

# Prüf- und Zertifizierungsstelle

# ZELM Ex



# (1) EC-TYPE-EXAMINATION CERTIFICATE

- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - Directive 94/9/EC
- (3) EC-TYPE-EXAMINATION CERTIFICATE Number:

## **ZELM 06 ATEX 0301**

(4) Equipment:

Timer type 8670.04\*.00

(5) Manufacturer:

F.H. Papenmeier GmbH & Co. KG

(6) Address:

D-58239 Schwerte

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Prüf- und Zertifizierungsstelle ZELM Ex, notified body No. 0820 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 ZELM Ex 0640519413.

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

EN 60079-0: 2004

EN 50014: 1997+A1+A2

EN 50019: 2000

EN 60079-18: 2004

EN 50018: 2000

- (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, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this Certificate.
- (12) The marking of the equipment shall include the following:

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II 2 G EEx demb IIC T6

Zertifizierungsstelle ZELM Ex

Zertifizierungs-

Braunschweig, September 28, 2006

Dipl.-Ing. Harald Zelm

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# Prüf- und Zertifizierungsstelle

# ZELM Ex



(13)

## **SCHEDULE**

(14) EC-TYPE-EXAMINATION CERTIFICATE ZELM 06 ATEX 0301

### (15) Description of equipment

The timer type 8670.04\*.00 allows an independent control of process procedures in potential explosive atmospheres. The impulse it raised by the connecting of the operating voltage or through the push-button. For the output there is a potential-free contact at disposal.

The "\*" of the type designation is replaced by the number 6, 7 or 8 according to the relevant operating voltage range. The correlation is done over the "Electrical data".

#### Electrical data

Operating voltage

depending on option model

terminals 1 and 3

Type 8670.046.00 230 to 240 V resp.

Type 8670.047.00

115 to 120 V resp.

Type 8670.048.00

24 V

Contact circuit terminals 2 and 5

rated values

250 V, 12 A AC  $(\cos \varphi = 1)$ 

230 V, 0,3 A DC (resistive load) 110 V, 0,45 A DC (resistive load)

24 V, 12

A DC (resistive load)

(16) Report No.

ZELM Ex 0640519413

(17) Special conditions for safe use

not applicable

### (18) Essential Health and Safety Requirements

The equipment is an explosion protected timer, which consists of different parts. In the equipment there is an electronic which has a protection by encapsulation, which is according the standards EN 60079-0 respectively EN 50014, EN 60079-18 and EN 50019. All other parts are according to standard EN 50014 and standard EN 50018 or EN 50019. By application of these standards the Essential Health and Safety Requirements are fulfilled.

Zertifizierungsstelle ZELM Ex

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## 1st SUPPLEMENT

ZELM ex

(supplement acc. to EC Directive 94/9 Annex III, No. 6)

Translation

### to EC Type-Examination Certificate

#### **ZELM 06 ATEX 0301**

Equipment:

Timer Type 8670.04\*.00

Manufacturer:

F.H. Papenmeier GmbH & Co. KG

Address:

D-58239 Schwerte

### Description of supplement

The timer may additionally be used in future in areas where the occasional occurrence of a potentially explosive atmosphere made up of dust-air mixtures is to be expected.

In addition, compliance of the equipment with current standards has been examined.

The changes relate to the ignition protection rating and the marking.

In future, the Timer Type 8670.04\*00 may also be manufactured in accordance with this 1<sup>st</sup> supplement and marked as follows:

Ignition protection rating / Marking:

Ex

II 2G

ExdembIIC T6

II 2D

Ex td A21 IP65 T80°C

The electrical and all other data remain unchanged and applicable.

#### Test report No.

ZELM Ex 0090926671

#### Essential Health and Safety Requirements

The essential health and safety requirements continue to be met by compliance with the following standards:

EN 60079-0:2006

EN 60079-1:2007

EN 60079-7:2007

EN 60079-18:2004

EN 61241-0:2006

EN 61241-1:2006

Braunschweig, 14 February 2009

ZELM ex

Certification body

Signed:

ZELM

ex

Certification body ZELM ex

Harald Zelm (Dipl.Ing.)

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EC type-examination certificates are only valid with signature and stamp.

This EC type-examination certificate may only be copied in its unaltered form. Any excerpts or amendments are only permitted with the consent of ZELM ex examination and certification body.

ZELM ex

Examination and Certification Body Siekgraben 56, D-38124 Braunschweig