

PTT Adapter

PMLN7310ASP01

AK6760T

SAFETY GUIDE



A-KABEL AS

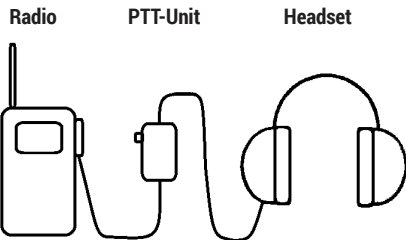
Norway



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	Output
U_i : 8.4Vdc	U_o : 8.4Vdc
I_i : 2.2A	I_o : 187mA
L_i : 2.2μH	L_o : 1.02mH
C_i : 47nF	C_o : 5μF
	P_o : 364mW

Linear resistive characteristics of power sources are required.
Ambient temperature range: -20°C ≤ T_a ≤ +55°C.

Grade of protection

	II 2	G	CE	0470
Explosion Proof According to ATEX	Equipment group, and category	Gas (zone)	Complies with European Directive	Nemko Notified Body ID
Ex	ib	IIC	T4	Gb
Equipment for ATEX	Type of protection	Gas group	Temperature Class	Equipment protection level

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.

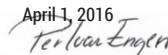
EU Declaration of conformity

The Manufacturer A-KABEL AS, hereby declares that the adapter and PTT unit AK6760T is manufactured in accordance with the EMC directive 2014/30/EU and tested for standard EN 301 489-01 (V1.9.2). Further the equipment is manufactured and tested in accordance with Directive 2014/34/EU and the IECEx scheme. The equipment is manufactured in compliance with European standards: EN 60079-0:2012, 60079-11:2012 and the International 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 Certification Body no. 2460 DNV Nemko Presafe AS, 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

April 1, 2016



Per Ivar Engen
Managing Director

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

Date of issue: 2016-03-02


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



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, Ii: 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

EC-Type Examination Certificate

Presafe 15 ATEX 6928, Issue 1

[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
B096B 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



Statement of Conformity

Ingress Protection (IP)

Order No.: 307640

Applicant

A-Kabel AS
P.O. Box 64 Nedre Haga vei 15
NO-2151 ÅRNES
NORWAY

Manufacturer

A-Kabel AS
P.O. Box 64 Nedre Haga vei 15
NO-2151 ÅRNES
NORWAY

Product

PTT (Push To Talk switch)

Models

AK6760T
Motorola item no. PMLN7310ASP01

Brand Name

A-Kabel AS

Additional information

Push To Talk switch for Motorola radio 4000-series.
For connection between headset and radio.

IP classification

IP67

The above product is tested according to the following standards

EN 60529 (1991) + A1 (2000) + A2 (2013)
Degree of protection provided by enclosures (IP Code)

IP67

Nemko confirms that one sample of the mentioned product has been tested and found to be in conformity with the requirement for the degree of protection as specified above.

This Statement gives no right to use Nemko's name or certification mark on the products.

Date 2016-05-23

Tested by: Finn-Tore Jørgensen

Approved by: Espen Eriksen

A-KABEL AS

Nedre Hagaveg 15C
2150 Årnes
NORWAY

Phone: +47 63 91 28 20
E-mail: engen@a-kabel.no



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