Translation

EU-Type Examination Certificate

- 2 Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014
- 3 EU-Type Examination Certificate Number: **DMT 00 ATEX E 073 U** Issue: **01**
- 4 Component: **Control unit type 8510/1**-**-***-*****
- 5 Manufacturer: R. STAHL Schaltgeräte GmbH
- 6 Address: Am Bahnhof 30, 74638 Waldenburg, Germany
- 7 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 00.2069 EU.

This issue of the EU-Type Examination Certificate replaces the previous issue of the EC-Type Examination Certificate DMT 00 ATEX E 073 U including supplements 1 and 2.

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

EN IEC 60079-0:2018 | General requirements | EN 60079-1:2014 | Flameproof enclosure "d" | EN IEC 60079-7:2015 + A1:2018 | Increased Safety "e" | EN 60079-11:2012 | Intrinsic Safety "i" |

- The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This partial certification may be used as a basis for certification of an equipment or protective systems. "Schedule of limitations" is 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.
- 12 The marking of the product shall include the following

II 2G Ex db eb IIC Gb or I M2 Ex db eb I Mb or II 2G Ex db eb [ib Gb] IIC Gb or I M2 Ex db eb [ib Mb] I Mb or II (1)2G Ex db eb [ia Ga] IIC Gb or II (M1)M2 Ex db eb [ia Ma] I Mb

DEKRA Testing and Certification GmbH Bochum, 2023-02-03

Signed: Dr. Rolf Krökel

Managing Director



- 13 Appendix
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15 **Product description**

15.1 Subject and type

Control unit type 8510/1**-**-***-**

| Τ | y | ре | С | 0 | de |
|---|---|----|---|---|----|
| | | | | | |

| 8510 | / | 1 | * | * | - | ** | - | *** | - | *** | - | ** |
|------|---|---|---|---|---|----|---|-----|---|-----|---|----|
| а | | b | С | d | | е | | f | | g | | h |

- a type series
- b generation
- c enclosure size [mm]
- 1 130×48 2 - 130×70 3 - 130×115
- 4 130×88

1 - 110.5

permissible combinations: 11, 12, 22, 31

///32 and 41

- d enclosure height [mm]
 - 2-168
- e version: Kind of built-in components f - h further information regarding built-in components

15.2 **Description**

The control unit is an enclosure that meets the requirements of the type of protection Flameproof Enclosure. It is equipped with electrical and electronic components. This may include devices (Ex components and or Ex equipment) with intrinsically safe circuits, which have been separately tested and certified. After the components are mounted, the enclosure is closed by a cover which is cemented to the enclosure.

The cover of the enclosure is equipped with several connection facilities. There are two sizes of connection facilities; larger size for the main circuits, and a smaller size for the auxiliary circuits. These facilities are a combination of feedthroughs and terminals. The terminals meet the requirements of the type of protection increased Safety.

Optionally the cover is equipped with one or more bushes with operating rods.

The control unit is intended to be mounted inside an enclosure in type of protection Increased safety.

Reason for this issue

- Change to Directive 2014/34/EU
- Update of the standard basis
- Modification of the enclosure materials
- Type 8510/121-... and type 8510/142-... are removed from the list of permissible types.

Listing of all components used referring to older standards

None



15.3 Parameters

| 15.3.1 | Limits of the service temperatures | |
|--------|------------------------------------|---------------------|
| | depending on the material | -20 °C up to 110 °C |
| | or | -20 °C up to 100 °C |

15.3.2 Rated voltage up to AC 690 V

15.3.3 Permissible cross sectional area

- for the main contacts
type 8510/11*-**-***
all other types

0.75 mm² up to 2.5 mm²
0.75 mm² up to 10 mm²

- for the auxiliary contacts 0.75 mm² up to 2.5 mm²

15.3.4

| Type | max. T _a at temperature class | | | | | | |
|----------|--|------------|----------------|--|--|--|--|
| Туре | T6 | T5 | T4 and group I | | | | |
| 8510/111 | 60 °C | 60 °C | 60°C | | | | |
| 8510/112 | 60 °C | 60°C | 60°C | | | | |
| 8510/122 | 50 °C | 60°C | 60°C | | | | |
| 8510/131 | 60 °C | 60°C | 60°C | | | | |
| 8510/132 | 45°C | ///60°C/// | ////60/°C///// | | | | |
| 8510/141 | /60°C/// | ///60°C/// | ////60%c///// | | | | |

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17 Schedule of limitations

After installation of the control unit into an enclosure in type of protection increased Safety "e", the clearances and creepage distances have to meet the requirements of IEC 60079-7.

If the control unit is equipped with separately tested and certified devices with intrinsically safe circuits (IS-devices), the following applies:

The instructions of the IS-devices have to be followed in addition to the instructions of the control unit.

If the grouping of the IS-device is not IIC, the grouping of the control unit has to be downgraded to the grouping of the IS-device.

If the requirements of the SPECIFIC CONDITIONS FOR USE of the IS device could not be met with the equipment of the Ex component, the requirements must be passed on to the user.



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, 2023-02-03 BVS-Ru/Mu A 20210628 / 342001300

Managing Director

