

(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 8004

Issue: 01

(4) Equipment: **Belt alignment switch, position switch type EX-T.454-*Z-*-***

(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 8004.01 / 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 60079-11:2012

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 G Ex ib IIC T6 Gb

II 2 D Ex ib IIIC T80°C Db

II 2 D Ex tb IIIC T80°C Db

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

Cologne, 2023-08-01

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
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(13)

Annex

(14)

EU Type Examination Certificate

TÜV 17 ATEX 8004

Issue: 01

(15)

Description of equipment

15.1 Equipment and type:

Issue00

Belt alignment switch, position switch type EX-T.454-*Z-*-*

Type designation

EX-T.454-①Z-②-③-④

No.	option	description
	T	Slow-action
1	02	2 NC contacts
	04	4 NC contacts
	11	1 NC contact / 1 NO contact
	13	1 NC contact / 3 NO contact
	31	3 NC contact / 1 NO contact
	20	2 NO contact
	22	2 NC contact / 2 NO contact
2	without	Standard (11, 02, 20)
	H	Contact staggering (22, 13, 31,04)
3	without	Standart
	DN	With integral Dupline input module
4	without	Standard (smooth shaft)
	1801	Geared shaft (10°-steps)

Issue 01

unchanged

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15.2 Description

General product information

Issue 00

The belt alignment switch, position switch type EX-T.454-*Z-*-* is used for detecting the position and monitoring moving parts.

The switch consists of a metal enclosure and variant types of mechanical actuators. The aspects of the mechanical explosion protection of the actuators are not part of this testing.

The switch in type of protection Ex tb IIIC T80°C Db can be equipped with an integral Dupline input module.

Issue 01

Details of change:

The standard IEC 69979-0:2011 Ed. 5 has been updated to IEC 60079-0:2017 Ed. 7 and the type of protection Ex ib IIIC T80°C Db is added and the PA-connection facility is changed.

Technical Data

Issue 00

For switch in type of protection Ex tb IIIC T80°C Db

Rated insulation voltage	Ui	400 V
Utilization category	AC-15:	230 V / 4 A
	DC-13:	24 V / 1 A
Rated surge voltage	Uimp	6 kV

For switch in type of protection Ex ib IIC T6 Gb

For connecting to one intrinsically safe circuit

Max. input voltage	Ui	60 V
Max. input current	Ii	100mA
Max. input power	Pi	6W
Max. inner capacity	Ci	negligible
Max. inner inductance	Li	negligible

Ambient temperature range $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$

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Issue 01

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(16) Test-Report No. 557 / Ex 8004.01 / 17

(17) Special Conditions for safe use

None

(18) Basic Safety and Health Requirements

Covered by afore mentioned standard

TÜV Rheinland Zertifizierungsstelle für Explosionsschutz

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