

(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 17 ATEX 8059 X

Issue: 01

- (4) Equipment: Fiber Optic Transceiver Type RJ-*G-SX; Type SFP-F*-SX and Type RJ-*M-FX-*
- (5) Manufacturer: COTSWORKS, Inc.
- (6) Address: 749 Miner Rd, Highland Heights
OH 44143

- (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/Ex8059.01/17

- (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 60079-28: 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 (1) G [Ex op is IIC T4 Ga]

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2024-03-20

Dipl.-Ing. Christian Meinhoff



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 17 ATEX 8059 X Issue: 01

(15) Description of equipment

15.1 Equipment and type:

Fiber Optic Transceiver
Type RJ-*G-SX; Type SFP-F*-SX and Type RJ-*M-FX-*

15.2 Description / Details of Change

General product information

The Fiber Optic Transceivers are intended to build inside another electronic equipment to provide a conversion from electronic data signals to optical data signals.

They have to be placed outside explosive atmosphere or have to be protected by an appropriate type of protection.

Details of Change:

Standard update to EN IEC 60079-0: 2018
Minor changes to the hardware (not Ex relevant).

Technical Data:

U_N	=	3,14 to 3,47 V
P_{opt}	<	35 mW
λ		830 to 860 nm for Type SFP-F*-SX
λ		840 to 860 nm for Type RJ-*G-SX
λ		1270 to 1380 nm for Type RJ-*M-FX-*

Ambient temperature:

$-40^{\circ}\text{C} \leq T_{amb} \leq 85^{\circ}\text{C}$

(16) Test-Report No. 557/Ex8059.01/17

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(17) Special Conditions for safe use

1. Connecting of the transceiver to a non-certified transceiver may cause the destruction of the receiver. The damaging of a receiver of the certified transceiver does not influence the optical output power level of the laser diode.
The optical connection of the laser diode to a non-certified receiver in the safe area does not influence this certification.
The transceiver shall be supplied by a driving circuit powered from
 - an SELV or PELV system or,
 - via a safety isolating transformer complying with the requirements of IEC 61558-2-6 or technically equivalent standard, or
 - directly connected to apparatus complying with IEC 60950, IEC 61010-1, or a technically equivalent standard, or
 - fed directly from cells or batteries.
2. The temperature range is -40°C to +85°C.

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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