



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx KDB 18.0003

Issue No: 0

Certificate history:

Issue No. 0 (2018-07-30)

Status: **Current**

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Date of Issue: **2018-07-30**

Applicant: **2RHP Sp. z o.o.**
ul. Chorzowska 37, 41-709 Ruda Śląska
Poland

Equipment: **PC 1.0 Personal Communicator**

Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i"**

Marking:
Ex ia I Ma

*Approved for issue on behalf of the IECEx
Certification Body:*

mgr inż. Piotr Madej

Position:

Head of ExCB

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Główny Instytut Górnictwa, Kopalnia Doświadczalna "BARBARA"
(Central Mining Institute Experimental Mine "Barbara")
ul. Podleska 72
43-190 Mikołów
Poland





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Manufacturer: **2RHP Sp. z o.o.**
ul. Chorzowska 37, 41-709 Ruda Śląska
Poland

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[PL/KDB/ExTR18.0004/00](#)

Quality Assessment Report:

[PL/OBAC/QAR18.0004/00](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

PC1.0 Personal Communicator is an element of rescuer's/miner's personal equipment, used for wireless voice communication with other members of the team / brigade or the underground rescue action base, as well as for data transmission from sensors that rescuers/miners are equipped with.

The PC1.0 Personal Communicator consists of two ear bowls, mounted to a helmet using adaptors located at the helmet sockets used originally to mount hearing protectors. In the right headphone bowl there is a control keyboard and main electronics circuits, antennas, speaker and microphones - main and listening microphone. In the left headphone bowl there is a power source, speaker and a listening microphone. Optionally there is mounted mask microphone. The personal communicator is powered by a dedicated battery pack, which is an integral part of the device. The battery pack can be replaced in explosion hazard zone.

PC1.0 Personal Communicator is an integral element of the wireless and wired communication system designed to operate in underground excavation mines.

SPECIFIC CONDITIONS OF USE: NO

Annex:

[CoC_KDB_18_0003_00_Attachment.pdf](#)

Data Sheet

Manufacturer: 2RHP Sp. z o.o.
ul. Chorzowska 37, 41-709 Ruda Śląska, Poland

Equipment: PC 1.0 Personal communicator

Intrinsically safe parameters:

Parameters of output ACCU+ ÷ ACCU-

$U_0 = 4,2 \text{ V}$

$I_0 = 5,3 \text{ A}$

$P_0 = 3,57 \text{ W}$

Lo [mH]	0,076	0,04	0,017	0,009	0,004	0,002	0,001
Co [μ F]	314	595	850	850	850	850	850