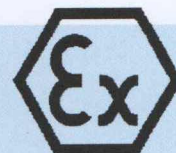


(1) EU-TYPE EXAMINATION CERTIFICATE



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

TÜV 22 ATEX 8837 X Issue: 01

- (4) Equipment: **Safety-relay module, Type SRB101EXi-1A, SRB200EXi-1A, SRB101EXi-1R, SRB200EXi-1R**
- (5) Manufacturer: **K. A. Schmersal GmbH & Co. KG**
- (6) Address: **Möddinghofe 30
42279 Wuppertal, 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 / Ex 8837.01 / 22

- (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 60079-11:2012**

**EN 60079-7:2015
EN IEC 60079-15:2019**

EN IEC 60079-7:2015/A1:2018

- (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 (2) G Ex ec nC [ib Gb] IIC T5 Gc

II (2) D [Ex ib Db] IIIC

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2024-03-07

Dipl.-Ing. Christian Mehrhoff



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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 22 ATEX 8837 X

Issue: 01

(15)

Description of equipment

15.1 Equipment and type:

Issue 00

Safety-relay module Type SRB101EXi-1A, SRB200EXi-1A, SRB101EXi-1R, SRB200EXi-1R


Type designation SRB ① EX-i -②③

①	200	2 no / 0 nc (STOP 0)
	101	1 no / 1 nc (STOP 0)
②	1	Sensor use into Zone 1 and 21
③	A	Autostart
	R	Reset (monitored start with falling edge)

General product information


The safety relay module type SRB is a relay module whose signal inputs are intrinsically safe according to EN 60079-11. The relay module can be installed in Zone 2 in a suitable housing. It is used to evaluate sensors that are located in an Ex Zone (1 or 2).

Its marking is:

 II 3 (2) G Ex ec nC [ib Gb] IIC T5 Gc

In addition, it is used to evaluate sensors located in an Ex Zone (21 or 22) with its intrinsically safe signal inputs. The relay module must be installed as associated equipment outside the Ex-area in a suitable switch box or switch cabinet.

Its marking is:

 II (2) D [Ex ib Db] IIIC

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Technical Data

Power supply 24 V DC, 100 mA (max.)
 Maximum voltage U_m 253 V
 Contact circuits / Release paths: 250 V AC, 3 A
 Ambient temperature range $-25^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

Values of the intrinsically safe output circuit of the equipment with

Protection level [ib Gb] IIC or [Ex ib Db] IIIC linear source:

The following maximum L_o and C_o values can be connected together:

Group	II C				II B					
External capacity C_o [nF]	26	36	46	49	160	180	230	280	350	412
External inductivity L_o [mH]	4,0	2,0	1,0	0,5	38,0	5,0	2,0	1,0	0,5	0,2

Issue 01

Detail of change

Corrections were made and the electrical parameters for the intrinsically safe output circuit were added.

Type designation

Unchanged

General product information:

Unchanged

Technical Data

Power supply 24 V DC, 100 mA (max.)
 Maximum voltage U_m 253 V
 Contact circuits / Release paths: 250 V AC, 3 A
 Ambient temperature range $-25^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

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Values of the intrinsically safe output circuit of the equipment with
Protection level [ib Gb] IIC or [Ex ib Db] IIIC linear source:

$$U_o = 33,6 \text{ V}$$

$$I_o = 57 \text{ mA}$$

$$P_o = 478,8 \text{ mW (characteristic linear)}$$

The following maximum L_o and C_o values can be connected together:

Group	II C				II B					
External capacity C_o [nF]	26	36	46	49	160	180	230	280	350	412
External inductivity L_o [mH]	4,0	2,0	1,0	0,5	38,0	5,0	2,0	1,0	0,5	0,2

(16) Test-Report No. 557 / Ex 8837.01 / 22

(17) Special Conditions for safe use

For equipment "ec" Installation in Zone 2

- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1."
- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with IEC 60079-0".
- Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment".
- The maximum voltage must be limited to U_m 253 V

(18) Basic Safety and Health Requirements Covered by afore mentioned
standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2024-03-07

Dipl.-Ing. Christian Mehrhoff



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