

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

Ulrich Feike

Certificate No.: **IECEX EPS 22.0046X** Page 1 of 4 Certificate history:

Issue No: 1 Status: Current

2024-05-07 Date of Issue:

R. STAHL Schaltgeräte GmbH Applicant:

Am Bahnhof 30 74638 Waldenburg

Germany

Equipment: Audible and visual signalling devices: Yodalex YL60/3, YA60/3, FL60/3

Optional accessory:

Type of Protection: db, eb, tb

Marking: Ex db IIC T6/T4 Gb

Ex db eb IIC T6/T4 Gb

Ex tb IIIC T80°C/T100°C Db

Approved for issue on behalf of the IECEx

Certification Body:

Position: **Head of Certification**

Signature:

(for printed version)

(for printed version)

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 This certificate is not transferable and remains the property of the issuing body.
 The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Issue 0 (2023-05-11)

Certificate issued by:

Bureau Veritas Consumer Products Services Germany GmbH Businesspark A96 86842 Türkheim Germany





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Date of issue: 2024-05-07 Issue No: 1

Manufacturer: R. STAHL Schaltgeräte GmbH

Am Bahnhof 30 74638 Waldenburg

Germany

Manufacturing R. STAHL Schaltgeräte GmbH

locations: Nordstrasse 10

99427 Weimar Germany

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 60079-1:2014 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:7.0

IEC 60079-31:2022 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure "t"

Edition:3.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:5.1

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/EPS/ExTR22.0043/01

Quality Assessment Report:

DE/BVS/QAR10.0002/19



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The signalling devices YL60/3, YA60/3 and FL60/3 are explosion-protected electrical equipment in the type of protection "flameproof enclosure" ("db"), "dust protection by enclosure" ("tb") and, depending on the version, "increased safety ("eb"). The enclosure consists of aluminium with optional glass or plastic dome or horn. They are used in gas explosion hazardous areas Zone 1 and 2 and areas that are subject to dust explosion hazard, Zone 21 and 22. These signalling devices are used to deliver audible and visual alarm signals for alerting, warning or as an indication of a device malfunction or other safety-related problems.

For electrical and temperature data see annex.

SPECIFIC CONDITIONS OF USE: YES as shown below:

A repair of a flame-proof joint is only permitted in accordance with the manufacturer's values.

The protective covers and loudspeaker horns must be installed in a way that they are protected against electrostatic charging.

Temperature class T6/T80°C is not allowed for Xenon variant with plastic lens.

The devices with glass dome shall only be used with the protection grid provided by manufacturer.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Addition of new glass material

Update of voltages

Annex:

Annex_R.Stahl Yodalex.pdf



Annex to Certificate IECEx EPS 22.0046X Issue No.: 1



Technical Data:

Туре	YL60/3		
Signalling	audible / visual (Xenon-flash or LEDs)		
Input voltage	12 27,2 V DC 100 240 V AC (50 / 60 Hz); 133 272 V DC		
Medium input power	≤ 35 W (momentarily ≤ 50 W)		
Temperature class	T6 ¹⁾	T4	
Max. surface temperature (tb)	T80°C	T100°C	
Ambient temperature	-60°C +40 °C ²⁾	-60°C +70 °C ³⁾	

 $^{^{1)}}$ Temperature class T6 / T80 $^{\circ}$ C not for Xenon-Variant with plastic lens

 $^{^{3)}}$ for In-Out-Wiring with max. 16 A connection line and cable entry with permissible operating temperature \geq 90°C required

Туре	YA60/3		
Signalling	audible		
Input voltage	12 27.2 V DC 100 240 V AC (50 / 60 Hz); 133 272 V DC		
Medium input power	≤ 20 W (momentarily ≤ 35 W)		
Temperature class	T6	T4	
Max. surface temperature (tb)	T80°C	T100°C	
Ambient temperature	-60 °C +50 °C ¹⁾	-60 °C +70 °C ²⁾	

¹⁾ In-Out-Wiring with max. 16 A

²⁾ In-Out-Wiring with max. 16 A

 $^{^{2)}}$ for In-Out-Wiring with max. 16 A connection line and cable entry with permissible operating temperature \geq 90°C required



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Туре	FL60/3		
Signalling	visual (Xenon-Flash or LED)		
Input voltage	12 27.2 V DC 100 240 V AC (50/ 60 Hz); 133 272 V DC		
Average Input power	≤ 15 W (one visual Unit) ≤ 25 W (two visual Units)		
Temperature class	T6	T4 ¹⁾	
Max. surface temperature (tb)	T80°C	T130°C	
Ambient temperature	-60 °C +40 °C ^{2) 3)}	-60 °C +70 °C ^{4) 5)}	

- 1) additional flash energy \leq 4.5 J/ f \leq 1.5 Hz and \leq 3.5 J/ f \leq 2.0 Hz possible for Temperature class T4/ T130 °C for variant with glass-lens
- 2) In-Out-Wiring with max. 16 A
- 3) Temperature class T6/ T80°C not for Xenon-Variant with plastic lens
- $^{4)}$ Temperature class T4 for Xenon-Variant with plastic lens only for Ta = -60 $^{\circ}$ C \dots +60 $^{\circ}$ C
- 5) for In-Out-Wiring with max. 16 A connection line and cable entry with permissible operating temperature \geq 90°C required

all Types	Inputs
Voltage	according to device-input voltage
Current (total)	≤ 2 mA
Dissipation (total)	≤ 500 mW