Physical-Technical Testing Institute
Ostrava - Radvanice

(1)

Type Examination Certificate

(2) **Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres (Directive 2014/34/EU)**

(3) Type Examination Certificate number:

FTZÚ 23 ATEX 0039X

(4) Product: **Luminaire type BORDER-N-LED-2,22 ; MULTIBORDER-N-LED-2,22; BORDER-N-LED-Em-2,22; BORDER-N-LED-2,22-FROST and BORDER-N-LED-2,22-CB**

(5) Manufacturer: **VYRTYCH a.s.**

(6) Address: **Židněves 116, 294 06 Březno, Czech Republic**

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014.

The examination and test results are recorded in confidential Report number:

23/0039 dated 23.08.2023

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018, EN 60079-15:2010, EN 60079-31:2014

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

(11) This type examination certificate relates only to the design of the specified product and not to specific items of equipment subsequently manufactured.

(12) The marking of the product shall include the following:

II 3G Ex nR IIC T6 Gc
II 3D Ex tc IIIC T85°C Dc

This certificate is valid till: **31.08.2028**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body

FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV, s.p. OSTRAVA-RADVANICE

Date of issue: 24.08.2023

Physical-Technical Testing Institute, s.p., Pikartská 1337/7, 716 07 Ostrava - Radvanice, Czech Republic
tel.: +420 595 223 111, +420 604 203 525, e-mail: ftzu@ftzu.cz, www.ftzu.cz

(13) **Schedule**

(14) # Type Examination Certificate No. FTZÚ 23 ATEX 0039X

(15) Description of Product:

The luminaire consists of three main parts (metal plate body, reflector with electrical components and metal plate frame with optical cover. All parts are varnish by paint). The optical cover is made from clear or opal glass or from clear PC. These covers are parts of luminaire. Al part are connected by screws. Used sealing is glued between body and optical cover. On the top and side of body are holes for Ex - thread cable glands M20x1,5. The auxiliary optical covers are used for optical radiated angle, they are not part of luminaire enclosure. Luminaires are designed to be built into various types of suspended ceilings or for flush mounting in the ceiling.

Basic electrical parameters:
Nominal Voltage Un: 220 -240 V, 0/50/60 Hz
Maximum power Pmax: 80W
Degree of protection: IP66

TYPE CODING OF LUMINAIRE, zone 2,22:

Type coding	Type
BORDER-N-LED-2,22	Luminaires for standard lighting
MULTIBORDER-N-LED-2,22	Luminaires for maintained emergency lighting
BORDER-N-LED-Em-2,22	Luminaires for non-maintained emergency lighting
BORDER-N-LED-2,22-FROST	Luminaires for ambient temperature Ta = -40°C
BORDER-N-LED-2,22-CB	Luminaires for central battery power supply

MARKING OF LUMINAIRES:

BORDER-N-LED-G,D-M-V-x-y-zK-DIM DALI

G	- marking of zone with danger of explosion of inflammable gas and vapours
D	- marking of zone with danger of explosion of inflammable dust
M	- type of ceiling (M600, M598, M623, M625+PB)
V	- luminaire shape (SQ - square / R - rectangle)
x	- type of optical system
y	- marking of luminous flux value LED modules (lm)
zK	- correlated colour temperature (K)
DIM DALI	- marking of dimmable luminaire (option

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(13) **Schedule**

(14) # Type Examination Certificate No. FTZÚ 23 ATEX 0039X

(15) Description of Product: - continuation

Type of optical system - marking „x“:
CG – clear glass, radiated angle 120°
GLM – opal glass, radiated angle 120°
PC – clear polycarbonate, radiated angle 120°

Combination of optical system inside of luminaire:
OP – clear PC + opal PA, radiated angle 90°
CGOP – clear glass + opal PA; radiated angle 90°
MP – clear PC+PS MICRO CLEAR; radiated angle 90°
CGMP – clear glass + PS MICRO CLEAR; radiated angle 90°

The luminaire and its variants are verified according to the newest standard EN IEC 60079-15:2019.

(16) Report Number: 23/0039

(17) Specific Conditions of Use:

1. Ambient temperature:

-20°C ≤ Ta ≤ +40°C	- for BORDER – N- LED-R-12000
-20°C ≤ Ta ≤ +45°C	- for BORDER – N- LED-SQ-12000
-20°C ≤ Ta ≤ +55°C	- for BORDER – N- LED-R-8700
-20°C ≤ Ta ≤ +60°C	- for BORDER – N- LED-SQ-8700/7200/6300/4800/3300 for BORDER – N- LED-R-7200/6300/4800/3300
-40°C ≤ Ta ≤ +55°C	- for BORDER – N- LED-FROST-SQ-6300/4800/3300
-40°C ≤ Ta ≤ +60°C	- for BORDER – N- LED-FROST-SQ-8700/7200 for BORDER – N- LED-FROST-R-8700/7200/6300 for BORDER – N- LED-FROST-R-6300/4800/3300
0°C ≤ Ta ≤ +35°C	- for MULTIBORDER – N- LED-SQ-8700/7200 for MULTIBORDER – N- LED-R-12000
0°C ≤ Ta ≤ +40°C	- for MULTIBORDER – N- LED-SQ-6300 for MULTIBORDER – N- LED-R-8700
0°C ≤ Ta ≤ +45°C	- for MULTIBORDER – N- LED-SQ-4800/3300 for MULTIBORDER – N- LED-R-7200/6300/4800/3300
0°C ≤ Ta ≤ +50°C	- for BORDER – N- LED-Em-SQ for BORDER – N- LED-Em-R

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(13) **Schedule**

(14) # Type Examination Certificate No. FTZÚ 23 ATEX 0039X

(17) Specific Conditions of Use: - continuation

2. The luminaire is intended for fixed installation and must be labelled "Warning - potential danger of electrostatic charging" - see Technical conditions of the lighting fixture installation.
3. The power supply cable shall be effectively fixed to prevent pulling or twisting.
4. The Technical conditions of the lighting fixture installation established by the manufacturer must be complied.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (9) of this certificate and EN IEC 60079-15:2019.

(19) Drawings and Documents:

Issue	Sheets	Date	Description
00	17	01.02.2023	Technical description
---	5	01.02.2023	Technical conditions of the lighting fixture installation
---	1	03.05.2023	Assembly drawing BORDER-N_LED-R
---	1	13.10.2022	Assembly drawing BORDER-N_LED-SQ

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