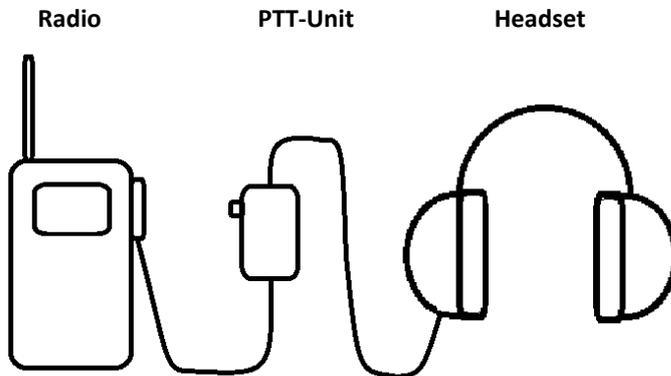


SAFETY GUIDE FOR A-KABEL ADAPTER & PTT UNIT PMLN7310ASP01 / AK6760T

This product is an adapter with Push-To-Talk button (PTT) for use together with intrinsically safe Motorola radios and Peltor and A-KABEL headsets. Certificate no.: PRESAFE 15 ATEX 6928 and IECEx PRE 15.0062.

Approved equipment to be used together with AK6760T:



Motorola DP4401Ex
 Motorola DP4801Ex
 Motorola XPR7550Ex
 Motorola XiR P8668Ex
 Motorola DGP8550Ex
 Motorola DGP8050Ex

**PMLN7310ASP01
 6760T**

A-KABEL AK5850
 A-KABEL AK5850S
 A-KABEL AK5850HS
 A-KABEL AK6631
 Peltor PMLN6087A (MT7H79F-50)
 Peltor PMLN6092A (MT7H79P3E-50)
 Peltor PMLN6090A (MT1H7F2-07-51)
 Peltor PMLN6089A (MT1H7P3E2-07-51)

Or any other separately ATEX-approved headsets and radios that fulfill the requirements for intrinsic safe connection based on the dedicated safety parameters of the PTT. Following conditions must be considered in the end configuration: $U_o \leq U_i$, $I_o \leq I_i$, $C_o \geq C_i + C_c$, $L_o \geq L_i + L_c$ (C_c & L_c is cable's capacitance & inductance).

The PTT-unit AK6760T has the following electrical parameters (Input: From radio. Output: To headset)

Input

U_i : 8.4Vdc
 I_i : 2.2A
 L_i : 2.2 μ H
 C_i : 47nF

Output

U_o : 8.4Vdc
 I_o : 187mA
 L_o : 1.02mH
 C_o : 5 μ F
 P_o : 364mW

Linear resistive characteristics of power sources are required.

Ambient temperature range: $-20^\circ\text{C} \leq T_a \leq +55^\circ\text{C}$.

Grade of protection



Explosion Proof According to ATEX

II 2

Equipment group, and category.

G

Gas (zone)

CE 0470

Nemko Notified Body ID

Ex

Equipment for ATEX

ib

Type of protection

IIC

Gas group

T4

Equipment protection level

Gb

Safety instructions

The operating instructions have to be followed to ensure safe operation. Read the user guide carefully together with this safety guide and the user guide for the radio and headset to ensure that the equipment is used after the manufacturer instructions. Otherwise it may cause danger for both equipment and persons.

If there are damage on the equipment housing, leads, switch/socket, labels or if other malfunction occurs it has to be removed from Ex-area immediately for maintenance or replacement. For service and repair contact A-KABEL AS.

Do not use the equipment in zone 0.

Do not connect or disconnect the PTT-unit from the headset or the radio in Ex area.

Declaration of conformity

The Manufacturer A-KABEL AS, hereby declares that the adapter and PTT unit AK6760T is manufactured in accordance with the EMC directive 2004/108/EC and standards EN61000-6-2:2005 + AC:2005. Further the equipment is manufactured and tested in accordance with Directive 94/9/EC and the IECEx scheme. The equipment is manufactured in compliance with the international standards: EN 60079-0:2012, 60079-11:2012 and the European standards IEC 60079-0:2011, IEC 60079-11:2011. The equipment is certified under EC certificate of conformity no. PRESAFE 15 ATEX 6928 and IECEx PRE 15.0062 issued by Notified body no. 2460 Presafe, Gaustadallèen 30, 0373 Oslo, Norway.

The manufacturing of this product is in conformity of the RoHS directive 2011/65/EU for restrictions of the use of certain hazardous substances in electrical and electronic equipment and the risk assessment has been conducted according to harmonized standard EN50581:2012.

A-KABEL AS
Nedre Hagaveg 15 C
2150 Årnes
Norway
August 1, 2015



Per Ivar Engen
Managing Director



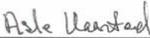
Safety Guide rev. A.

Printed in Norway, March 20, 2016

EC-Type Examination Certificate

- [2] EQUIPMENT OR PROTECTIVE SYSTEM INTENDED FOR USE IN POTENTIALLY EXPLOSIVE ATMOSPHERES DIRECTIVE 94/9/EC
- [3] EC-Type Examination Certificate Number: Presafe 15 ATEX 6928 Issue 1
- [4] Equipment or Protective System: Key switch (PTT-unit) type AK6760T
- [5] Applicant – Manufacturer or Authorized representative: A-Kabel AS
- [6] Address: Nedre Hagaveg 15C, 2150 Årnes, Norway
- [7] This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] DNV Nemko Presafe AS, notified body number 2460 in accordance with Article 9 of Council Directive 94/9/EC of 23 March 1994, 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 systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
The examination and test results are recorded in confidential reports listed in section 16.
- [9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with: EN 60079-0: 2012 + A11: 2013 & EN 60079-11: 2012
- [10] If the sign “X” is placed after the certificate number, it indicates that the equipment or protective system is subject to specific conditions of 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 or protective system shall include the following:

 II 2 G Ex ib IIC T4 Gb -20°C ≤ Ta ≤ +55°C


Asle Kaastad
For DNV Nemko Presafe AS
Information on electronic signature www.presafe.com



Date of issue: 2016-03-02

This certificate may only be reproduced in its entirety and without any change, schedule included.

EC-Type Examination Certificate

[13]

Schedule

[14] EC-TYPE EXAMINATION CERTIFICATE No.: **Presafe 15 ATEX 6928** Issue 1

[15] **Description of Equipment or Protective System**

This certificate cover the key switch (PTT-unit) type AK6760T manufactured by A-Kabel AS. The PTT unit is intended for use with separately certified headsets and Motorola radios that fulfill the requirements for intrinsic safe connection based on the dedicated safety parameters of the PTT.

The PTT unit is a small portable product consisting of a cable with connector and plug at the two ends. The plug only fits to certain models of Motorola radios. The PTT unit may be connected to the radio when this is allowed by the certificate of the radio. The connector used have antistatic plastic enclosure with a small PCB/electronics inside. A switch is located on the PTT for communication purpose.

Type designation

AK6760T

Electrical Data

Intrinsic safe parameters

Ui: 8.4Vdc, li: 2.2A, Li: 2.2μH, Ci: 47nF.

Uo: 8.4Vdc, Io: 187mA, Po: 364mW, Lo: 1.02mH, Co: 5μF

Degrees of protection (IP Code)

IP20

Ambient temperature:

-20°C to +55°C

Routine tests

None

[16] **Report No.:** D0001753-01

[17] **Specific Conditions of Use**

None

[18] **Essential Health and Safety Requirements**

See part 9 of this certificate

[19] Descriptive Documents

Number	Title	Rev.	Date
AK6760T Label	Marking label	1	2015-08-24
AK6760T Assembly Drawing	Assembly (incl. part list)	B	2016-02-05
AK6760T Sysw	System connection	B	2016-02-05
B096B Pott	Potting & coating B096B	B	2016-02-05
B096A	Potting document	A	2015-08-10
S096B Schematic	Schematics	B	2016-02-05
B096B Bom	Bill of materials (electronics)	B	2016-02-05
B085B Layout	Layout (3 pages)	B	2016-02-05

[20] Certificate History

Issue	Description	Issue date	Report no.
0	Original issue	2015-08-26	D0001753-00
1	The changes concern: - Remove non-safety components (C9, C11,C12, C15, C17, C18, C20, C21, L4, L5, L6, L7, L11 from earlier version of BOM) to reduce the internal capacitance and inductance in term of functional reasons. - Change of layouts. - IECEx certification applied	2016-03-02	D0001753-01

END OF CERTIFICATE