

Translation

EU-Type Examination Certificate

Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

EU-Type Examination Certificate Number: **BVS 08 ATEX E 157** Issue: **01**

Equipment: **Belt Alignment Switch type / Position switch**
Type EX-* 250-*H-*-*

Belt alignment switch / Slack wire switch / Position switch
Type EX-* 441-11*-UE-*-*

Manufacturer: **K.A. Schmersal GmbH & Co. KG**

Address: **Möddinghofe 30, 42234 Wuppertal, Germany**

This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential Report No. BVS PP 08.2193 EU/N5. This issue of the EU-Type Examination Certificate replaces the previous issue of the EC-Type Examination Certificate BVS 08 ATEX E 157 including supplements 1 to 2.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018
EN 60079-31:2014

General requirements
Protection by Enclosure "t"

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

 **II 2D Ex tb IIIC T90°C Db**

DEKRA Testing and Certification GmbH
Bochum, 2023-05-22

Signed: Dr. Rolf Krökel

Managing Director



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This certificate may only be reproduced in its entirety and without any change.

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13 **Appendix**

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15 **Product description**

15.1 **Subject and type**

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

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

15.2 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.

Reasons for this issue

- Change to Directive 2014/34/EU
- Updating of the standards
EN 60079-0:2012 to EN IEC 60079-0:2018
EN 60079-31:2009 to EN 60079-31:2014
- Additional information label on the enclosure and in the instructions
- Updating the Type codes
- Changing the size of equipotential bonding conductor connection

15.3 Parameters

15.3.1 Electrical data

Voltage	AC	400 V
Current		4 A

15.3.2 Thermal data

Maximum surface temperature T +90°C

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

15.3.3 Type of protection according to EN 60529

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

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17 Specific Conditions of Use

None

18 Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

19 Remarks and additional information

Drawings and documents are listed in the confidential report.

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH
Bochum, 2023-05-22
BVS-DDo/MGR A 20210689



Managing Director