

# INSTALLATION INSTRUCTIONS

## Technical conditions for mounting series SETBUL-N-LED, SETBUL-N-Em-LED and MULTISETBUL-N-LED

In case of any ering on lights fitting in premises with danger of explosion, the national safety rules and regulation for prevention of accidents are to be observed.  
SETBUL-N-LED – are dustproof and waterproof lighting fixtures designed for the lightening premises with danger of explosive  
SETBUL-N-Em-LED – non-maintained emergency lifting  
MULTISETBUL-N-LED – maintained emergency lifting

9. Take the fixture from transporting packing.
10. Unbolt the screws on glass cover and remove it.
11. Unbolt the screws of reflector and take it from the housing.
12. Fix empty housing on the base bay means of one of allowed fastening possibilities.
13. Pass the supply cable through the cable gland. Fix the cable gland properly when the sealing rubber washer is partially damaged. The outer diameter of the supply cable must be in the range (table List of cable glands), which is necessary condition for the right function of the cable gland. The hole for the supply cable in the sealing plug of the light fitting, in which the cable gland is not used, has to be properly packed with plug.
14. Plug in the supply cable into the free part of the feeding terminal block as follows:

SETBUL-N-LED	SETBUL-N-Em-LED	MULTISETBUL-N-LED
on terminal L1 - phase conductor	on terminal L1 - cond. of charging phase	on terminal L1 - cond. of charging phase
on terminal N - neutral conductor	on terminal N - neutral conductor	on terminal L2 - cond. of switching phase
on terminal ⊕ - protective conductor	on terminal ⊕ - protective conductor	on terminal N - neutral conductor
		on terminal ⊕ - protective conductor

To each pole of terminal block can be connected two conductors with cut 0,5 – 2,5mm<sup>2</sup>.

Attend to correct stripping (8 – 9 mm) and connection on terminals.

15. Insert the reflector back to the body and lock with screws.
16. Close the glass and fasten it properly. (tighten the screws to maximum)

### Test of operation:

For correct operation it is necessary to observe enclosed instruction about testing of emergency fixtures. Switch the luminaire off the mains voltage. LED module, emergency lamp (green marker) must light control LED diode goes out. Should the emergency lamp be extinguished within the test period though the battery is fully charged, the latter will have to be replaced by a new battery set.  
Warning: The full battery capacity will be available after approximately three charging/discharging cycles.

### Warning for the mounting of light fittings SETBUL-N-LED, SETBUL-N-Em-LED and MULTISETBUL-N-LED:

The fitting can be installed only by authorized person.  
Producer included in recycling system provided by EKO-KOM company (EK-F06022453).  
The light source in this lighting fixture can be replaced only producer or its contractual service technique or a similarly qualified person.  
WARNING - potential danger of electrostatic charging.  
WARNING - the lighting fixture must be installed in the position, which does not allow the touch of persons and parts of the fixture.  
When installing lighting fixture, observe the ESD safety using appropriate tools!  
When the mounting instructions are not observed, the producer can't be responsible for incidental damages incurred.  
The light fitting can be fastened with several possible methods:

- through the background by means of screws M8
- by means of pole brackets
- by means of recessed frame
- by means of ceiling mount
- by hanging eye



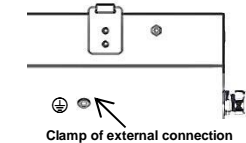
### Maintenance:

WARNING – the fixture should be cleaned with damp duster only. It is necessary to keep periodic cleaning intervals of lighting fixture.

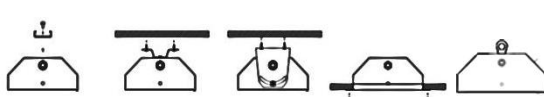
Table: List of cable glands:

Cable glands	Diameter of the cable for cable glands M20x1,5	Diameter of the cable for cable glands M25x1,5
OBO V-TEC Ex	∅7-12mm	∅12-18mm
CEAG CHG 960 92. P...	∅5,5-13mm	-
WISKA ESKE/1 (S)(-L)(-)(-RDE)	∅7-13mm	∅10-17mm
ELFIT UNI	∅7-12mm	-
BIMED LYRA (EURO-TOP)	∅7-12mm	∅12-17mm

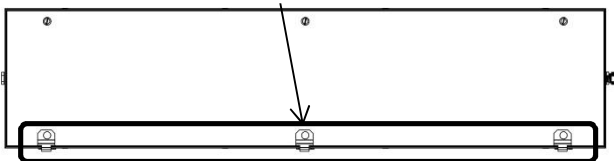
### External luminaire connection:



### Possibilities of installation luminaire:



For wall mounting, the hinge side must always be at the bottom, for the possible suspension of the glass:



## Technical conditions for mounting series SETBUL-N-LED, SETBUL-N-Em-LED and MULTISETBUL-N-LED

### Application of light fittings:

The explosion proof light fittings meet the standards according to the EU instructions 2014/34/EU. They can be used in areas with danger of explosion according to the following chart:

Area with danger of explosion	Marking of exterior ambient	Classification of area	
		Marking	Compulsory regulation
Danger of explosion of inflammable	BE3N1	ZONE 21	CSN EN 60079-14 CSN EN 60079-10-2
Danger of explosion of inflammable gas and vapors	BE3N2	ZONE 2	CSN EN 60079-14 CSN EN 60079-10-1

### Technical data:

Admissible range of operating temperature SETBUL-N-LED-5000-218	Ta -20°C to +65°C
Admissible range of operating temperature SETBUL-N-LED-10000/15000-236/258	Ta -20°C to +55°C
Admissible range of operating temperature SETBUL-N-LED-10000-418	Ta -20°C to +55°C
Admissible range of operating temperature SETBUL-N-LED-18300-436	Ta -20°C to +50°C
Admissible range of operating temperature SETBUL-N-LED-29000-458	Ta -20°C to +45°C
Admissible range of operating temperature MULTISETBUL-N-LED-5000/10000/15000-218/236/258	Ta -20°C to +40°C
Admissible range of operating temperature MULTISETBUL-N-LED-10000/18300/29000-418/436/458	Ta 0°C to +35°C
Admissible range of operating temperature SETBUL-N-Em-LED-500-218-236-258	Ta 0°C to +50°C
Protection level: IP65	
Insulation class: I	
Rated voltage and frequency:	

for ballasts HELVAR:	220-240V, 0/50/60 Hz
for ballasts TRIDONIC:	220-240V, 0/50/60 Hz
for ballasts HADLER:	220-240V, 0/50/60 Hz
for ballasts TC1:	110-240V; 50/60 Hz
for ballasts TC1:	220-240V; 0 Hz
for emergency systems AWEX:	220-240V, 50/60Hz
for emergency systems TRIDONIC:	220-240V, 50/60Hz

### Operation and maintenance instructions:

- The light fittings, which operate in areas of above mentioned premises, are under the requirements resulting from compulsory regulations of valid EN:
- The light fitting must not be open, if the terminal block is alive.
- Any change or replacements of components of the light fittings, which can influence the protection before the danger of explosion, are forbidden.
- The repair of the light fittings can be done only by person with relevant qualification, only with original spare parts and in compliance with the latest regulations.
- The operation with cracked cover is forbidden, replace the damaged cover immediately!!!
- In the fixtures series SETBUL-N-LED, SETBUL-N-Em-LED and MULTISETBUL-N-LED can be used through wiring connection.
- Maximum allowed number of connected fixtures is referred in table. Recommended protection is type B, 10A.

The fixtures are certified by FTZU - AO 210, Ostrava - Radvanice:

- 1) Certificate type FTZU 17 ATEX 0129X from date 15. 02. 2018

### Marking lights:

⊕ II 3G Ex nR IIC T6 Gc

⊕ II 3D Ex tc IIIC T68°C Dc

### Maximum admissible number of SETBUL-N-LED, MULTISETBUL-N-LED light fittings with one-phase and three-phase through wiring

connection:	one-phase				three-phase			
	SETBUL-N-LED	MULTISETBUL-N-LED	SETBUL-N-LED	MULTISETBUL-N-LED	SETBUL-N-LED	MULTISETBUL-N-LED	SETBUL-N-LED	MULTISETBUL-N-LED
218	20	418	13	218	19	418	12	
236	10	436	7	236	9	436	6	
258	7	458	4	258	6	458	4	

### Dimensions of mounting holes for recessed frames:

Type of luminaire	Hole dimension	Type of luminaire	Hole dimension	Type of luminaire	Hole dimension
258	165x3x23mm	236	135x3x23mm	218	74x2x323mm
458	165x3x383mm	436	135x3x383mm	418	74x2x383mm

### Battery change:

Battery change is necessary when the fixture doesn't observe the conditions of rated operation period durability. In explosive area it is prohibited to disconnect battery for emergency unit. It is allowed to disconnect the fixture from supply voltage and take remove reflector from the fixture.

1. Disconnect the fixture from supply voltage.
2. Unbolt the screws on glass cover and remove it.
3. Unbolt the screws of reflector and take it from the housing.
4. Disconnect battery from emergency unit in non-explosive area as follows „-“black conductor and „+“red conductor.
5. Remove the old battery.
6. Screw the new battery (mark the date of operation start).
7. Connect conductors to battery as follows „+“red conductor and „-“black conductor.
8. Insert the reflector back to the body and lock with screws.
9. Close the glass and fasten it properly.
10. Connect the fixture to the supply voltage.

WARNING: The battery in the fixture can be changed for the same type or the same parameters only!!