



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**
- (3) EC-type-examination Certificate Number:



PTB 01 ATEX 1105

- (4) Equipment: Control and indicator module, type 8040/...-.../...
- (5) Manufacturer: R. STAHL Schaltgeräte GmbH
- (6) Address: Am Bahnhof 30, D-74638 Waldenburg (Württ.), Germany
- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that 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 atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 01-11181.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- | | | |
|--------------------------------|----------------------|----------------------|
| EN 50014:1997 + A1 + A2 | EN 50017:1998 | EN 50018:2000 |
| EN 50019:2000 | EN 50020:1994 | EN 50028:1987 |
- (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 EC-type-examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.
- (12) The marking of the equipment shall include the following:

II 2 G EEx edqm ia/ib [ia/ib] II, IIA, IIB, IIC, T6, T5 or T4

Zertifizierungsstelle Explosionsschutz

Braunschweig, October 1, 2001

By order:

Dipl.-Phys. U. Völkel



SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1105**

(15) Description of equipment

The control and indicator module, type 8040/...-.../..., consists of one or several plastic enclosures designed to type of protection Increased Safety "e".

The enclosures can accommodate control and indicator components as well as terminals for intrinsically safe and non-intrinsically safe circuits. The area designated for intrinsically safe circuits will be marked, e.g. by means of a light-blue colour.

Connection is by means of explosion-proof cable entries.

All the installed and attached elements will be tested and certified under separate examination certificates.

Technical data

Rated voltage*	up to	690	V
Rated current*	max.	23	A
Power input for indicator lights	max.	1.5	W
Rated cross section, installations	max.	6	mm ²
Rated cross section, terminal block / connecting terminals	max.	4	mm ²

*) depending on type of terminal and explosion-proof components used

Ambient temperature range: -50 °C to +60 °C

The ratings specified are maximum values, actual values will be subject to the electrical equipment installed from case to case. Depending on the system conditions, the mode of operation, the utilisation category, etc., the manufacturer will define the definitive ratings which will be within the range of these limiting values and will comply with the relevant standards.

The actual ambient temperature range will depend on the admissible temperature range of the components used.

The composition of the protection symbol will be based on the types of protection of components actually used.

(16) Test report PTB Ex 01-11181

(17) Special conditions for safe use

None

Notes for installation and use

Installation of equipment designed to type of protection Intrinsic Safety "i" has to proceed in such a way that the clearance and creepage distances between intrinsically safe and non-intrinsically safe circuits as set forth in EN 60079-14 are met.

If the clearance requirements for the connectors as specified in EN 50020 cannot be safeguarded with the system installation and layout, wiring that meets the quality criteria Increased Safety "e" shall be used, or the wiring shall be of the fail-safe type.

When using more than one intrinsically safe circuit, the regulations for interconnection shall duly be observed.


The EC type-examination certificate as well as any future supplements thereto shall at the same time be regarded as supplements to Certificate of Conformity PTB No. Ex-93.C.1036.

(18) Essential health and safety requirements

The tests and the favourable results these have produced reveal that the control and indicator module, type 8040/...-.../... , meets the requirements of directive 94/9/EC as well as those of the standards quoted on the cover sheet.

Zertifizierungsstelle Explosionsschutz

By order:


Dipl.-Phys. U. Völkel



Braunschweig, October 1, 2001

1st SUPPLEMENT
according to Directive 94/9/EC Annex III.6
to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1105
(Translation)

Equipment: Control and indicator module, type 8040/...-.../...

Marking:  **EEx edqm ia/ib [ia/ib] II, IIA, IIB, IIC, T6, T5 or T4**

Manufacturer: R. STAHL Schaltgeräte GmbH

Address: Am Bahnhof 30, 74638 Waldenburg (Württ.), Germany

Description of supplements and modifications

The control and indicator module, type 8040/...-.../..., is complemented in the following respects:

- 1) The control and indicator module may also be employed in areas in which a potentially explosive atmosphere as a mixture of dust and air can occasionally form.
- 2) The control and indicator module has been re-tested in compliance with Standards EN 60079-0 and EN 60079-7.

The marking will thus change to:

 **II 2 G Ex edqm ia/ib [ia/ib] II, IIA, IIB, IIC, T6, T5 or T4**

 **II 2 D Ex tD A21 IP 65 T 80 °C, T 95 °C, T 130 °C**

- 3) The control and indicator module may also be combined with other – separately certified – items of equipment.

Applied standards

EN 60079-0:2004

EN 60079-7:2003

EN 61241-0:200X

EN 61241-1:2004

Test report: PTB Ex 06-16093

Zertifizierungsstelle Explosionsschutz

By order

Dr.-Ing. G. Klugsmeyer
Direktor und Professor



Braunschweig, June 1, 2006

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2nd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1105

(Translation)

Equipment: Control and indicator module, type 8040/***-***/***

Marking:  II 2 G Ex edqm ia/ib [ia/ib] I, IIA, IIB, IIC, T6, T5 or T4
 II 2 D Ex tD A21 IP65 T 80 °C, T 95 °C, T 130 °C

Manufacturer: R. STAHL Schaltgeräte GmbH

Address: Am Bahnhof 30, 74638 Waldenburg (Württ.), Germany

Description of supplements and modifications

The 8040/***-***/*** control and indicator module is modified in the following respects:

- 1) The ambient temperature is extended to a range of -60 °C to +75 °C.
- 2) The control and indicator module has been re-examined on the basis of standards EN 60079-0:2009, EN 60079-1:2007, EN 60079-5:2007, EN 60079-7:2007, EN 60079-11:2007, EN 60079-18:2009 and EN 60079-31:2009. The marking therefore changes to:


 II 2 G Ex d e ia ib [ia Ga] mb q IIA, IIB, IIC T6, T5, T4 Gb

or

 II 2 G Ex db eb ia ib [ia] mb qb IIA, IIB, IIC T6, T5, T4

 II 2 D Ex tb IIIC T80 °C, T95 °C, T130 °C Db IP66

or

 II 2 D Ex tb IIIC T80 °C, T95 °C, T130 °C IP66

Technical data

Rated voltage*	up to	690 V
Rated current*	max.	23 A
Power input for pilot lamps	max.	1.5 W
Conductor size, installed elements	max.	6 mm ²
Conductor size terminal blocks / connecting terminals	max.	4 mm ²

*) subject to the type of terminal and 'Ex' components actually used

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Ambient temperatures: -60 °C to +75 °C

Protection in accordance with EN 60529 IP66 without flange
..... IP65 with flange

Rated values are maximum values, the actual electrical values are determined by mounted electrical apparatus. Within these limiting values complying with the appropriate standards the manufacturer specifies the final limiting values dependent on power supply specifications, operating mode, utilisation category, etc.

The actual ambient temperature range depends on the temperature range permitted for the components that are used from case to case.

The composition of the protection symbol depends on the types of protection of the components actually used.

Notes for manufacturing and operation

Equipment of Intrinsic Safety "i" type of protection shall be installed so that the clearances and creepage distances between intrinsically safe and non-intrinsically safe circuits, which are specified in EN 60079-14 are maintained.

If system installation and layout does not provide for the clearance requirements for connectors as specified in EN 60079-11, wiring that meets the Increased Safety "e" quality criteria has to be used, or the wiring has to be of the fail-safe type.

When connecting more than one intrinsically safe circuit, the rules and regulations for interconnection must be observed.

Applied standards

EN 60079-0:2009, EN 60079-1:2007, EN 60079-5:2007, EN 60079-7:2007, EN 60079-11:2009,
EN 60079-18:2009, EN 60079-31:2009

Test report: PTB Ex 12-11088

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, May 30, 2012


Dr.-Ing. M. Thedens
Oberregierungsrat

