(1) # TYPE EXAMINATION CERTIFICATE

(2) Equipment and Protective Systems intended for use in Potentially Explosive Atmosphere - **Directive 94/9/EC**

(3) Type Examination Certificate Number

TÜV 12 ATEX 7173

(4) Equipment: **Floodlight** **Type: 6521/5***-**-***

(5) Manufacturer: **R. Stahl Schaltgeräte GmbH**

(6) Address: **Am Bahnhof 30** **74638 Waldenburg**

(7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The TÜV Notified Body for ex-protected products of TÜV Rheinland Industrie Service GmbH, Notified Body No. 0035 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmosphere, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report: 557 / Ex 173.00 / 12

(9) Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule of this certificate, has been assessed by reference to:

FprEN 60079-0: 2011 **EN 60079-15: 2011**

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This Type-Examination Certificate relates only to the design and specification for construction of the equipment or protective system. It does not cover the process for actual manufacture or supply of the equipment or protective system, for which further requirements of the directive are applicable.

(12) The marking of the equipment shall include the following:

II 3 G Ex nAc IIC Tx or

II 3 G Ex nA IIC Tx Gc

TÜV Rheinland Ex Notified Body

Cologne, 5th July 2010

Dipl.- Ing. Klauspeter Graffi

Translation!
This **Type Examination** Certificate shall not be valid without signature and stamp.
This Type Examination Certificate **may be** circulated without alteration only. Extracts or alterations are subject to approval by the:
TÜV Rheinland Industrie Service GmbH Am Grauen Stein 51105 Köln
Tel. +49 (0) 221 806-0 Fax. + 49 (0) 221 806 114

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(13) Annex to

(14) # Type Examination Certificate
TÜV 12 ATEX 7173

(15) **Description of Equipment**

15.1 Article

The floodlight type 6521/5 of sheet steel or stainless steel is designed for the use in explosive gas atmospheres of Zone 2.

The type is defined as shown in following table:

Floodlight		**Type 6521 / 5 3 * * - 3 * - *****
Size		3
Reflector	symmetrical broad beamed	1
	symmetrical narrow beamed	2
	asymmetrical	3
Lamp Holder	E27	1
	E40	2
Lamp	High pressure sodium HST	3
Power	250 W	25
	400 W	40
Additional numbers, not relevant for the certification		

Technische Daten / Technical Data

Electrical Data

Rated voltage	up to 250 V
Frequency	50/60 Hz
Cable cross section	0,75 to 2,5 mm²

Variation and Temperature Code

Type 6521/53

Lamp	Power	Temperature Code		surface temperature	
		T_a 40 °C	T_a 55 °C	T_a 40 °C	T_a 50 °C
HST	< 250 W *)	-	T1	-	125 °C
HST	< 400 W *)	T1	-	134 °C	-

*) temperature classification is valid for OSRAM VIALOX-T SUPER only

HST = High pressure Sodium vapour discharge lamp

Ambient temperature range

T_a = - 40 °C ... + 40 °C for 400 W HST

T_a = - 40 °C ... + 55 °C for 250 W HST

(16) **Test Report No.** 557 / Ex 173.00 / 12

(17) **Special Conditions for safe use**

None

(18) **Basic Safety and Health Requirements**
Fulfilled

TÜV Rheinland Ex Notified Body

Cologne, 5th July 2012

Dipl.-Ing. Klauspeter Graffi

TÜVRheinland® 0035 Notified Body

1st Supplement

to Type Examination Certificate

TÜV 12 ATEX 7173

Device: **Floodlight**
Type 6521/5*-**-***

Manufacturer: R.STAHL Schaltgeräte GmbH
Address: Am Bahnhof 30
D - 74638 Waldenburg Germany

Description of supplements and modifications:

(15) **The following modifications are valid for this 1st Supplement**

Standard basis:

EN 60079-0:2012, EN 60079-15:2010, EN 60079-31:2009

Code for type of protection

II 3 G Ex nAc IIC Tx

or

II 3 G Ex nA IIC Tx Gc

15.1 Equipment and Type

Floodlight
Type 6521/5*-**-***

15.2 Description

General product information

The scope of the 1st supplement to TÜV 12 ATEX 7173 is

- In addition to the ballasts produced by company TRIDONIC identical ballasts are produced by manufacturer ELKOSUN; (see "Notification of Change" 557 / Ex 173.01 / 12)

HS / HI Ballast Combination Elkosun

Power	Ballast	Igniter	opt. Igniter
250 W	OGLIS 250W	Z 400 M K D20	ZRM 2,5
400 W	OGLIS 400W	Z 400 M K D20	ZRM 12

HS / HI Ballast Combination Tridonic

Power	Ballast	Igniter
250 W	OGLIS 250W	ZRM 2,5 ES / CT
400 W	OGLIS 400W	ZRM 12 ES / CT

- New types of ballasts and igniters of company Vossloh Lighting Solutions were assessed and are allowed to be used. There is no significant change of the service temperature. The manufacturer assures that the ballasts and igniters fulfill the requirements of EN 60079-15.

HI / HS Ballast Combination VOSSLOH - SCHAWABE

Power	Ballast	Igniter	opt. Igniter
250 W	NAHJ250.xxx	Z 400 M K D20	Z 1000 S D20
400 W	NAHJ400.xxx	Z 400 M K D20	Z 1000 S D20

- The mounting plate can also be produced out of a complete metal plate instead of a welded 1mm sheet metal
- Change of the wire from igniter to lamp. Type HEW-Silicone-Single Core SIF-t.p.c 1.5mm^2 was assessed and is allowed to be used.
- The cable cross section of the input terminal was enlarged from 0.75 to 6 mm^2 (0.75 to 2.5 mm^2 before). Therefore the type was changed to the already certified terminals WAGO series 862 (1.5 to 4mm^2) or WAGO series 2006 (6mm^2).

The type designation remains unchanged

15.3 Technical Data

Unchanged except:
Cable cross section 0.75 to 6 mm²

(16) **Test Report No.** 557 / Ex 173.02 / 12

Parts of the device, which already fullfill the requirements for the category, were not approved and assessed by TÜV Rheinland Industrie Service (e.g.xxxx).

The applicability and assembly of mechanical and electrical parts and components were assessed and approved by TÜV Rheinland Industrie Service with respect to the requirements of explosion protection.

(17) **Special conditions for safe use**

Unchanged
The original certificate has to be observed.

(18) **Basic Safety and Health Requirements**

Covered by mentioned standards in the original certificate.

TÜV Rheinland ExNB for explosion protected equipment Cologne, 2014-06-05

Dipl.-Ing. Klauspeter Graffi

2nd Supplement

to Type Examination Certificate

TÜV 12 ATEX 7173

Device: **Floodlight**
Type 6521/5*-**-***

Manufacturer: R.STAHL Schaltgeräte GmbH
Address: Am Bahnhof 30
D - 74638 Waldenburg Germany

Description of supplements and modifications:

(15) **The following modifications are valid for this 2nd Supplement**

Standard basis:

EN 60079-0:2012, EN 60079-15:2010, EN 60079-31:2009

Code for type of protection

II 3 G Ex nAc IIC Tx

or

II 3 G Ex nA IIC Tx Gc

15.1 Equipment and Type

Floodlight
Type 6521/5*-**-***

Type Designation:

Floodlight		Type 6521 / 5 . . . - 1 3 . - . . .
Version		5
Size		1 2 3
Reflector	symmetrical broad beamed	1
	symmetrical narrow beamed	2
	asymmetrical	3
Lamp Holder	E27	1
	E40	2
Lamp	High pressure sodium HS	3
	Metal halide HI	
Power	**70 W**	**07**
	100 W	**10**
	150 W	**15**
	250 W	25
	400 W	40
Additional numbers, not relevant for the certification		

15.2 Description

General product information

The scope of the 2nd supplement to TÜV 12 ATEX 7173 is

- An additional igniter with a thermal heating device shall be included for operating temperatures down to -50°C
- Lamps of 70, 100 and 150W power dissipation will be integrated into the series
- Non Ex Wago Terminals Type 862-... are also allowed for the supply connections.
- It is possible to use any combination of igniters and ballasts.

The type designation remains unchanged

15.3 Technical Data

Electrical Data:

Rated voltage: up to 250 V
Rated frequency: 50 / 60Hz

Terminals:
Main contact terminal: 0,75 up to 6 mm2 , solid or stranded.

Ambient Temperature:
See variation of temperature code. An ambient temperature outside the range of -20 °C to +40°C will be marked on the product. If the low temp ignitor is used, an ambient temp of down to -50°C is allowed.

Dimensions:

Type	length	width	height
6521/51. - .... - .../..	380 mm	340 mm	140 mm
6521/52. - .... - .../..	515 mm	467 mm	190 mm
6521/53. - .... - .../..	565 mm	583 mm	237 mm

Variation and Temperature Code:

Type 6521/51

Lamp	Power	Temperature Code		surface temperature	
		Ta 40 °C	Ta 55 °C	Ta 40 °C	Ta 55 °C
HIE/HIT or HSE/HST	<= 70 W	T1	T1	121 °C	136 °C
HIE/HIT	<= 100 W	T1	T1	140 °C	155 °C
HIE/HIT	<= 150 W	T1	T1	165 °C	180°C

Type 6521/52

Lamp	Power	Temperature Code		surface temperature	
		Ta 40 °C	Ta 55 °C	Ta 40 °C	Ta 55 °C
HSE/HST	<= 150 W	T1	T1	130 °C	145 °C
HIE/HIT oder HSE/HST	<= 250 W	T1	T1	156 °C	171 °C

Type 6521/53

Lamp	Power	Temperature Code		surface temperature	
		Ta 40 °C	Ta 55 °C	Ta 40 °C	Ta 55 °C
HIE/HIT oder HSE/HST	<= 250 W	T1	T1	125 °C	140 °C
HIE/HIT oder HSE/HST	<= 400 W	T1	T1	160 °C	175 °C

HIE or HIT = Halogen metal vapour lamp

HSE or HST = High pressure Sodium vapour discharge lamp

* only OSRAM Lamps shall be used

HI / HS Ballast Combination VOSSLOH - SCHAWABE

Power	Ballast	Igniter	opt. Igniter
70 W	NAHJ70.xxx	Z 70 K D20	Z 400 M K D20
100 W	NAHJ100.xxx	Z 400 M K D20	-
150 W	NAHJ150.xxx	Z 400 M K D20	-
250 W	NAHJ250.xxx	Z 400 M K D20	Z 1000 S D20
400 W	NAHJ400.xxx	Z 400 M K D20	Z 1000 S D20

HS / HI Ballast Combination Elkosun

Power	Ballast	Igniter	opt. Igniter
150 W	OGLIS 150W	Z 400 M K D20	ZRM 2,5
250 W	OGLIS 250W	Z 400 M K D20	ZRM 2,5
400 W	OGLIS 400W	Z 400 M K D20	ZRM 12

HS / HI Ballast Combination Tridonic

Power	Ballast	Igniter
70 W	OMBIS 70	ZRM 2,5 ES / CT
100 W	OMBIS 100	ZRM 2,5 ES / CT
150 W	OGLIS 150W / OMBIS 150	ZRM 2,5 ES / CT
250 W	OGLIS 250W	ZRM 2,5 ES / CT
400 W	OGLIS 400W	ZRM 12 ES / CT

It is possible to use any combination of igniters and ballasts.

(16) **Test Report No.** 557 / Ex 173.03 / 12

Parts of the device, which already fullfill the requirements for the category, were not approved and assessed by TÜV Rheinland Industrie Service (e.g.xxxx).

The applicability and assembly of mechanical and electrical parts and components were assessed and approved by TÜV Rheinland Industrie Service with respect to the requirements of explosion protection.

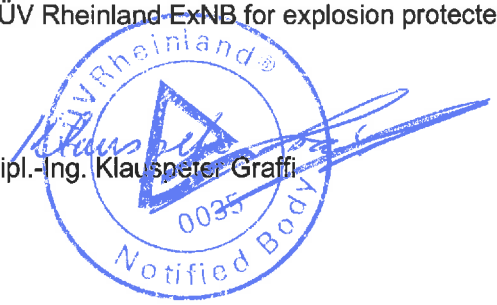
(17) **Special conditions for safe use**

Unchanged
The original certificate and the 1st supplement have to be observed.

(18) **Basic Safety and Health Requirements**

Covered by mentioned standards in the original certificate.

TÜV Rheinland ExNB for explosion protected equipment — Cologne, 2015-05-26



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