

PURPOSE

Explosion proof pendant lighting fitting type PLFS-T/. 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.

TYPE OF PROTECTION

Apparatus category: II 2GD/II 2G

Marking of explosion-protection: EEx de IIC T3-T6, T 80°C-130°C - according to model code shown in table

Environment temperature: $-20^{\circ}\text{C} \leq T_a \leq +50^{\circ}\text{C}$ - according to model code shown in table

Degree of protection (IP Code): IP 66 in accordance with EN 60529+A1, category 1

Resistance to shock: IK 08 in accordance with EN 50102

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

Electromagnetic compatibility: in accordance with the Directive 89/336 EEC, EN 55015, EN 61547

MODEL CODE

MODEL CODE	LAMP TYPE (According to ZVEI)	POWER CONSUMPTION	OSRAM	PHILIPS	LAMP-HOLDER	TEMPERATURE CLASS		T ₀ MAX			
						T _a =40°C	T _a =50°C	T _a =40°C			
PLFS-T/200	A	max. 200W	CLAS A CL 25-200W	STANDARD A 25-200W	E27	T4	T4	130°C			
	QT	max. 230W	HALOLUX CERAM 60-230W	HALOGEN A PRO 40-150W			T3				
	LME	max. 160W	HWL 160	ML 160W			T4				
	TC-TSE	max. 30W	DULUX EL LL 5-30W	PL ELECTRONIC PRO 12-27W		T6	-	80°C			
PLFS-T/125	HME	125W	HQL 125	HPL-N 125W	E27	T4	-	130°C			
	HSE-I	110W	NAV-E 110	SON H PRO 110W			-				
PLFS-T/100	HSE	100W	HCI-E/P 70,100,150 HQI-E 70,100,150	CDM/CDO-ET 70W SON PRO 70W			E27		T4	-	95°C
	HIE									-	
PLFS-T/70	HSE	70W	NAV-E 70/E NAV-E70 4Y		SON PRO 70W	E27		T5		T4	
	HIE									-	
PLFS-T/BLF-1/150	HIE	150W			E27	T4	-	130°C			
PLFS-T/FLASH	XENON	15W / 11J (in total)	D.G. CONTROL Ltd., type XFE		-	T6	-	80°C			

TECHNICAL DATA

Rated voltage:	-230 V (-10% / +6%) -12 V AC/DC, 24 V AC/DC, 110 V AC, 230 V AC - lamp type PLFS-T/FLASH
Frequency:	-50Hz
Rated power:	- according to table
Power factor:	- $\cos \phi = 0,95$ HSE-I (NAV-E 110, SON H PRO 110) 110 W - $\cos \phi = 1$ bulbs
Connecting terminals:	- L1, L2, L3, N; max. 2 x 2,5 mm ² solid, stranded - terminal for protective earthing conductor connection -PE; max 2 x 6 mm ² stranded - terminal for earthing and bonding conductor connection; max. 2 x 6 mm ² stranded - tightening torque for screw clamp 1,2 Nm
Cable entries:	- two entries Exe M25x1,5 according EN 60423
Connection cable:	- PLFS-T/200 with QT 230W cable suitable for a minimum temperature of 90°C
Cable gland and plug:	- II 2GD EEx e M25 IP66 - tightening torque for gland screw 2,5 Nm, tightening torque for gland or plug 3,5 Nm
Screws of Exe cover:	- screw M5x20 (Z4) – 4.8, tightening torque 1,5 Nm

ASSEMBLAGE AND REPLACING THE LIGHT SOURCE

Assemblage and installation is done according to technical and certification data on warning labels on lamp, this user manual by manufacturer, national regulations and laws. Only with that, explosion-proof protection of pendant light fitting is ensured with EC-type certificate.

Explosion-protected pendant lighting fitting PLFS-T/.. is labeled with warning labels:

- all models but PLFS-T/FLASH: WARNING! DO NOT OPEN WHEN ENERGIZED
 WARNING! AFTER DE-ENERGIZING, DELAY 12 MINUTES BEFORE OPENING
- PLFS-T WITH QT 230W max.: WARNING! USE CABLE SUITABLE FOR A MINIMUM TEMPERATURE OF 90°C
- PLFS-T/ FLASH: WARNING! DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE IS PRESENT

Blockade switch is ensuring non-voltage state on E27 lampholder when the Exd casing is opened. In that way is possible to replace the light source without switching off the electrical current.

Before opening the Exd casing by screwing the protective glass with glass holder, it is necessary to unblock it mechanically by twisting the blockade screw M6x20 on glass holder and turn glass holder with protective glass on the left. Connection cable is introduced in Exe casing trough M25x1,5 Exe cable gland. Exe glands and plugs are a part of the original product, and are secured by the manufacturer. Special attention must be dedicated to selection of inner gasket sealing ring of Exe gland according to diameter of connecting cable. Ensurance against self-unscrewing Exe M25x1,5 cable gland is done with LOCTITE Super Atak glue which is inflicted on minimal three joints. Gland screw and gland body with threads must be tightened with torque regulated by manufacturer. The electric connection is performed by linking power supply cable on the Exe terminals into the Exe housing: L1, L2, L3, N and protective grounding on PE terminal. The conductor for equalization of potentials / outer grounding – connect to the outer connection terminal. The closing of the casing should be done by a reverse sequence of action. During installation one must also be careful that the maximum angle to hanging lighting fitting have to be 45° from vertical position.

CONTROL, MAINTENANCE AND REPAIR

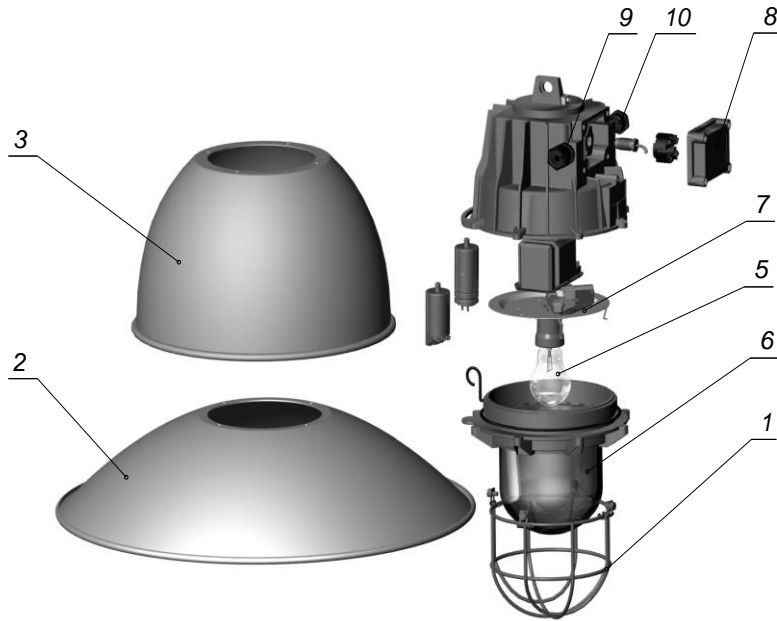
It is necessary to conduct review and maintenance on all parts on which the explosion proof protection depends in accordance to standards IEC 60079-17, general and individual demands of the manufacturer and the regulations of the user, and especially:

- that all enclosures, all parts of the casing, the protective glass and the gasket of the cover are completely without a crack or damage,
- that the Exe gland and gasket, connecting terminals, screws of Exe cover, and screw of blockade on glass holder are tightened with torque regulated by manufacturer.

Maintenance presume replacing: protective glass with glass holder, internal reflector with lamholder and blocked switch, cover EEx e with gasket and screws, glands and plugs.

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.

In case the supplied lighting fitting type is PLFS-T/BLF-1/150, do not open ballast BLF-1/150 flameproof enclosure within the regular maintenance. The opening is allowed only by the manufacturer, or by authorized expert. Any unauthorized procedure will free manufacturer of all responsibility for the product, and the declaration of conformity which is given by the manufacturer becomes insignificant.



Spare parts:

- 6. Protective glass with glass holder
- 7. Internal reflector with lamholder and blocked switch, set
- 8. Cover EEx e with gasket and screws
- 9. Gland Exe M25x1,5, set
- 10. Plug Exe M25x1,5, set

Accessories:

- 1. Protective grid, set
- 2. External reflector, wide beam, set
- 3. External reflector, narrow beam, set
- 4. Assembly kit for fixing on wall, angle ±45°
- 5. Light source, according to table

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.

STORAGE AND TRANSPORT

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

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