



**BUREAU
VERITAS**



(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**

EPS 11 ATEX 1 345 X

Revision 3

(4) **Equipment:** Mobiltelefon Ex-Handy 07

Mobiltelefon Ex-Handy 08

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

(6) **Address:** Industriestrasse 2, D-97959 Assamstadt

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

(8) Bureau Veritas Consumer Products Services Germany GmbH, Notified Body No. 2004 in accordance with Article 9 of the Council Directive 94/9/EC of March 23rd 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 of the Directive. The examination and test results are recorded in the confidential report 11TH0213.

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

EN 60079-0:2012

EN 60079-11:2012

(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 the 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:

1. Ex-Handy 07:



II 2G Ex ib IIC T4 Gb IP54

II 2D Ex ib IIIB T130°C Db IP5X

2. Ex-Handy 07, „IIIC“ version:



II 2G Ex ib IIC T4 Gb IP64

II 2D Ex ib IIIC T130°C Db IP6X

3. Ex-Handy 08:



II 2G Ex ib IIC T4 Gb IP64

II 2D Ex ib IIIC T130°C Db IP6X

Certification department of explosion protection

Türkheim, February 28, 2013

D. Zitzmann



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(13)

Annexe

(14) **EC-Type Examination Certificate EPS 11 ATEX 1 345 X**

(15) Description of equipment:

The explosion protected mobile phone of type Ex-Handy 07 is a communication device via quad-band intended for use in hazardous areas of zones 1, 2, 21 and 22 (non-conductive dusts). It provides additional features such as camera, GPS, acceleration sensor, Bluetooth, vibra motor, headphone connector, and flashlight. Two different integrated antennas can be used for different frequencies. The permissible ambient temperature range is -20°C to +55°C. The mobile phone can be used with different battery packs (standard or high capacity) containing one secondary Li-Ion cell each. The battery packs use the same kind of current and power limiting safety circuit. Charging is done without disconnecting the battery pack from the mobile phone via the Safety box SBH 07 or with a disconnected battery pack by the desktop charger DCH. The battery pack may only be charged outside explosive atmospheres. The new version of the Ex-Handy 07 will carry the additional marking "IIIC" reaching IP64 – with changes to the battery pack. The latest version is called Ex-Handy 08, technically based on Ex-Handy 07, offering additional features and a more diverse range of functionalities, such as UMTS 850/1900/2100.

Features / type	Ex-Handy 07	Ex-Handy 07, „IIIC“ version	Ex-Handy 08
Allowed battery packs:	Ex-BPH 07 SC (standard capacity) and Ex-BPH 07 HC (high capacity)	Ex-BPH 17 SC and Ex-BPH 17 HC	Ex-BPH 08 xx
Permitted charging:	Charging without disconnecting the battery pack from the mobile phone via the Safety box "SBH 07" or with a disconnected battery pack via the desktop charger "DCH" – charging outside Ex-area	Charging without disconnecting the battery pack from the mobile phone via the Safety box "SBH 07" or with a disconnected battery pack via the desktop charger "DCH" – charging outside Ex-area	Charging without disconnecting the battery pack from the mobile phone via the Safety box "SBH 07" or with a disconnected battery pack via the desktop charger "DCH" – charging outside Ex-area
Certified ingress protection:	IP54 / IP5X	IP64 / IP6X	IP64 / IP6X
Permitted use in zones:	1, 2, 21 and 22 (non-conductive dusts)	1, 2, 21 and 22 (conductive dusts)	1, 2, 21 and 22 (conductive dusts)



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Electrical data:

Supply (optional)

battery pack Ex-BPH 07 SC, Ex-BPH 17 SC, Ex-BPH 08 SC:

Battery pack type Lishen LP653450RS, 1280mAh, $U_o=3.7V$

($U_o_{max}=4.2V$), $I_o=1.15A$, $P_o=4.38W$

Battery pack Ex-BPH 07 HC, EX-BPH 17 HC:

Battery type MoliceI ICP103450CA, 2000mAh, $U_o=3.7V$

($U_o_{max}=4.2V$), $I_o=1.15A$, $P_o=4.38W$

Battery pack Ex-BPH 08 HC:

Battery type MoliceI ICP103450CA, 1960mAh, $U_o=3.7V$,

($U_o_{max}=4.2V$), $I_o=1.15A$, $P_o=4.38W$

(16) Test report: 11TH0213

(17) Special conditions for safe use:

The battery pack is only allowed to be changed outside of the explosive hazardous area and has to be charged either with the charging circuit "SBH 07" or with the desktop charger "DCH".

The device has to be protected against impacts with high impact energy.

(18) Essential health and safety requirements:

Met by standards.

Certification department of explosion protection

Türkheim, February 28, 2013

