

Technical conditions for mounting series EXTRA-Ex-LED, EXTRA-Ex-LED-Em, MULTIEXTRA-Ex-LED

In case of any interventions on lights fitting in premises with danger of explosion, the national safety rules and regulation for prevention of accidents are to be observed. The light fittings must not be installed simultaneously in premises with danger of explosion of inflammable dust and inflammable gas and vapors. The light fittings are not suitable for zone 0 hazardous area.

EXTRA-Ex-LED-Em – non-maintained emergency lifting

MULTIEXTRA-Ex-LED – maintained emergency lifting

Mounting instructions:

- Remove the cover from the luminaire.
- Loose the screws holding on the reflector.
- Remove reflector from the luminaire (The reflector will be hang on the security suspensions).
- Remove the bag with equipment.
- The side opening in the body plant the cable gland (which is included in the luminaire equipment), and on the other side of her body screw the nut. Cable gland nut to the body, tighten torque 2.7Nm.
- Into the hinges on the body insert stainless steel clips from equipment of luminaire.
- Fasten the lighting fixture on the base:
 - With fastening spring directly on the base (Picture 1)
 - With steel wire hanger (no included) (Picture 2)
 - With a cable suspension (no included) (Picture 3) . Put the washer between hinge and fastening spring.
 - With set of pole bracket for diameter 50mm (not included) (Picture 4)

Note: another method of fastening is not allowed!

Pull the power cable through the cable gland. Tighten bushings to a state of partial deformation of the rubber sealing washers, tightening torque 2.5Nm. Supply cable must have an outer diameter in the range (see. Table no.2 List of cable glands, which is a necessary condition for correct function of cable gland. Hole for power cable in the housing, which is not used cable gland (which is contained in the equipment luminaires), seal blanking plug (which is contained in the equipment luminaires).

- Connect supply cable into the feeding terminal block as follows:

EXTRA-Ex-LED	EXTRA-Ex-LED-Em	MULTIEXTRA-Ex-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 cond.	on terminal Ⓞ - protective cond.	on terminal - neutral conductor
		on terminal Ⓞ - protective conductor

Look out for the right wire stripping (9 – 10 mm) and conductor engagement into the terminal block. The terminal block is adjusted for the connection of conductors with diameter up to 4 mm². In case of the through wiring connection, observe the possible maximum number of light fittings.

- Insert the reflector back to the luminaire and tight the screws. Tightened moment is 0,5Nm.
- Fix the optical cover on the luminaire:
 - fix the optical cover that all round landed on a seal which is disposed in the fixture
 - optical cover secure by the stainless steel clips, secure each clip with screw included with luminaire

Test of operation emergency luminaire:

For correct operation it is necessary to observe enclosed instruction about testing of emergency fixtures. Switch the luminaire off the mains voltage. The emergency LED module must light. The green LED in the reflector is off. 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 capacity of battery will be reach after approximately three charging/discharging cycles.

Table no.1: Light output of luminaire in emergency mode

Luminaire	Light output in emergency mode for types 3000K/ 4000K/ 6000K
MULTIEXTRA-Ex-LED-8000-236, 1,5h EXTRA-Ex-LED-Em-900-236, 1,5h	729lm/ 759lm/ 789lm
MULTIEXTRA-Ex-LED-8000-236, 3h EXTRA-Ex-LED-Em-900-236, 3h	402lm/ 419lm/ 436lm

Warning for the mounting of EXTRA-Ex-LED, EXTRA-Ex-LED-Em and MULTIEXTRA-Ex-LED light fittings:

The fitting can be installed only by authorized person.

Producer included in recycling system provided by EKO-KOM Company, (EK-F06070058)

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

WARNING - the lighting for fixed installation

WARNING - Do not open when energized!

WARNING - Do not open when an explosive atmosphere may be present.

WARNING - Any change or replacements of components of the light fittings, which can influence the protection before the danger of explosion, are forbidden

WARNING - The operation with cracked cover is forbidden, replace the damaged cover immediately!!!

In EXTRA-Ex-P-LED, MULTIEXTRA-Ex-P-LED, EXTRA-Ex-LED-Em light fittings, you can use through-wiring connection supplied by the producer of the light fittings.

When the mounting instructions are not observed, the producer can't be responsible for incidental damages incurred.

Lighting fixtures are not allowed to be used in atmospheres with appearance of vibrations, aggressive chemical substances and smear.

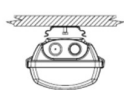
Such conditions decrease lifetime of plastic parts.

Maintenance:

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

Fastening possibilities:

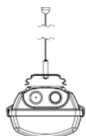
Picture 1



Picture 2



Picture 3



Picture 4

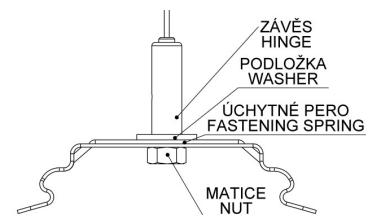
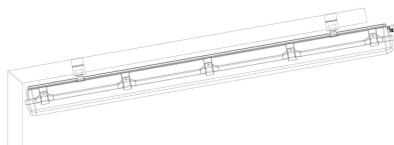


Table no.2: Table sealing areas for different types of cable glands

Cable glands	Diameter of the cable for cable glands M20x1,5
OBO V-TEC Ex	Ø7-12mm
CEAG CHG 960 92.. P...	Ø5,5-13mm
WISKA ESKE/1 (S)-(L)-(*)-(RDE)	Ø7-13mm
ELFIT UNI	Ø7-12mm

Application of light fittings:

The explosion proof light fittings meet the standards according to the EU instructions 2014/34/EU and UK Statutory Instrument 2016 No.1107

They can be used in areas with danger of explosion according to the following chart:

Area with danger of explosive	Marking of exterior ambient	Classification of area	
		Marking	Compulsory regulation
Danger of explosion of inflammable dust	BE3N1	ZONE 21, ZONE 22	ČSN EN 60079-14/ BS EN 60079-14 ČSN EN 60079-10-2/ BS EN 60079-10-2
			ČSN EN 60079-14/ BS EN 60079-14 ČSN EN 60079-10-1/ BS EN IEC 60079-10-1
Danger of explosion of inflammable gas and vapors	BE3N2	ZONE 1, ZONE 2	

Technical data:

Admissible range of operating temperature EXTRA-Ex-LED	4000/8000	218/236	Ta -20°C to +50°C
Admissible range of operating temperature EXTRA-Ex-LED for 110V, 50/60Hz	4000/8000	218/236	Ta -20°C to +40°C
Admissible range of operating temperature MULTI EXTRA-Ex-LED	8000	236	Ta 0°C to +35°C
Admissible range of operating temperature EXTRA-Ex-LED-Em	500/900	236	Ta 0°C to +50°C
Protection level: IP66			
Insulation class: I			
Rated voltage and frequency:	for ballasts BAREL HFX a HFXE LED:		110-254V, 50/60Hz

The luminaires are certified by FTZÚ, AO 210, Ostrava – Radvanice:

- Certificate of type FTZÚ 16 ATEX 0167X from date 24.11.2016
- Supplement No. 1 to certificate FTZÚ 16 ATEX 0167X, date of issue 25. 4. 2017
- Supplement No. 2 to certificate FTZÚ 16 ATEX 0167X, date of issue 18. 8. 2020

Na zařizení níže uvedených typů jsou vystaveny ze strany Eurofins E&E CML Limited (No.2503), United Kingdom osvědčení:

- Certifikát typu CML 22 UKEX3240X ze dne xx. xx. 2022

Marking luminaires:

- II 2G Ex eb mb op is IIC T4 Gb
- II 2D Ex tb op is IIIC T67°C Db

Maximum admissible number of EXTRA-Ex-LED, MULTIEXTRA-Ex-LED, EXTRA-Ex-LED-Em light fittings with through wiring connection for circuit breaker B10:

EXTRA-Ex-LED-4000-218 EXTRA-Ex-LED-8000-236	15	MULTIEXTRA-Ex-LED-8000-236 EXTRA-Ex-LED-Em-900/500-236	13
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Battery change:

"Replace the battery in a non-explosive environment"

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.

- Disconnect the fixture from supply voltage.
- Loose the clips, remove the cover from the body, loose the screws and remove the reflector.
- Disconnect cable from terminal block.
- Disconnect battery from emergency unit in non-explosive area as follows „-“black conductor and „+“red conductor.
- Loose the screws of battery.
- Remove the battery.
- Insert and screw the new battery (mark the date of operation start). Tight the screws with moment 0,5Nm.
- Connect conductors to battery as follows „+“red conductor and „-“black conductor.
- Connect the fixture to supply voltage.
- Insert the reflector, tight the screws by moment 0,5Nm, insert the cover and fix it with the clips.

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