



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 60079-18: 2004

EN 50014: 1997+A1+A2  
EN 50018: 2000

EN 50019: 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:



**II 2 G EEx d e mb IIC T6**

Zertifizierungsstelle ZELM Ex

Braunschweig, September 28, 2006

  
Dipl.-Ing. Harald Zelm



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EC EC-type-examination Certificates without signature and stamp are not valid. The certificates may only be circulated without alteration. Extracts or alterations are subject to approval by the Prüf- und Zertifizierungsstelle ZELM Ex. This English version is based on the German text. In the case of dispute, the German text shall prevail.



(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 terminals 1 and 3	depending on option model						
	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

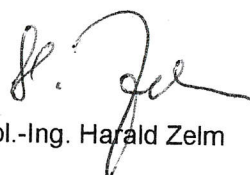
(18) Essential Health and Safety Requirements

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 to 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.

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**1<sup>st</sup> SUPPLEMENT**  
(supplement acc. to EC Directive 94/9 Annex III, No. 6)

**ZELM ex**

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	Ex d e mb IIC 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 60079-18:2004**

**EN 60079-1:2007**  
**EN 61241-0:2006**

**EN 60079-7:2007**  
**EN 61241-1:2006**

Braunschweig, 14 February 2009

**ZELM ex**

**Certification body**

Signed:  
Certification body ZELM ex  
Harald Zelm (Dipl.Ing.)

**ZELM  
ex**

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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