



# 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](http://www.iecex.com)

Certificate No.:	<b>IECEx BVS 09.0004</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 2	<a href="#">Issue 1 (2013-03-07)</a> <a href="#">Issue 0 (2009-01-16)</a>
Date of Issue:	2023-05-31		
Applicant:	<b>K.A. Schmersal GmbH &amp; Co. KG</b> Moeddinghofe 30 42234 Wuppertal Germany		
Equipment:	<b>Belt alignment switch, slack wire switch, position switch, type EX-* 441-11*-UE-*-** and type EX-* 250-**-H-*-**</b>		
Optional accessory:			
Type of Protection:	<b>Equipment dust ignition protection by enclosure "t"</b>		
Marking:	<b>Ex tb IIIC T90°C Db</b>		

Approved for issue on behalf of the IECEx  
Certification Body:

**Dr Franz Eickhoff**

Position:

**Senior Lead Auditor, Certification Manager and officially  
recognised expert**

Signature:  
(for printed version)

  
2023-05-31

Date:  
(for printed version)

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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**DEKRA Testing and Certification GmbH**  
Certification Body  
Dinnendahlstrasse 9  
44809 Bochum  
Germany





# IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 09.0004**

Page 2 of 4

Date of issue: 2023-05-31

Issue No: 2

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 60079-31:2013](#) 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/BVS/ExTR09.0006/03](#)

Quality Assessment Report:

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



# IECEX Certificate of Conformity

Certificate No.: **IECEX BVS 09.0004**

Page 3 of 4

Date of issue: 2023-05-31

Issue No: 2

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

### **Description**

The belt alignment switch / position switch is actuated when the conveyor gets misaligned.  
The slack wire switch reacts when the sling tension is lost.

The devices consist of a metallic single-chamber housing in the protection type protection by enclosure "t" with a built-in switching insert. On the front side, varying to type and design, is the actuating part, which operates the switching insert within the enclosure. On the side of the housing, right and left are entries for cable glands. At the bottom of the enclosure is the equipotential bonding connection.

### **Subject and Type**

See Annex

### **Parameters**

See Annex

**SPECIFIC CONDITIONS OF USE: NO**



# IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 09.0004**

Page 4 of 4

Date of issue: 2023-05-31

Issue No: 2

## DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Updating of the standards IEC 60079-0:2011 to IEC 60079-0:2017 and IEC 60079-31:2008 to IEC 60079-31:2013
- Additional information label on the enclosure and in the instructions
- Updating the type codes
- Changing the size of equipotential bonding conductor connection

## Annex:

[BVS\\_09.0004\\_KaSchmersal\\_Annex2.pdf](#)



# IECEx Certificate of Conformity



**Certificate No.:** IECEx BVS 09.0004 Issue No. 2  
**Annex**  
**Page 1 of 3**

**Subject and Type:**

Belt alignment- or Slack wire switch, position switch  
EX-\* 441-11\*-UE-\*-\*

EX-[1] 441-11[2]-UE-[3]-[4]-[5]

- |     |                        |                                  |
|-----|------------------------|----------------------------------|
| [1] | Contact system         |                                  |
|     | M.                     | Snap action                      |
|     | T.                     | Slow action                      |
| [2] | Protection class       |                                  |
|     | Z                      | IP67                             |
|     | Y                      | IP66                             |
| [3] | Actuator               |                                  |
|     | L*                     | Roller level                     |
|     | V*                     | Roller level                     |
|     | C*                     | Fork Level                       |
|     | A*                     | Roller level                     |
|     | Z*                     | Pull level                       |
|     | 4D*                    | Angle roller lever               |
|     | 2A*                    | Roller level                     |
|     | D*                     | Roller level                     |
|     | 2Z*                    | Pull level                       |
|     | 4D-RMS*                | Angle roller lever, brass roller |
|     | V-RMS*                 | Roller level, brass roller       |
|     | 243                    | Belt alignment switch            |
|     | 966                    | Belt alignment switch            |
|     | 1224                   | Belt alignment switch            |
|     | 14                     | Slack rope switch                |
|     | * Position switch only |                                  |
| [4] | Contact material       |                                  |
|     | 1276-1                 | Gold-plated, 5µm                 |
|     | 1276-2                 | Gold-plated, 0,3µm               |
|     | 1276-3                 | Gold-plated, 5µm                 |
|     | 1276-4                 | Gold-plated, 0,3µm               |
| [5] | Special versions       |                                  |
|     | (Blank)                | Without special function         |
|     | 1801                   | toothed shaft                    |



# IECEx Certificate of Conformity



**Certificate No.:** IECEx BVS 09.0004 Issue No. 3  
**Annex**  
**Page 2 of 3**

Belt alignment and position switch  
EX-\* 250-\*\*-H-\*-\*

EX-[1] 250-[2][3]-H-[4]-[5]-[6]

- |     |                        |                                    |
|-----|------------------------|------------------------------------|
| [1] | Contact system         |                                    |
|     | M.                     | Snap action                        |
|     | T.                     | Slow action                        |
| [2] | Contact Versions       |                                    |
|     | 11                     | 1 NO contacts / 1 NC contacts      |
|     | 22                     | 2 NO contacts / 2 NC contacts      |
| [3] | Protection class       |                                    |
|     | Z                      | IP67                               |
|     | Y                      | IP66                               |
| [4] | Actuator               |                                    |
|     | L*                     | Roller level                       |
|     | V*                     | Roller level                       |
|     | C*                     | Fork Level                         |
|     | A*                     | Roller level                       |
|     | Z*                     | Pull level                         |
|     | 4D*                    | Angle roller lever                 |
|     | 2A*                    | Roller level                       |
|     | D*                     | Roller level                       |
|     | 2Z*                    | Pull level                         |
|     | 4D-RMS*                | Angle roller lever, brass roller   |
|     | V-RMS*                 | Roller level, brass roller         |
|     | 243                    | Belt alignment switch              |
|     | 966                    | Belt alignment switch              |
|     | 1224                   | Belt alignment switch              |
|     | * Position switch only |                                    |
| [5] | Contact material       |                                    |
|     | 1276-1                 | Gold-plated, 5µm                   |
|     | 1276-2                 | Gold-plated, 0,3µm                 |
|     | 1276-3                 | Pointed contact Gold-plated, 5µm   |
|     | 1276-4                 | Pointed contact Gold-plated, 0,3µm |
| [6] | Special versions       |                                    |
|     | (Blank)                | Without special function           |
|     | 2825-1                 | Toothed shaft                      |
|     | 2825-2                 | Toothed shaft                      |



# IECEx Certificate of Conformity



**Certificate No.:** IECEx BVS 09.0004 Issue No. 3  
**Annex**  
**Page 3 of 3**

## Parameters

Type EX-\* 441-11\*-UE-\*-\*

Type EX-\* 250-\*-H-\*-\*

Voltage	AC	400 V
Current		4 A

### Thermal data

Maximum surface temperature T +90°C

Permitted ambient temperature -20°C to +60°C

### Type of protection according to IEC 60529

IP66, the types marked with “z” meet IP67 as well.