



1. **EU-TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use  
in Potentially explosive atmospheres  
Directive 2014/34/EU**

3. Reference: **VTT 06 ATEX 043X Issue 2**

4. Equipment: **Remote Speaker Microphone**

Certified types: **SAVOX C-C500/TK-2260 Ex  
Thrane&Thrane C-C500 Ex  
Thrane&Thrane C-C500 Ex Peltor  
SAVOX C-C500/WARIS ATEX**

5. Applicant: **Savox Communications  
Sinikalliontie 3  
FI-02630 ESPOO  
Finland**

Manufacturing locations:

**SAVOX Communications Oy Ab  
Laitaatsillantie 3  
FI-57170 SAVONLINNA  
Finland**

or

**Savox Communications (Shenzen) Co. Ltd  
7<sup>th</sup> Floor, Building #2, Hong Hui Industrial  
Park, Liu Xian 2<sup>nd</sup> Road, 68<sup>th</sup> Subdistrict,  
Baoan, Shenzen  
China**

6. This equipment or protective system and any acceptable variations thereto is specified in the schedule and possible supplement(s) to this Certificate and the documents therein referred to.

7. VTT Expert Services Ltd, notified body number 0537, in accordance with Article 21 of the Directive 2014/34/EU of February 2014, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. VTT-S-03487-16.



8. Compliance with the Essential Health and Safety Requirements has been assured by compliance with the standards:

EN 60079-0 (2012)  
EN 60079-11 (2012)

9. If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

10. This EU-Type examination certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. This certificate does not cover these.

11. The marking of the equipment or protective system shall include the following:

**SAVOX C-C500/TK-2260 Ex, Thrane&Thrane C-C500 Ex and Thrane&Thrane C-C500 Ex Peltor:**



**II 2 G Ex ib IIC T4**

**SAVOX C-C500/WARIS ATEX**



**II 2 G Ex ib IIC T5**

Espoo, 30.08.2016  
VTT Expert Services Ltd

Martti Siirola  
Senior Expert

Kari Koskela  
Expert



12. **Schedule**

13. **EC-TYPE EXAMINATION CERTIFICATE VTT 06 ATEX 043X Issue 2**

14. Description of Equipment

The radiophone mic/speaker unit, type SAVOX C-C500 manufactured by Savox Communications Ltd, shall be used with an intrinsically safe radiophone and optional plug in microphone/speaker accessories given below. The plastic material of the enclosure is conductive.

Electrical data

**U<sub>i</sub> = 9 V      I<sub>i</sub> = 3 A      P<sub>i</sub> = 6.75 W      C<sub>i</sub> = 10 nF      L<sub>i</sub> = 1 μH**

Allowed plug-in accessories

- a) SAVOX TC-1 Ex
- b) SAVOX MP-H ATEX
- c) SAVOX N-H Peltor ATEX (IIC), SAVOX N-HH Peltor ATEX (IIC)
- d) Peltor Adapter Cable Ex
- e) Invisio H-M3x-2-xxxX-xxx
- f) SAVOX IS-Com ATEX
- g) SAVOX HC... ATEX
- h) SAVOX MS-Com ATEX
- i) SAVOX NC ATEX
- j) SAVOX N-H Silenta ATEX (IIB), SAVOX N-HH Silenta (IIB)
- k) Dräger Com Tac...ATEX (IIB)
- l) Holmco HL-09 ATEX / SCORPION ATEX, HL19
- m) CON-SPACE FACEMASK COM/Sabrecom 2
- n) FRR Ele. Mic Ex QR4\*\*
- o) FPS-COM-PLUS VA R-C\*\*
- p) FPS-COM 5000\*\*
- q) MT7H79F-50, MT7H79B-50, MT7H79P3E-50

Limited conditions

n/a  
n/a  
n/a  
n/a  
n/a  
T4 (-20 °C < Ta < +40 °C)  
T4 (-20 °C < Ta < +55 °C)  
T4 (-20 °C < Ta < +55 °C)  
T4 (-20 °C < Ta < +40 °C)  
IIB T4 (-20 °C < Ta < +40 °C)  
IIB T4 (-20 °C < Ta < +40 °C)  
VTT 10 ATEX 029X T4 (-20 °C < Ta < +50 °C)  
T4 (-20 °C < Ta < +55 °C)  
n/a  
n/a(Ref. ATEX-certificate ITS 11 ATEX 27318X)  
n/a(Ref. ATEX-certificate ITS 16 ATEX 28437X)  
T4 (-20 °C < Ta < +40 °C)

Documents:

C-C500 Main asm Ex D13603F, 31.10.2014\*  
Safety declaration (Sailor) D22111B, 7 pages, 7.7.2016\*  
Safety declaration (500uA/043X) D22370C, 13 pages, 7.7.2016\*  
Cable connection assembly (Waris) D13069C, 22.08.2012\*  
PCB comp. layout D21379D, 15.10.2009  
PCB part list (Waris) D21471F, 4 pages, 24.10.2011\*  
PCB part list (Sailor Ex) D13861C, 4 pages, 4.2.2011  
PCB part list (Sailor Peltor Ex) D13966C, 4 pages, 4.2.2011  
PCB part list (TK-2260 Ex) D14255B, 5 pages, 8.7.2010  
PCB circuit diagram D21378D, 4 pages, 14.10.2009  
Epoxy coating D21495D, 09.10.2008  
Ex label D13083D, 30.06.2016\*  
Ex label IIC T4 D22129B, 30.06.2016\*  
Ex label IIC T4 Peltor D22167C, 30.06.2016\*  
Safety guide IIC T5 D21534G, 2 pages, 7.7.2016\*  
Safety guide IIC T4 D22130I, 2 pages, 7.7.2016\*

The accessory documents are listed in the document "Headset documents in PTT Ex certificates". Doc.nr. D22115. Rev.M\*. Date: 28.6.2016.

15. Report:

VTT-S-03487-16



16. Special conditions for safe use

1. Allowed ambient temperature range is Tamb -20 °C to +55 °C.
2. When used with allowed plug-in accessories inside hazardous areas, the limited conditions in Clause 14 shall be observed.
3. Connection of SAVOX C-C500 RSM Units shall be done according to radio manufacturer's instructions.

17. Essential Health and Safety Requirements

Met by compliance with the standards referred in point 9.

Certificate history

Issue	Date:	Report no.	Comment
-	07.07.2006	VTT-S-03649-06	Prime certificate
1	10.08.2011	-	Manufacturing locations updated; New document revisions: D13966B → C, D21534D → E, D22370A → B, D13861B → C; SAVOX C-C500/Becker Ex added, part list. D14894A; Thrane&Thrane C-C500 Ex and – Ex Peltor added, part lists D13861C and D13966C, Thrane&Thrane replaces Sailor versions; New headset Invisio H-M3x-2-xxxX-xxx (Ex ia IIC T6) added. Peltor adapter cable Ex added.
2	30.08.2016	VTT-S-03487-16	Removal of Certified types **MTP850, **810 ATEX, **TRX51xx and Becker Ex. Ex List of accessories updated. **) New accessories assessed. *) Revised documents.

Espoo, 30.08.2016

VTT Expert Services Ltd



Martti Siirola  
Senior Expert



Kari Koskela  
Expert



Certificate without signatures shall not be valid

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