(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 16 ATEX 7742 X

Issue: 01

(4) Equipment: Switch unmanaged FXopis/TX SC MM, SM or SMM

Type 9721/13-42-14, 9721/13-42-54 and 9721/13-42-74

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/Ex7742.01/16

(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:

 $\langle \varepsilon_{x} \rangle$

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 Mehrhoft

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

Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114





(13)

Annex

(14) EU Type Examination Certificate TÜV 16 ATEX 7742 X Issue: 01

(15) Description of equipment

15.1 Equipment and type:

Switch unmanaged FXopis/TX SC MM, SM or SMM Type 9721/13-42-14; 9721/13-42-54 and 9721/13-42-74

15.2 Description / Details of Change

General product information

The switch unmanaged is designed for linking of electrical Ethernet networks (TX) and fibre optic (FX) based networks. The unmanaged switch has two TX ports and four FX op is ports. Redundant supply can be provided.

Observing the Special Conditions for safe use, the switch unmanaged can be installed in Zone 2 or Zone 22 or outside explosive atmospheres. The fibre optics are used for operation in hazardous areas of Zone 0, 1, 2, 20, 21 and 22 with the type of protection "Ex op is" (EN 60079-28).

Type designation

Switch unmanaged FXopis/TX SC **	9721 / 1 3 - 4 2 -	*	4
Design of Ex op is ports:			
100Base FX Multimode, SC		1	
100Base FX Singlemode, SC		5	
100Base FX Single- and Multimode, SC		7	





Technical Data

Electrical data:

Optical Ethernet interface as per. EN 60079-28, "op is"-protected max. optical output power < 15 mW

Nominal voltage:

12 ... 30 V DC

Nominal power consumption: < 5.4 W (24 V)

Environmental data:

Ambient temperature range:

- 30 °C ... + 70 °C

Relative humidity (no condensation):

5 ... 95 %

Use at height:

< 2000 m

Ethernet and power supply connectors: "In Zone 2 do not separate PWR or RJ45-Plug when energized! "

Details of Change:

Standard update to EN IEC 60079-0: 2018 and EN IEC 60079-7: 2015 / A1:2018.

(16) Test-Report No.

557/Ex7742.01/16

(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.
- For installations in Zone 2 or Zone 22 the Switch unmanaged 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) <u>Basic Safety and Health Requirements</u>

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2021-07-05

Dipl.-Ing. Christian Mehrhoff

This EU Type Examination Certificate without signature and official stamp shall not be valid. This certificate may be circulated without alteration. Extracts or alterations are subject to approval by: Zertifizierungsstelle of TÜV Rheinland Industrie Service GmbH