



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

| | | | |
|---------------------|---|-------------|--------------------------------------|
| Certificate No.: | IECEx TUR 18.0048 | Page 1 of 4 | <u>Certificate history:</u> |
| Status: | Current | Issue No: 1 | Issue 0 (2018-07-31) |
| Date of Issue: | 2023-08-01 | | |
| Applicant: | K. A. Schmersal GmbH & Co. KG Möddinghofe 30 42279 Wuppertal Germany | | |
| Equipment: | Belt alignment switch, position switch | | |
| Optional accessory: | EX-T.454-*Z-*-* | | |
| Type of Protection: | Ex "i" Ex "t" | | |
| Marking: | Ex ib IIC T6 Gb Ex ib IIIC T80°C Db Ex tb IIIC T80°C Db | | |

Approved for issue on behalf of the IECEx
Certification Body:

Christian Mehrhoff

Position:

Assigned certifier

Signature:
(for printed version)

Date:
(for printed version)

2023-08-01

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

TUV Rheinland Industrie Service GmbH
Am Grauen Stein
51105 Cologne
Germany





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Certificate No.: **IECEx TUR 18.0048**

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Date of issue: 2023-08-01

Issue No: 1

Manufacturer: **K. A. Schmersal GmbH & Co. KG**
Möddinghofe 30
42279 Wuppertal
Germany

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[DE/TUR/ExTR18.0047/01](#)

Quality Assessment Report:

[DE/TUR/QAR11.0008/05](#)



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Date of issue: 2023-08-01

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

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

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 inner mounted switching elements 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.

Technical data

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 |

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 |

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

SPECIFIC CONDITIONS OF USE: NO



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Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 01

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

Annex:

[Attament to DE_TUR_18.0048-01.pdf](#)



Device: Belt alignment switch, position switch
Type: EX-T.454-*Z*-*-*

Manufacturer: K. A. Schmersal GmbH & Co. KG
Address: Möddinghofe 30
42279 Wuppertal

Issue 01

Details of change Issue 1:

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

General product information:

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 inner mounted switching elements 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 Db can be equipped with an integral Dupline input module.

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) |



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