

(1) TYPE EXAMINATION CERTIFICATE



(2) Equipment and Protective Systems intended for use in
Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) Type Examination Certificate Number:

TÜV 25 ATEX 9256 X

Issue: 00

(4) Equipment: **Explosion-proof LED Luminaire, Model TOSA-Ex2/21-F-B01 Series**

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

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

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

(8) The Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC / Ex9256.00 / 25.

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018

EN IEC 60079-15:2019

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

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

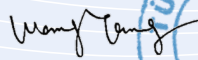


II 3 G

Ex nR IIC T6/T5 Gc

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2025-06-05


Yang Wang



This Type Examination Certificate without signature and stamp shall not be valid and may be circulated only without alteration.
Extracts or alterations are subject to approval by Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH.
Am Grauen Stein • 51105 Köln • Tel. +49 (0) 221 806-0 • Fax. + 49 (0) 221 806 114

(13)

(14)

Annex to

Type Examination Certificate

TÜV 25 ATEX 9256 X

Issue: 00

Environmental data

Models	Tamb	T Class
TOSA-Ex2/21-F-B01-γγγ-23400-εεεε-ζζ-λλ	-40°C to +65°C	T5
	-40°C to +55°C	T6
TOSA-Ex2/21-F-B01-γγγ-29700-εεεε-ζζ-λλ	-40°C to +60°C	T5
	-40°C to +50°C	T6
TOSA-Ex2/21-F-B01-γγγ-35100-εεεε-ζζ-λλ	-40°C to +50°C	T5

IP Rating: IP66

(16) Test report No.: GC / Ex9256.00 / 25

(17) Special Conditions for safe use

- 1) End user shall use certified cable glands with suitable type of protection for installation purpose. Cable gland with minimum IP66 rating and has a minimum service temperature of 100°C to be used.
- 2) Clearances and creepage distances should be considered when installing the power cables in accordance with the applicable safety requirements of the relevant industrial standards.
- 3) Electrostatic charging hazard – clean only with a damp cloth.
- 4) End users are not allowed to open the light source chamber.
- 5) Restricted breathing enclosures with provision for routine checking shall be subjected to periodic pressure test measurement at intervals of six months or more, as experience dictates.
- 6) To ensure that the “nR” properties will not be defeated by the opening and closing operation, the mounting and replacement of gasket or any seal must be observed in accordance with the requirements as specified in the Ex instruction of manufacturer.
- 7) Different ambient temperature range should be observed for different models as below.

Models	Tamb	T Class
TOSA-Ex2/21-F-B01-γγγ-23400-εεεε-ζζ-λλ	-40°C to +65°C	T5
	-40°C to +55°C	T6
TOSA-Ex2/21-F-B01-γγγ-29700-εεεε-ζζ-λλ	-40°C to +60°C	T5
	-40°C to +50°C	T6
TOSA-Ex2/21-F-B01-γγγ-35100-εεεε-ζζ-λλ	-40°C to +50°C	T5

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

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Annex to

Type Examination Certificate

TÜV 25 ATEX 9256 X

Issue: 00

(15) Description of Equipment

Equipment and type:

Explosion-proof LED Luminaire, TOSA-Ex2/21-F-B01 Series

General product information:

The TOSA-Ex2/21-F-B01 Series Explosion-proof LED Luminaire is designed to be used in an explosive atmosphere. The rated voltage is 100-277VAC and frequency is 50/60Hz, the rated power are 150W, 200W and 240W, and the enclosure is made of ENAC-44300 cast aluminum. All models of the TOSA-EX2/21-F-B01 Series have the same enclosure and same rated power LED.

The type of protection of the equipment are "nR". The lighting is intended to be used in Zone 2. The differences of each model of TOSA-EX2/21-F-B01 Series are as below:

- 1) These equipment are powered by two models of power supply: EUM Series and X6 Series.
- 2) These equipment use one Series surge protection device: LYSPD Series.
- 3) The Cable Entry of the equipment are 3/4" NPT, M25×1.5-6H shall be certified by IECEx and ATEX.

Type code:

TOSA-EX2/21-F-B01-YYY-55500-EE-ZZ-AA	
LB:125°-165° (F01612);LM:51°-75° (F01605);LS:25°-51° (F01604);	
LW:76°-100° (F01606);LT:1°-15° (F01603);AA:TYPE I very short (F01601);	
AB:T4 I (F01602);AC:TYPE II very short 1 (F01608);AD:TYPE II medium (F01609);	
AE:TYPE II very short 2 (F01610);AF:TYPE IV short (F01611);AG:T4 II (F01613)	
ZZ:12 = Wire Guard;13 = Glare Shield;14 = 1pcs Cable Gland;	
15 = 2pcs Cable Gland;16 = Wire Guard + Glare Shield;	
17 = Wire Guard + 1pcs Cable Gland;18 = Wire Guard +	
2pcs Cable Gland;19 = Glare Shield + 1pcs Cable Gland;	
20 = Glare Shield + 2pcs Cable Gland;	
21 = Wire Guard + Glare Shield + 1pcs Cable Gland;	
22 = Wire Guard + Glare Shield + 2pcs Cable Gland	
Type of connection:0ND-Standard On/Off	
23400:150W;29700:200W;35100:240W	
CCT:827-2700K,...;970=6500K	
Approximate dimensions of the luminaire 420x440mm	
Internal designation of the type of enclosure "nR"	
Certified luminaire for Zone 2,21	
Luminaire name	

Details of Change:

N/A, initial certification.

Technical data:

Electrical data

Rated Voltage: 100 to 277VAC, 50/60Hz

Rated Power: 150W/200W/240W

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(14)

Annex to

Type Examination Certificate

TÜV 25 ATEX 9256 X

Issue: 00

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2025-06-05



Yang Wang



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(1) EU-TYPE EXAMINATION CERTIFICATE



(2) Equipment and Protective Systems intended for use in
Potentially Explosive Atmosphere - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

TÜV 25 ATEX 9255 X

Issue: 00

(4) Equipment: **Explosion-proof LED Luminaire, Model TOSA-Ex2/21-F-B01 Series**

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

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

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

(8) The Zertifizierungsstelle für Explosionsschutz of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 21 of the Council Directive 2014/34/EU of 26th February 2014, certifies this product which has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report GC / Ex9255.00 / 25.

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

EN IEC 60079-0: 2018

EN 60079-31: 2014

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

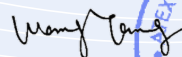
(12) The marking of the equipment shall include the following:



II 2 D

Ex tb IIIC T80°C/T95°C Db IP66

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz


Yang Wang



Cologne, 2025-06-05

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Annex to

EU-Type Examination Certificate

TÜV 25 ATEX 9255 X

Issue: 00

(15) Description of Equipment

Equipment and type:

Explosion-proof LED Luminaire, TOSA-Ex2/21-F-B01 Series

General product information:

The TOSA-Ex2/21-F-B01 Series Explosion-proof LED Luminaire is designed to be used in an explosive atmosphere. The rated voltage is 100-277VAC and frequency is 50/60Hz, the rated power is 150W, 200W and 240W, and the enclosure is made of ENAC-44300 cast aluminum.

All models of the TOSA-EX2/21-F-B01 Series have the same enclosure and same rated power LED. The type of protection of the equipment are "tb". The lighting is intended to be used in Zone 21 and Zone 22.

The differences of each model of TOSA-EX2/21-F-B01 Series are as below:

- 1) These equipment are powered by two models power supply: EUM Series and X6 Series.
- 2) These equipment use one Series surge protection device: LYSPD Series.
- 3) The Cable Entry of the equipment are 3/4" NPT, M25×1.5-6H shall be certified by IECEx and ATEX.

Type code:

TOSA-EX2/21-F-B01-YYY-SSSS-EE-ZZ-LL	LB:125°-165° (F01612);LM:51°-75° (F01605);LS:25°-51° (F01604); LW:76°-100° (F01606);LT:1°-15° (F01603);AA:TYPE I very short (F01601); AB:T4 I (F01602);AC:TYPE II very short 1 (F01608);AD:TYPE II medium (F01609); AE:TYPE II very short 2 (F01610);AF:TYPE IV short (F01611);AG:T4 II (F01613) ZZ:12 = Wire Guard;13 = Glare Shield;14 = 1pcs Cable Gland; 15 = 2pcs Cable Gland;16 = Wire Guard + Glare Shield; 17 = Wire Guard + 1pcs Cable Gland;18 = Wire Guard + 2pcs Cable Gland;19 = Glare Shield + 1pcs Cable Gland; 20 = Glare Shield + 2pcs Cable Gland; 21 = Wire Guard + Glare Shield + 1pcs Cable Gland; 22 = Wire Guard + Glare Shield + 2pcs Cable Gland Type of connection:0ND-Standard On/Off 23400:150W;29700:200W;35100:240W CCT:827=2700K;...;970=6500K Approximate dimensions of the luminaire 420x440mm Internal designation of the type of enclosure "nR" Certified luminaire for Zone 2,21 Luminaire name
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Details of Change:

N/A, initial certification.

Technical data:

Electrical data

Rated Voltage: 100 to 277VAC, 50/60Hz

Rated Power: 150W/200W/240W

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Annex to

EU-Type Examination Certificate

TÜV 25 ATEX 9255 X

Issue: 00

Environmental data

Models	Tamb	Dust(°C)
TOSA-Ex2/21-F-B01-γγγ-23400-εεεε-ζζ-λλ	-40°C to +65°C	95°C
	-40°C to +55°C	80°C
TOSA-Ex2/21-F-B01-γγγ-29700-εεεε-ζζ-λλ	-40°C to +60°C	95°C
	-40°C to +50°C	80°C
TOSA-Ex2/21-F-B01-γγγ-35100-εεεε-ζζ-λλ	-40°C to +50°C	95°C

IP Rating: IP66

(16) Test report No.: GC / Ex9255.00 / 25

(17) Special Conditions for safe use

- 1) End user shall use certified cable glands with suitable type of protection for installation purpose. Cable gland with minimum IP66 rating and has a minimum service temperature of 100°C to be used.
- 2) Clearances and creepage distances should be considered when installing the power cables in accordance with the applicable safety requirements of the relevant industrial standards.
- 3) Electrostatic charging hazard – clean only with a damp cloth.
- 4) End users are not allowed to open the light source chamber.
- 5) Different ambient temperature range should be observed for different models as below.

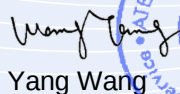
Models	Tamb	Dust(°C)
TOSA-Ex2/21-F-B01-γγγ-23400-εεεε-ζζ-λλ	-40°C to +65°C	95°C
	-40°C to +55°C	80°C
TOSA-Ex2/21-F-B01-γγγ-29700-εεεε-ζζ-λλ	-40°C to +60°C	95°C
	-40°C to +50°C	80°C
TOSA-Ex2/21-F-B01-γγγ-35100-εεεε-ζζ-λλ	-40°C to +50°C	95°C

(18) Essential Health and Safety Requirements

The Essential Health and Safety Requirements are covered by the standards listed at item 9.

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2025-06-05



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