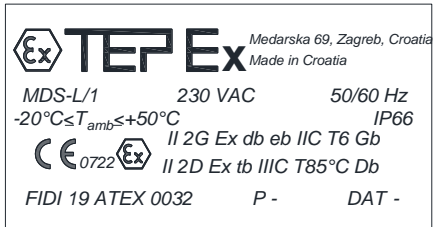
## 11. MARKING

The junction box, type MDS-L/. is marked with a marking plate on the cover of the housing and a marking label inside the housing.

Natpisna pločica / Marking plate with technical data



Natpisna naljepnica sa tehničkim podacima/ Marking label with technical data



Pločica upozorenja/Warning plate

