

BORDER-N-LED

Technical conditions of the lighting fixture installation

ENG

 01.04.2026/ rev.2
 www.vyrtych.cz

BORDER-N-LED-2,21 FTZÚ 23 ATEX 0038X

⚠ II 3G Ex nR IIC T6 Gc

 ⚠ II 2D Ex tb op is IIIC T85°C Db
 IP66, class I

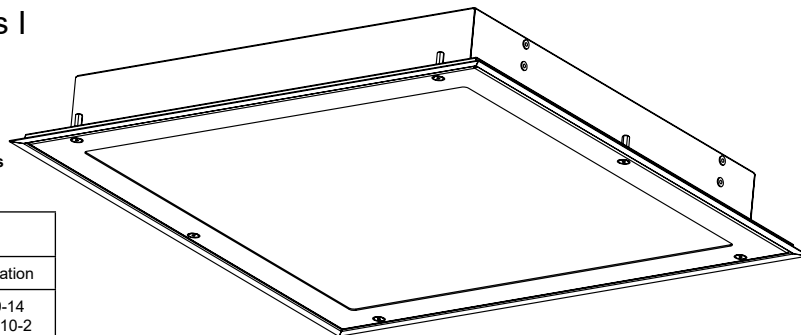
BORDER-N-LED-2,22 FTZÚ 23 ATEX 0039X

⚠ II 3G Ex nR IIC T6 Gc

 ⚠ II 3D Ex tc IIIC T85°C Dc
 IP66, class I

The explosion proof light fittings meet the standards according to the EU instructions 2014/34/EU and UK Statutory Instrument 2016 No.1107
 They are used in areas with danger of explosion according to the following table:

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



1. Technical information

Allowed range of operating temperatures for voltage 220-240V, 50/60 Hz:

BORDER-N-LED-SQ-3300	/18W/	-20°C to +60°C
BORDER-N-LED-SQ-4800	/29W/	-20°C to +60°C
BORDER-N-LED-SQ-6300	/40W/	-20°C to +60°C
BORDER-N-LED-SQ-7200	/45W/	-20°C to +60°C
BORDER-N-LED-SQ-8700	/53W/	-20°C to +60°C
BORDER-N-LED-SQ-12000	/71W/	-20°C to +45°C
BORDER-N-LED-R-3300	/18W/	-20°C to +60°C
BORDER-N-LED-R-4800	/29W/	-20°C to +60°C
BORDER-N-LED-R-6300	/40W/	-20°C to +60°C
BORDER-N-LED-R-7200	/45W/	-20°C to +60°C
BORDER-N-LED-R-8700	/53W/	-20°C to +55°C
BORDER-N-LED-R-12000	/71W/	-20°C to +40°C
BORDER-N-LED-FROST-SQ-3300	/18W/	-40°C to +55°C
BORDER-N-LED-FROST-SQ-4800	/29W/	-40°C to +55°C
BORDER-N-LED-FROST-SQ-6300	/40W/	-40°C to +55°C
BORDER-N-LED-FROST-SQ-7200	/45W/	-40°C to +60°C
BORDER-N-LED-FROST-SQ-8700	/53W/	-40°C to +60°C
BORDER-N-LED-FROST-R-3300	/18W/	-40°C to +60°C
BORDER-N-LED-FROST-R-4800	/29W/	-40°C to +60°C
BORDER-N-LED-FROST-R-6300	/40W/	-40°C to +60°C
BORDER-N-LED-FROST-R-7200	/45W/	-40°C to +60°C
BORDER-N-LED-FROST-R-8700	/53W/	-40°C to +60°C

Rated voltage and frequency:

for LED drivery HELVAR:	220 - 240V, 0/50/60 Hz
for LED drivery TRIDONIC:	220 - 240V, 0/50/60 Hz
for LED drivery TCI:	220 - 240V, 0/50/60 Hz
emergency unit TRIDONIC	220 - 240V, 50/60 Hz

Table list of cable glands:

Cable glands	Diameter of the cable for cable glands M20x1,5
OBO V-TEC Ex	∅ 7 mm - 12 mm
CEAG CHG 960 92.. P...	∅ 5,5 mm - 13 mm
WISKA ESKE/1 (S)(-L)(-*)(-RDE)	∅ 7 mm - 13 mm
ELFIT UNI	∅ 7 mm - 12 mm
BIMED LYRA (EURO-TOP)	∅ 7 mm - 12 mm
Pflitsch - 22052st13ex (stainless steel)	∅ 9 mm - 13 mm

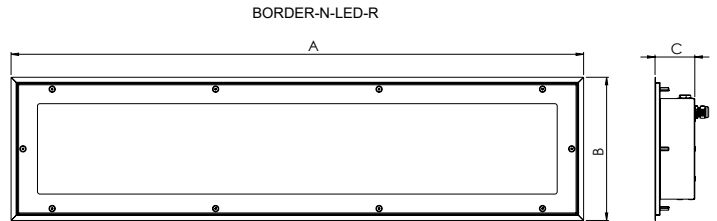
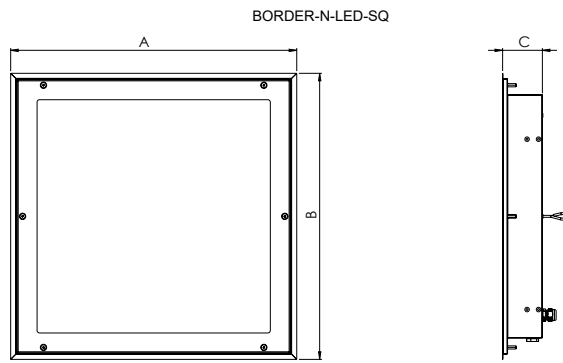
Maximum allowed number of through-wired lighting fixtures for circuit breaker:

	B10 A	B16 A	C 10 A	C16 A
BORDER-N-LED-SQ-3300/4800/6300	23	38	39	64
BORDER-N-LED-SQ-7200/8700/12000	18	30	31	51
BORDER-N-LED-R-3300/4800/6300	23	38	39	64
BORDER-N-LED-R-7200/8700/12000	18	30	31	51

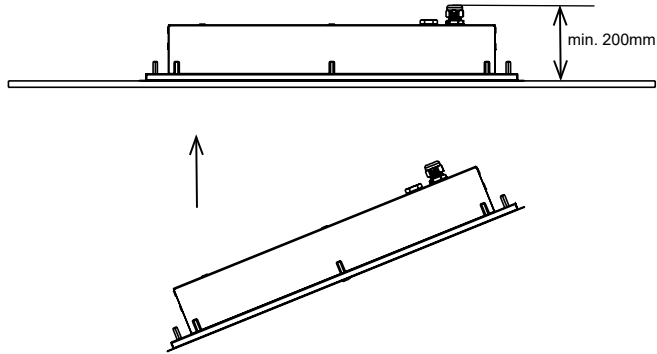
2. Installation of the light fixture:

2.1 - Dimensions: recessed light fixture:

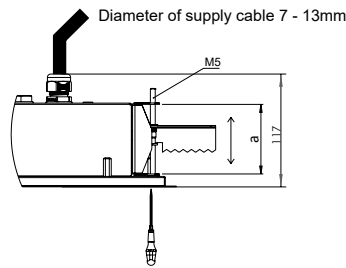
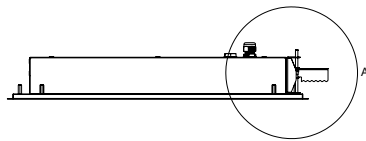
Type of soffit	Luminaire type - recessed	A(mm)	B (mm)	C (mm)
M600 + PB	BORDER-N-LED-SQ-M600/PB	595	595	86,6
	BORDER-N-LED-R-M600/PB	1195	295	86,6
M598	BORDER-N-LED-SQ-M598	598	598	86,6
	BORDER-N-LED-R-M598	1198	298	86,6
M625 + PB	BORDER-N-LED-SQ-M625/PB	620	620	86,6
	BORDER-N-LED-R-M625/PB	1245	310	86,6
M623	BORDER-N-LED-SQ-M623	623	623	86,6
	BORDER-N-LED-R-M623	1247	312	86,6



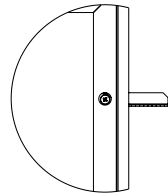
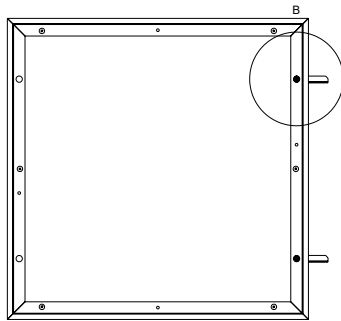
Ceiling mounting:



For order:
57800 - Nivelation set for BORDER-N-LED (4 pcs)
- for metal ceilings and plasterboard

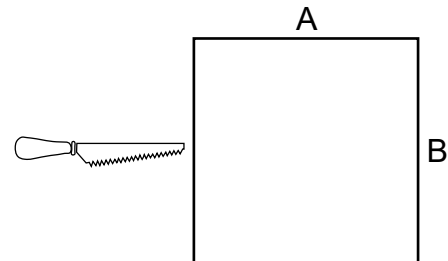


a - thickness plasterboard 20-55mm

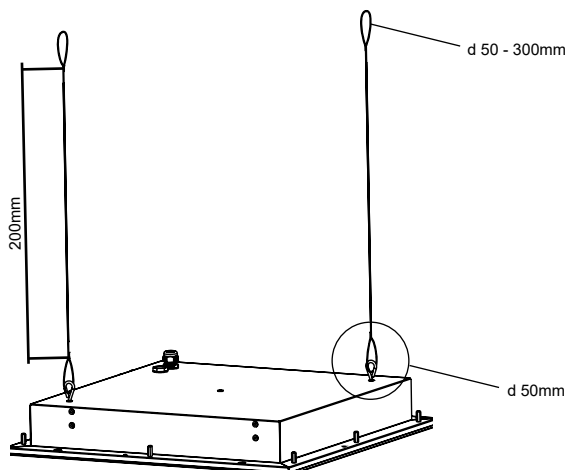


Mounting hole for light fixture PB:

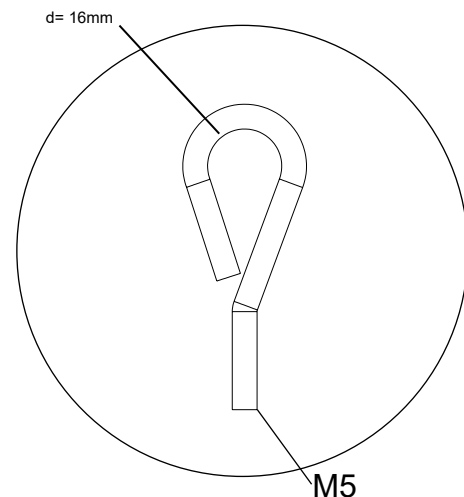
Type of soffit	Type of light fixture	A (mm)	B (mm)
PB	BORDER-N-LED-SQ-M600/PB	583	583
	BORDER-N-LED-R-M600/PB	1183	283
	BORDER-N-LED-SQ-M625/PB	608	608
	BORDER-N-LED-R-M625/PB	1233	1233



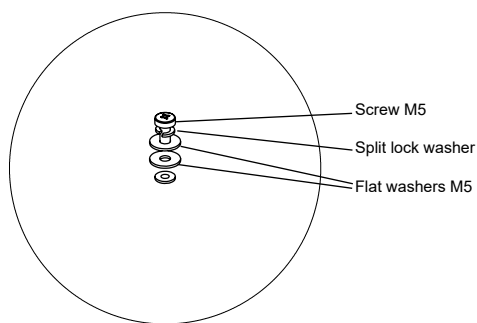
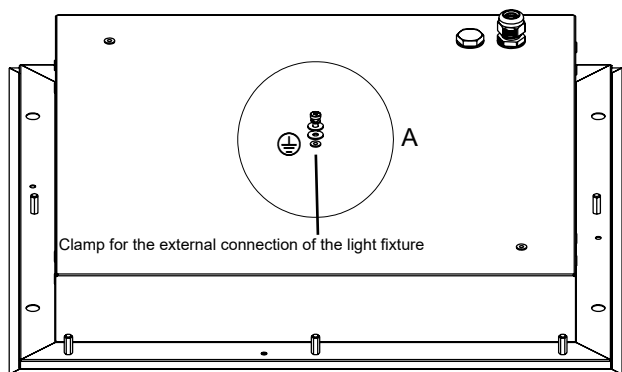
For order:
57512 - Set of safety suspension



Suspension eye:



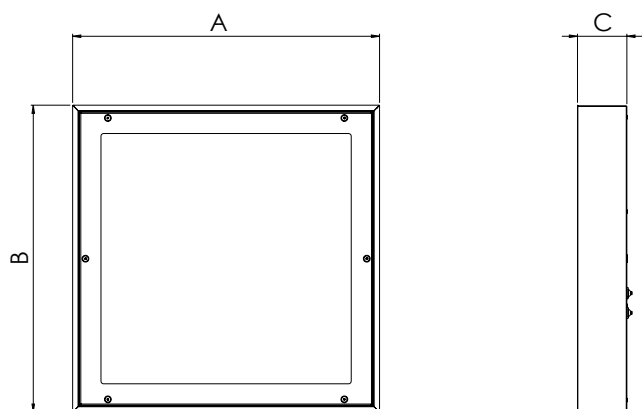
External connection of the light fixture:



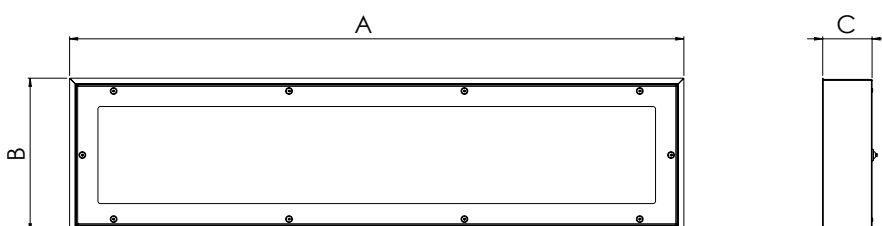
2.2 - Dimensions: surface light fixture:

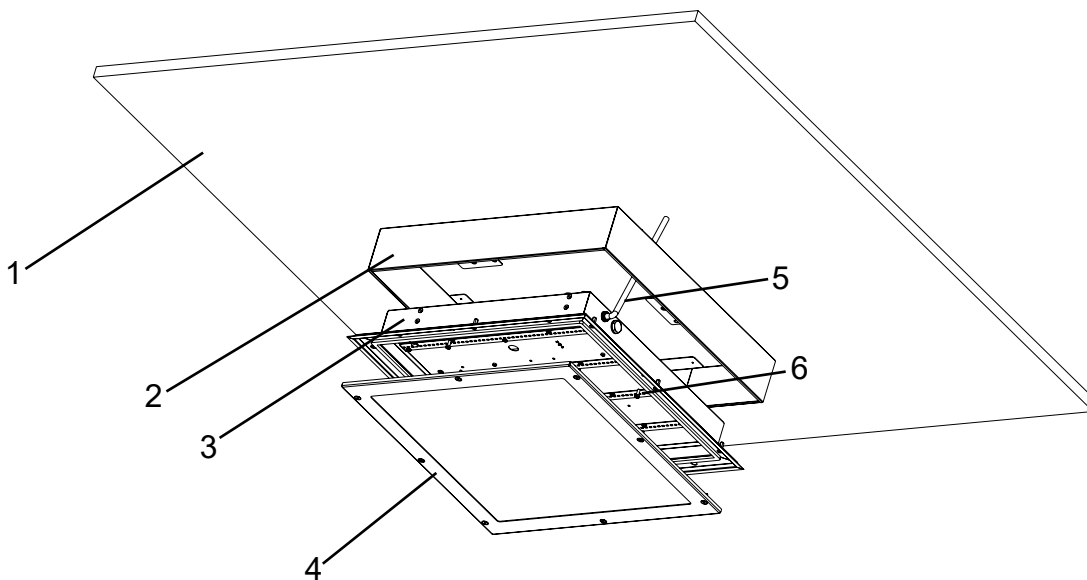
Type of light fixture - surface	A(mm)	B (mm)	C (mm)
BORDER-N-LED-SQ-M600/PB	595	595	100
BORDER-N-LED-R-M600/PB	1195	295	100
BORDER-N-LED-SQ-M598	598	598	100
BORDER-N-LED-R-598	1198	298	100
BORDER-N-LED-SQ-M625+PB	620	620	100
BORDER-N-LED-R-M625+PB	1245	310	100
BORDER-N-LED-SQ-M623	623	623	100
BORDER-N-LED-R-M623	1247	312	100

BORDER-N-LED-SQ



BORDER-N-LED-R





Installation of the surface frame:

Attach the frame for surface mounting (2) to the ceiling (1) (the screws for attachment are not part of the light fixture, the user chooses according to the load-bearing soffit, the maximum diameter of the screw is 5mm)

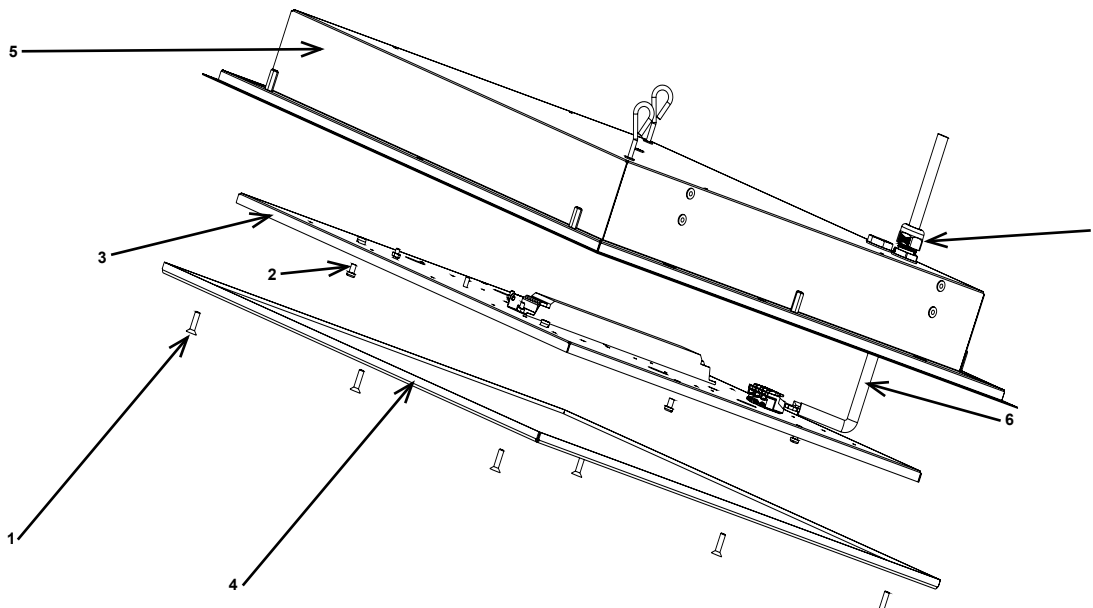
Pass the supply cable (5) through the cable outlet in the attached frame and the cable outlet in the lamp and plug into the supply terminal block.

Attach the reflector with the components to the lamp body and tighten the screws with a tightening torque of 0.5Nm

Using M5 screws (6), fasten the light fixture (3) to the attached frame (2) with a tightening torque of 1Nm.

Attach the frame (4) to the lamp body (2) and tighten the screws with a tightening torque of 2Nm.

3. Connection of light fixture





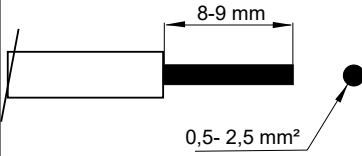





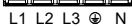




1. Loosen the M5 screws (1) on the frame, which are used to secure the frame (4) to the lamp body (5) and remove the frame with the optical diffuser.

2. Loosen the screws holding the reflector (2) and remove the reflector (3) from the lamp.

3. Pass the power cable (6) through the stuffing box (7). Properly tighten the packing glands until the state of partial deformation of the sealing rubber washer, tightening torque 2.5Nm.

The supply cable to the lamp must have an outer diameter within the range, according to the type of gland - Table of sealing areas, which is a necessary condition for the proper function of the gland. It is not allowed to use breathing plugs and breathing cable glands in the light fixture.

4. Plug the power cable into the free part of the supply terminal block as follows:

CLAMP	BORDER-N-LED	BORDER-N-LED-Em	MULTIBORDER-N-LED	BORDER-N-LED-DALI			
L1	phase wire	wire of charging phase	wire of charging phase	phase conductor			
L2	-		wire of switching phase	D1			
L3	-		-	D2			
N	neutral wire	neutral wire	neutral wire	neutral wire			
⊕	protective wire	protective wire	protective wire	protective wire			

*The marking of individual terminals and connections may differ, depending on the required equipment of the light fixture. In case of confusion, contact the technical support of VYRTYCH a.s.

5. Screw the reflector into the lamp body with a tightening torque of 0.5 Nm.

6. Fit the frame with the glass and tighten the M5 screws with a tightening torque of 2Nm.

7. The luminaire is equipped with a clamp for external connection (fig. external connection of the luminaire).

In case of any interventions on fixture lighting in premises with danger of explosion, the national safety rules and regulation for prevention of accidents are to be observed. BORDER-N-LED is metal dustproof and waterproof lighting fixture for areas with danger of explosion.



The light source and gasket in this lighting fixture can be replaced only producer or its contractual service technique or a similarly qualified person. When installing the 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 source and gasket in this lighting fixture can be replaced only producer or its contractual service technique or a similarly qualified person. Any modification or replacement of components on the luminaire that affects the protection against dangerous explosions is prohibited. Repairs to luminaires may only be carried out by a suitably qualified person and only with original spare parts. In case of damage to the seal in the lamp, it is necessary to perform a complete replacement of the lamp body.



WARNING!!!

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

WARNING – do not open under voltage.

WARNING – replace protective cover

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



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

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 locking screws on and remove it.
3. Unbolt the screws which hold the reflector, disconnect the connector and remove the reflector from luminaire.
4. Disconnect supply cable from terminal block.
5. Disconnect battery from emergency unit in non-explosive area as follows „-“ black conductor and „+“ red conductor.
6. Remove the old battery.
7. Insert the new battery (mark the date of operation start).
8. Connect conductors to battery as follows „+“ red conductor and „-“ black conductor.
9. Connect the connector, insert the reflector back into luminaire. Then tight the screws with torque. (with torque 0,5Nm).
10. Insert the glass and back into luminaire and tight the screws (with torque 2,5Nm).
11. Connect luminaire to power.

Basic instructions:

For users of luminaires

For users of emergency luminaires

For DALI system users

PRODUCT VIDEO



i After clicking on the QR code, you will be redirected to the relevant website.