

# Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex

## (1) EC-Type Examination Certificate

(2) Devices and shielding systems intended for regulated use in explosive areas -  
**Directive 94/9/EC**

(3) EC-Type Examination Certificate number  
**ZELM 07 ATEX 0337**

(4) Device: **Explosion-proof mobile phone Model Ex-Handy 05**

(5) Manufacturer: **ecom instruments GmbH**

(6) Address: **D-979S9 Assamstadt**

(7) The construction of this device and the various permissible details are specified in the appendix to this Type Examination Certificate.

(8) As notified body No. 0820, according to article 9 of the Council Directive of the European Communities dated 23 March 1994 (94/9/EC), Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex certifies the fulfilment of the fundamental health and safety requirements for the conception and construction of devices and protective systems for intended use within explosive areas in accordance with appendix II of the directive.

The results of the examination are specified in the confidential inspection report No. ZELM Ex 1320612553.

(9) The fundamental health and safety requirements are fulfilled through compliance with  
**EN 60079-0:2006 EN 60079-11 :2007**

(10) If the character "X" appends the certificate number, it refers to special conditions in the appendix to this certificate for the safe application of the device.

(11) This EC-Type Examination Certificate only refers to the construction, examination and testing of the specified device or protective system in agreement with directive 94/9/EC. Further requirements of this directive may apply for the manufacturing process and the supply of this device or protective system. These are not covered by the present certificate.

(12) The designation of the device must contain the following details:

 **II 2 G Ex ib IIC T4**

Certification body **ZELM Ex**

Braunschweig, 10.08.2007

Dipl.-Ing. Harald Zelm

Page 1/2

---

EC-type examination certificates without a signature and stamp are not valid.  
This EC-type examination certificate may only be circulated without alteration.  
Extracts or alterations are subject to approval by the Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex

# Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex

## (13) Appendix

### (14) EC-Type Examination Certificate ZELM 07 ATEX 0337

#### (15) Description of the device

The explosion-proof mobile phone type Ex-Handy 05 serves as a wireless connection point in the explosive area.

Only those accessories that are approved by the manufacturer may be used under the specified conditions.

The device must be charged outside the Ex-area using the corresponding battery charger.

#### Electrical data

|                                       |  |
|---------------------------------------|--|
| Supply current circuit                | from an integrated rechargeable battery<br>Model Ex-AMH 05<br>The internal electrical circuits are intrinsically safe. |
| Transmitting power                    | up to 2 W  |
| Interface electric circuit            | in ignition protection class 'Intrinsic safety EEx ib NC'<br>Only for connection to approved accessories               |
| permissible ambient temperature range | -10°C to +50°C   |

#### Notes:

The instruction manual is to be observed, particularly with regard to the approved corresponding accessories. Only these accessories may be used.

The device may only be charged outside the explosive area using the corresponding charger or the appropriate charging accessories.

Only the Ex-battery module Ex-AMH 05 may be used!

All connection sockets must be kept sealed in the Ex-area.

#### (16) Inspection report No. ZELM Ex 1320612553

#### (17) Special conditions not applicable

#### (18) Fundamental health and safety requirements fulfilled by standards

Certification body **ZELM Ex**

Braunschweig, 10.08.2007

Dipl.-Ing. Harald Zelm

Page 2/2

---

EC-type examination certificates without a signature and stamp are not valid.

This EC-type examination certificate may only be circulated without alteration.

Extracts or alterations are subject to approval by the Prüf- und Zertifizierungsstelle (Test and Certification Body) ZELM Ex

# 1st Amendment

# ZELM ex

(Amendment in accordance with EC Directive 94/9, appendix III number 6)

## to the EC-Type Examination Certificate

### ZELM 07 ATEX 0337

Device: **Explosion-proof mobile phone, model Ex-Handy 05**

Manufacturer: **ecom instruments GmbH**

Address: **D-97959 Assamstadt**

#### Description of the amendment

The 1st amendment to the EC Type Examination Certificate relates to changes in the explosion-shielded mobile phone Ex-Handy 05 and its internal configuration. Furthermore, its use in areas with flammable dust will also be taken into account in the future.

The changes relate to the ignition protection class and designation.

In future the explosion-shielded mobile phone Ex-Handy 05 may also be manufactured in accordance with this 1st amendment and designated as follows:

Ignition protection class / designation:  II 2 G Ex ib IIC T4  
II 3D Ex ibD 22 IP54 T55°C

The electrical data and other specifications, as well as the details specified in the EC Type Examination Certificate remain unaffected and shall continue to apply.

#### Test report No.

ZELM Ex 0750812626

#### Fundamental health and safety requirements

Furthermore, the fundamental health and safety requirements are fulfilled through compliance with the following standards:

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

**EN 60079-11:2007**  
**EN 61241-11:2006**

Brunswick, 01.07.08

Zertifizierungsstelle ZELM ex

Dipl.-Ing. Harald Zelm

# 2nd Amendment

**ZELM ex**

(Amendment in accordance with EC Directive 94/9, appendix III number 6)

## to the EC-Type Examination Certificate

### ZELM 07 ATEX 0337

Device: **Explosion-proof mobile phone, model Ex-Handy 05**

Manufacturer: **ecom instruments GmbH**

Address: **D-97959 Assamstadt**

#### Description of the amendment

The 2nd amendment to the EC-Type Examination Certificate concerns the internal configuration of the device.

The "electrical data" and labeling, as well as the information specified in the EC-Type Examination Certificate remain unaffected and are also applicable for this 2nd amendment.

#### Test report No.

ZELM Ex 1360812648

#### Special conditions

not applicable

#### Fundamental health and safety requirements

Furthermore, the fundamental health and safety requirements are fulfilled through compliance with the standards specified in the 1st amendment to the EC-Type Examination Certificate.

Brunswick, 11.09.08

Zertifizierungsstelle ZELM ex

Dipl.-Ing. Harald Zelm