

(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 13 ATEX 7316 X

Issue: 01

- (4) Equipment: **Converter FXopis/TX SC
Type 9721/13-11-14 and 9721/13-11-54
for details see type code below**
- (5) Manufacturer: **R. STAHL Schaltgeräte GmbH**
- (6) Address: **Am Bahnhof 30
74638 Waldenburg, Germany**
- (7) This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV Rheinland 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 557/Ex7316.02/13
- (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 60079-7: 2015 / A1: 2018 EN 60079-28: 2015
- (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 3 (1) G

Ex ec [op is T6 Ga] IIC T4 Gc

II (1) D

[Ex op is Da] IIIC

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2021-07-05

Dipl.-Ing. Christian Mehrhoff



This EU-Type Examination Certificate without signature and stamp shall not be valid.
This EU-Type Examination Certificate may be circulated only without alteration. Extracts or alterations are subject to approval by the
TÜV Rheinland Industrie Service GmbH TÜV Rheinland Group Am Grauen Stein 51105 Köln
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(13)

Annex

(14)

EU Type Examination Certificate

TÜV 13 ATEX 7316 X

Issue: 01

(15) Description of equipment

15.1 Equipment and type:

Converter FXopis/TX SC
Type 9721/13-11-14 and 9721/13-11-54

15.2 Description / Details of Change

General product information

Converter FXopis/TX SC Type 9721/13-11-14 and 9721/13-11-54.

A fiber optic media converter for Industrial Ethernet converts signals directly between copper and fiber optic cables. Thus, fiber optic media converters offer the possibility to enlarge the range of an already existing network.

The Converter FXopis/TX SC converts signals between standard copper cable based Ethernet signals and Ex op is fiber optic signals.

Therefore the Converter FXopis/TX SC maybe installed in Zone 2 or Zone 22 or outside explosive atmospheres. The Ex op is interface is certified as per [Ex op is T6 Ga] or [Ex op is Da] and can be connected to devices in Zone 0 or Zone 20.

- For operation in Zone 2 hazard areas a housing of at least IP 54 is required.
- For operation in Zone 22 hazard areas a housing of at least IP 64 is required.

The Converter FXopis/TX SC is equipped with a singlemode (SM) or multimode (MM) transceiver.

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Type designation

Converter FXopis/TX SC	9721 /	*	*	-	*	*	-	*	*
		a	b		c	d		e	f
Hardware-Version:									
1	1								
2	2								
Hazardous area:									
Zone 1	2								
Zone 2	3								
Number of ports op is									
1 Port	1								
2 Ports	2								
Number of ports non-Ex									
1 Port	1								
2 Ports	2								
Design of Ex op is ports									
100Base FX Multimode, SC	1								
100Base FX Multimode, LC	2								
100Base FX Singlemode, SC	5								
100Base FX Singlemode, LC	6								
Design of non-Ex ports									
100Base FX Multimode, SC	1								
100Base FX Multimode, LC	2								
100Base TX Copper 4-wire Cat5, M12	3								
100Base TX Copper 4-wire Cat5, RJ45	4								
100Base FX Singlemode, SC	5								
100Base FX Singlemode, LC	6								

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Electrical data:

Nominal voltage: 12 ... 24 V DC

Nominal power consumption: < 2,5 W

Environmental data:

Operating temperature range : $-30^{\circ}\text{C} \leq T_a \leq +75^{\circ}\text{C}$

IP Code : enclosure: IP 30;
connection terminals: IP 20

must be installed inside housing or cabinet which complies with the requirements of EN 60079-0 with IP 54 at minimum and IP 64 for use in Zone 22

Safety data:

Optical Ethernet interface and status LED

As per. EN 60079-28, „op is“-protected

max. optical output power: < 15 mW

Details of Change:

- Standard update to EN IEC 60079-0: 2018, EN 60079-28: 2015 and transfer of EN 60079-15: 2010 to EN IEC 60079-7: 2015 / A1:2018.
- The marking changed from nA to ec.
- Editorial changes to the circuit diagram.

(16) Test-Report No. 557/Ex7316.02/13

(17) Special Conditions for safe use

1. The equipment shall only be used in an area of at least pollution degree 2, as defined in EN 60664-1.
2. For installations in Zone 2 or Zone 22 the Converter FXopis/TX SC ** shall be mounted in a protective housing or cabinet according to EN 60079-0 which provides an appropriate type of protection.
For installations in Non-Ex area and in Zone 2 a housing of at least IP54 is required.
For installations in Zone 22 a housing of at least IP64 is required.


(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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