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Confirmation about Certificate No.G 686

Safety switch with positive contact for the use as lock switch of landing doors- and car door locking devices or as door switch of lift doors according to EN 81-20:2014 (D) and EN 81-50:2014 (D)

1 Customer who ordered the confirmation

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Industrielle Sicherheitsschaltsysteme
Möddinghofe 30
42279 Wuppertal - Germany

2 Manufacturer

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Industrielle Sicherheitsschaltsysteme
Möddinghofe 30
42279 Wuppertal – Germany

Schmersal India Private Limited
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Ranjangaon MIDC
Taluka Shirur
District Pune 412220 – India

3 Tested product

Safety switch with positive contact

Type AZ 09

4 Basis of examination of the certificate

- EN 81-20:2014 (D)
- EN 81-50:2014 (D)

5 Shortened description of the safety contact

5.1 The safety switch with positive contact consists of elastic, double interrupting non-holding contacts. The slight transversal movement of the contact ensures the self-cleaning. The switch is made of a housing and a cover through clip connection. The housing is produced with the insulating material "Ultramid B3UGM210" in black. The cover is made of the transparent insulating material "PC Cristal Lexan 943".

Date: 2020-03-17

Our reference:
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The test results refer exclusively to the units under test.

swiss safety center ISO 9001 certified system

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5.2 The safety switch of type AZ 09 is operated with the following switch bridge:

- Switch bridge, type AZ 06-13 B/18; with 18mm contact pin;
  Isolated mounting plate: 41 mm long; ± 1,5 mm adjustable longitudinally
- Switch bridge, type AZ 06-13 B-1284; with 18mm contact pin;
  Isolated mounting plate: 41 mm long; ± 1,5 mm adjustable longitudinally
- Switch bridge, type AZ 06 B-1284; formation of the contact pin like type AZ 06-13 B/18; isolated mounting plate: 40 mm long; not adjustable longitudinally
- Switch bridge, type AZ 07-14 B/18; with 18mm contact pin;
  Isolated mounting plate: 41 mm long; ± 1,5 mm adjustable longitudinally with shims
- Switch bridge, type Spez 2006, with 12 mm contact pin; isolated mounting plate: 40 mm x 28 mm; ± 5,8 mm adjustable longitudinally
- Switch bridge, type Spez 2006-1; with 15 mm contact pin; isolated mounting plate: 40 mm x 28 mm; ± 5,8 mm adjustable longitudinally
- Switch bridge, type Spez 2006-2, execution like type Spez 2006, additional isolation of the contact pin to 7 mm length
- Switch bridge, type Spez 2006-3, execution like type Spez 2006-1, additional isolation of the contact pin to 10 mm length

6 Assessment

6.1 Due to construction the switch contacts do open positively.

6.2 By the dimensions of the inlet openings it is guaranteed that by positional- and functional tolerances of the switch and of the actuator due to assembly, no adverse effect with regard to positive operation is possible.

6.3 The requirements concerning protection against contact with the subdivided test finger according to EN 60529 (IP-Code), with regard to the complete switch unit (switch box and actuator), are fulfilled.
According to manufacturer's data the switch complies with a degree of protection of IP 20. Examinations and tests with regard to protection against contact, dust-proof protection and protection against water according to EN 60529 have not been carried out.

6.4 Visual examination of the switching process of the safety switch of type AZ 09 is guaranteed through the transparent cover.

6.5 The creepage distances of the switch are at least 4 mm, the clearances are at least 3 mm (EN 81-20:2014 (D), 5.11.2.2.4).

7 Result

In our opinion the safety switch of type AZ 09, combined with the switch bridges mentioned in the chapter 5.2, insofar as construction and operation are concerned – independent of its mounting position - meets the requirements for lock contacts or for door switches of landing door- and car door locking devices, if the conditions according to number 9 of this confirmation are observed.

No deviations compared with the safety requirements of EN 81-20:2014 (D) or EN 81-50:2014 (D) ('Safety rules for the construction and the installation of lifts') have been found.

Note: The English text is a translation of the German original. In case of any discrepancy, the German version is valid only.

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8 Scope of application

The safety switch of type AZ 09, combined with the switch bridges mentioned in the chapter 5.2, – independent of its mounting position – may be used as lock contact of landing door- and car door locking devices or as door switch of lift doors according to EN 81-20:2014 (D) or EN 81-50:2014 (D), if the conditions according to number 9 of this report are observed.

9 Conditions

9.1 Electric nominal values

Alternating current:	230 V / 2 A
Direct current:	200 V / 2 A

9.2 The following certificates must be enclosed for the identification and information about the construction of the safety switch in principle. In each case the audit report of 17.03.2020 must also be applied.

- Technical drawing „Gehäuseunterteil – AZ 09“ (1 Seite) Nr. RD10019-F083-SIPL dated 2019-03-04
- Technical drawing „Gehäuseoberteil – AZ 09“ (1 Seite) Nr. RD10019-F084-SIPL dated 2019-03-04
- Data sheet AZ 09 (Seiten 1-2)

9.3 The creepage distances of the switch with a minimum value of 4 mm, the clearances with a minimum value of 3 mm must be ensured by the structure of the switch box and switch bridges. Use of additional isolation inserts could be applied as well.

9.4 This certificate may be used until **March of 2025**.

10 Notices

10.1 For legal reasons this certificate is not equivalent to an EC type examination in accordance with annex IV/A of the Directive 2014/33/EU ('Lifts Directive'), but it may be used as a help for decision.

10.2 The basis of this confirmation is the expert opinion no. G 686 dated 2020-03-17 and its associated documents.

10.3 This certificate does not certify the observance of the requirements with regard to „protection classes provided by enclosures according to EN 60529 (IP-Code) concerning protection against foreign matter (objects) and against water” for electric devices.

10.4 This certificate does not consider the behaviour of the safety switch and the switch bridges under fire conditions.

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the expert

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