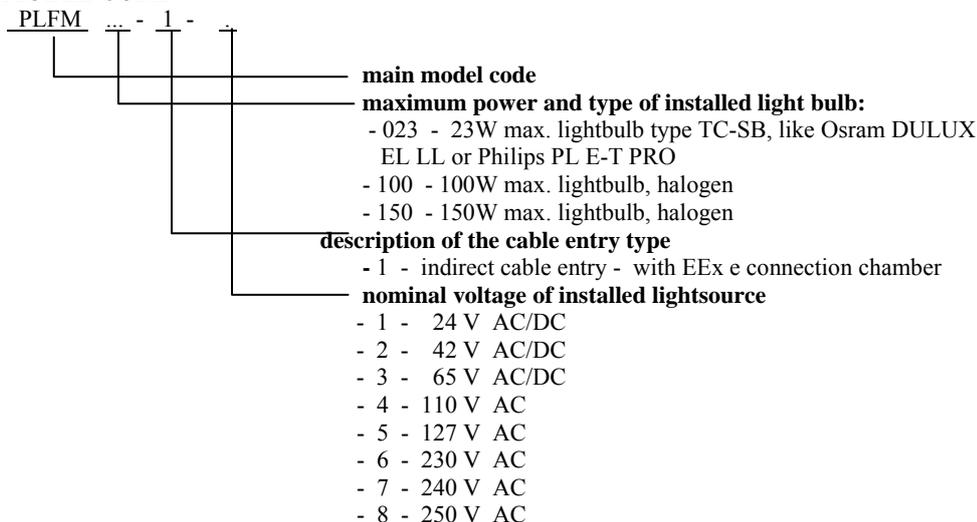


PURPOSE

Explosion proof pendant lighting fitting type PLFM ... - 1 - . is intended for use in industry areas:
 - in areas endangered by flammable and explosive mixtures of gases and air, fumes of flammable liquids and air, or various combinations between the two, in danger zones 1,2 in ordinance with standards IEC 60079-10/02,
 - in areas endangered by explosive and flammable mixtures of dust and air in danger zones 21, 22 in ordinance with standards EN 50281-3/02.

MODEL CODE



TYPE OF PROTECTION AND TECHNICAL DATA

Explosion protection is achieved by the use of requirements of the protection types: " Ex d flameproof enclosure" in accordance with EN 60079-1:2007., "Ex e increased safety" in accordance with EN 60079-7:2007, "General requirements" in accordance with EN 60079-0:2006, and the "Electrical apparatus protected by enclosures" type protection according to EN 50281-1-1/98.

Apparatus category : **II 2GD**

Marking of explosion-protection: **EEx de IIC T3 / T4 / T6 IP66 T195°C / T130°C / T80°C**

- PLFM 023-1-... - **T6** - to 250 V AC, 23W max. fluo TC-SB
- PLFM 100-1-... - **T4** - to 250 V AC/DC, 100 W max. , 4 A max. , lightbulb in accord. to IEC 60064, IEC 60432-1 and halogen lightbulb in acc. IEC 60432-2
- PLFM 150-1-... - **T3** - to 110 V AC, to 250 V AC, 150 W max., lightbulb in accord. to IEC 60064, IEC 60432-1 and halogen lightbulb in acc. IEC 60432-2

Degree of protection (IP Code): IP 66 in accordance with EN 60529+A1

Degree of protection (IK Code): IK 08 in accordance with EN 50102

Insulation class : I (protective earthing) in accordance with EN 61140

Rated voltage:	According to model code
Power and type of lightsource:	Max. 23 W TC-SB or max. 150 W lightbulb
Power factor:	cos φ = 0,97 for TC-SB
Lumious flux:	1500 lm / 2700K / R _a 1B - OSRAM DULUX EL LL 23W 1360 lm – lightbulb 100 W , 2160 lm – lightbulb 150W
Connecting terminals:	Terminals for connecting L, N conductor, and protective earthing conductor PE - max. 2 x 2,5 mm ² – solid, stranded Terminal for protective earthing conductor connection -PE max. 2 x 6 mm ² – solid, stranded
Ambient temperature:	-20°C to +40°C
EEx e cable gland and plug:	one EEx e cable gland M 25x1,5 for cable diameter ø 6-15 mm, and one EEx e plug, in according to EN 50262
Tightening torque	screws of EEx e connection clamp 0,8 Nm screws of EEx e connection chamber 0,8 Nm pressure nut of cable gland 2,5 Nm
Lampholder:	E27, 250V, 4A, in accordance to EN 60258
Dimension:	335 x 175 x 140 mm - ca 3,0 kg

ASSEMBLAGE AND ELECTRIC CONNECTION

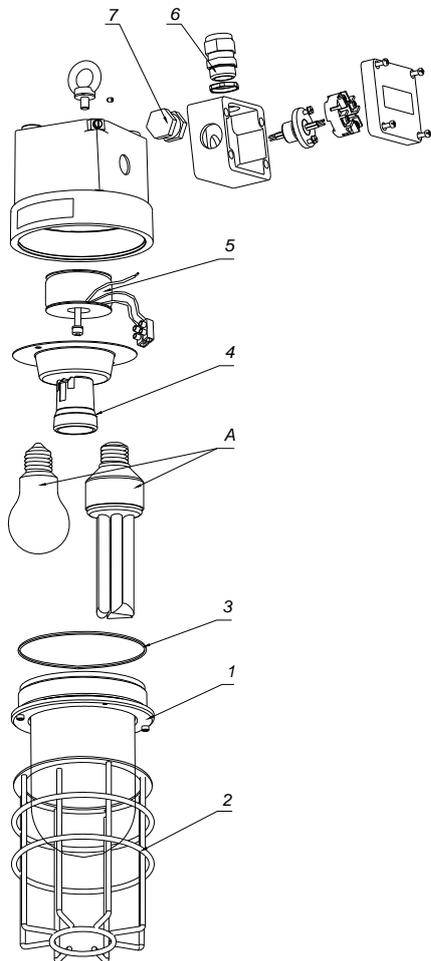
Before opening of Ex d enclosure, by unscrewing the protective glass with glass holder, it is necessary to unblock it mechanically by twisting the blockade screw M4x6 ISO 4027 on glass holder. **The opening of the enclosure is exclusively allowed only in non-voltage state** while respecting the warnings on the label – AFTER DE-ENERGIZING DELAY THREE MINUTES BEFORE OPENING. The non-voltage state should be secured by shutting the voltage off on the main switch. It is recommended to install TC-SB lightsource manufactured by Osram, type DULUX EL LL or Philips, type PL E-T. Adequate of TCD EL lightsources of other manufacturers is not tested, regarding to lifespan of lightsource. The electric connection is performed by linking power supply cable on the Ex e terminals into the Ex e chamber - L, N and protective grounding on PE terminal. After every opening of the lamp the screw joint should be protected by the lubricating grease “Baplex” protective solution (manufacturer’s recommendation).

CONTROL, MAINTENANCE AND REPAIR

It is necessary to conduct review and maintenance on all parts on which the explosion proof protection depends in accordance to standards IEC 60079-17, general and individual demands of the manufacturer and the regulations of the user, and especially:

- that all enclosures, all parts of the casing, the protective glass and gaskets without cracks or damages,
- that the casing is closed with glass holder and mechanical blockade is achieved,
- that the Exe gland and gasket, connecting terminals, screws of Exe chamber, and screw of blockaare tightened by torque regulated by manufacturer.

Maintenance presume replacing of parts which are delivered by manufacturer as a spare parts. All other interventions on lamp have attribute of a repair. The repair of the lamp is done by the manufacturer or a person legally authorized by the manufacturer, with original parts from the products documentation, and in accordance to the IEC 60079-19 standards. If the repair is done by a third person, the manufacturer is free of all responsibility from the product, and the declaration of conformity which is given by the manufacturer becomes insignificant.



Spare parts:

1. Glass with glass holder PLFM, set
2. Protective grid PLFM, set
3. Gasket PLFM
4. Lampholder with reflector E27, PLFM/023 set
Lampholder with reflector E27, PLFM/150 set
5. Autotransformer PLFM
6. Cable gland SPU 25, set
7. Plug SPČ 25, set

Accessories:

- A. TC-SB - Osram DULUX EL LL or lightbulb max. 150 W

STORAGE AND TRANSPORT

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

RESPONSIBILITY AND AUTHORIZATION

Responsibility and authorization are defined by the "Regulation on technical supervision over the electrical stations, installations and equipment intended for usage in potentially explosive atmospheres". This Manual represents the most relevant information about the product. Adequate national laws and regulations supplement it. The person in charge is required to secure its employment in the industrial unit. Every improper usage, as well as every unofficial restructuring, repair or restoration of the product, release the manufacturer of all responsibilities.

MARKING

Explosion-protected pendant lighting fitting, type PLFM ... - 1 - . is labeled with:

- warning label on enclosure of lighting fitting:

"NE OTVARAJ POD NAPONOM"
"DO NOT OPEN WHEN ENERGIZED"

- warning label on enclosure of lighting fitting:

"NAKON ISKLJUČENJA PRIČEKAJ TRI MINUTA PRIJE OTVARANJA"
"AFTER DE-ENERGIZING DELAY THREE MINUTES BEFORE OPENING"

- warning label on enclosure of lighting fitting:

"NE OTVARAJ U PRISUSTVU ATMOSFERE EKSPLOZIVNE PRAŠINE"
"DO NOT OPEN WHEN AN EXPLOSIVE DUST ATMOSPHERE IS PRESENT"

"SAMO ZA MONTAŽU S OTKLONOM DO 30° OD VERTIKALE"
"ONLY FOR MOUNTING ANGLED UP TO 30° FROM VERTICAL"
(type PLFM 100-1-1, PLFM 100-1-2, PLFM 100-1-3)

- labels with technical data, outside on lighting fitting enclosure:

S EP Ex Medarska 69 Zagreb Croatia
LFM 023-1-.¹⁾ HREx T04.006
... V/... Hz¹⁾ max. 23W TC-SB E27
II 2GD EEx de IIC T6 T80°C IP66
Pojed.isp.²⁾ Datum²⁾ Odgovorni ispitivač²⁾



S EP Ex Medarska 69 Zagreb Croatia
LFM 100-1-.¹⁾ HREx T04.006
do 250V AC/DC 100 W max. 4 A max. E27
II 2GD EEx de IIC T4 T130°C IP66
Pojed.isp.²⁾ Datum²⁾ Odgovorni ispitivač²⁾



S EP Ex Medarska 69 Zagreb Croatia
LFM 150-1-.¹⁾ HREx T04.006
od 110 V AC do 250 V AC 150W max. E27
II 2GD EEx de IIC T3 T195°C IP66
Pojed.isp.²⁾ Datum²⁾ Odgovorni ispitivač²⁾

