

SATA adam 2

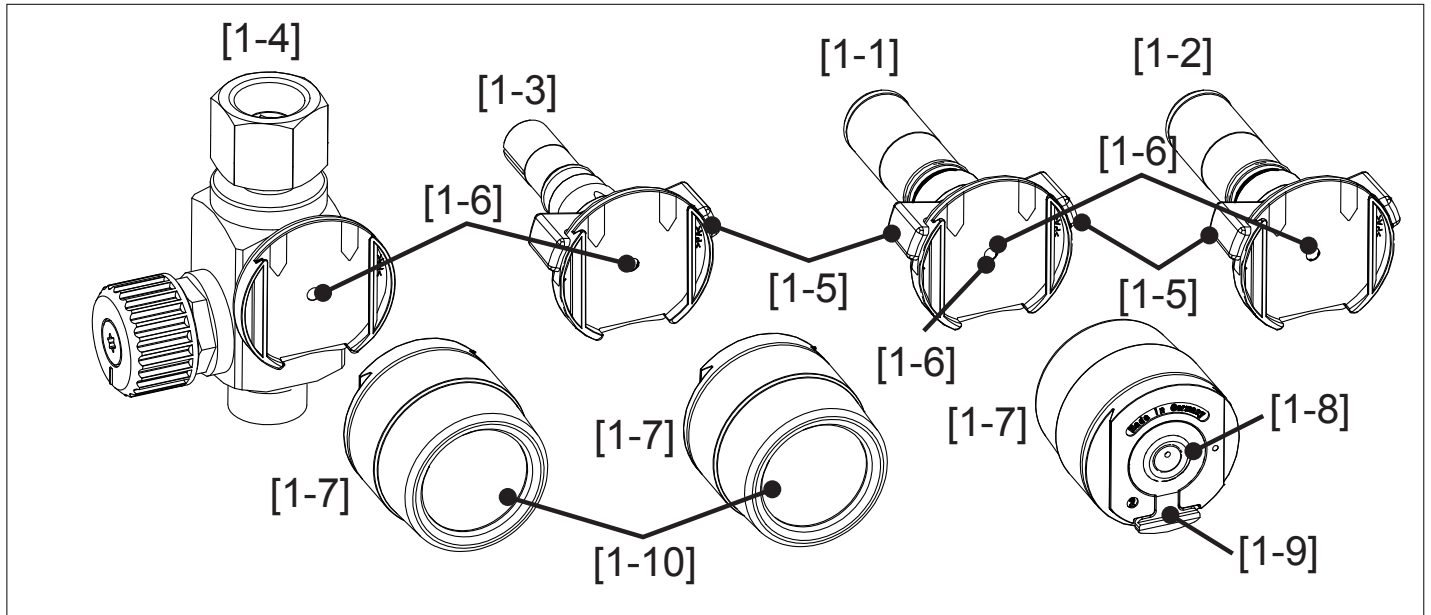
SATA adam 2 mini, SATA adam 2 display, SATA adam 2 U



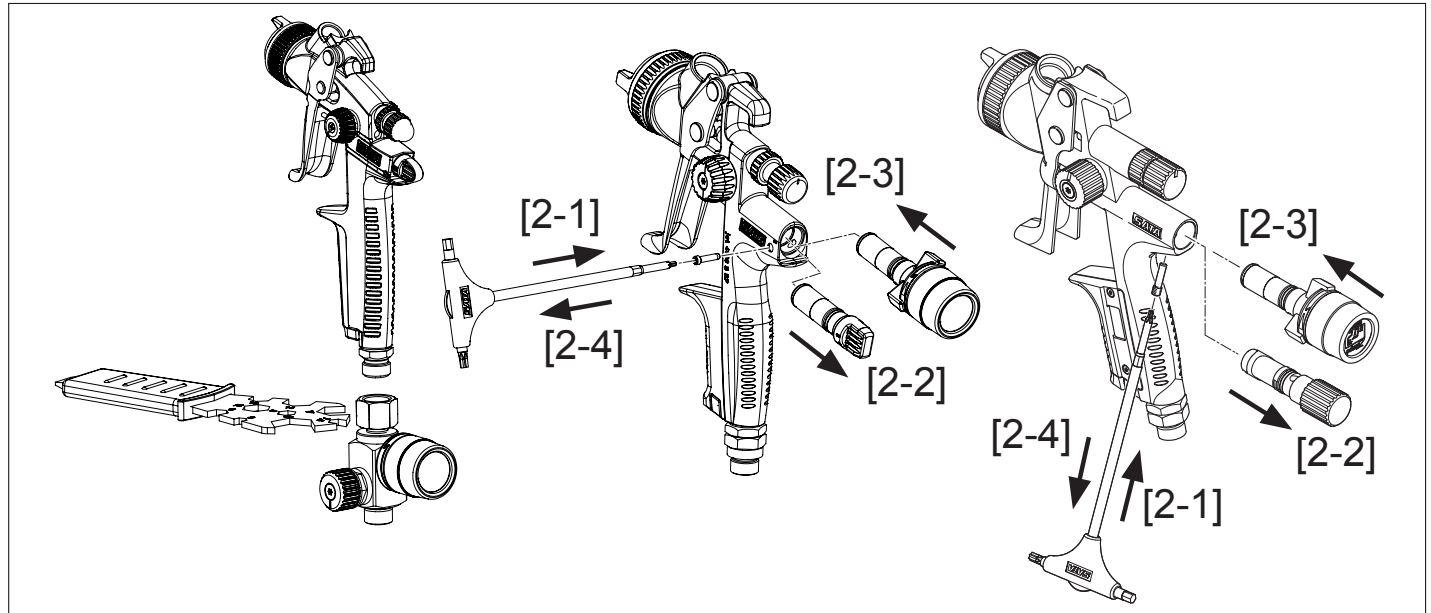
Betriebsanleitung | Упътване за работа | 使用说明书 | Návod k použití
Betjeningsvejledning | Kasutusjuhend | Operating Instructions Instruc-
ciones de servicio | Käyttöohje | Mode d'emploi | Οδηγίες λειτουργίας
Üzemeltetési utasítás | Istruzione d'uso | Naudojimo instrukcija
Lietošanas instrukcija | Gebruikershandleiding | Bruksveiledning
Instrukcja obsługi | Instruções de funcionamento | Manual de utilizare
Руководство по эксплуатации | Bruksanvisning | Navodilo za obrato-
vanje | Návod na použitie | Kullanım talimatı | Operating Instructions



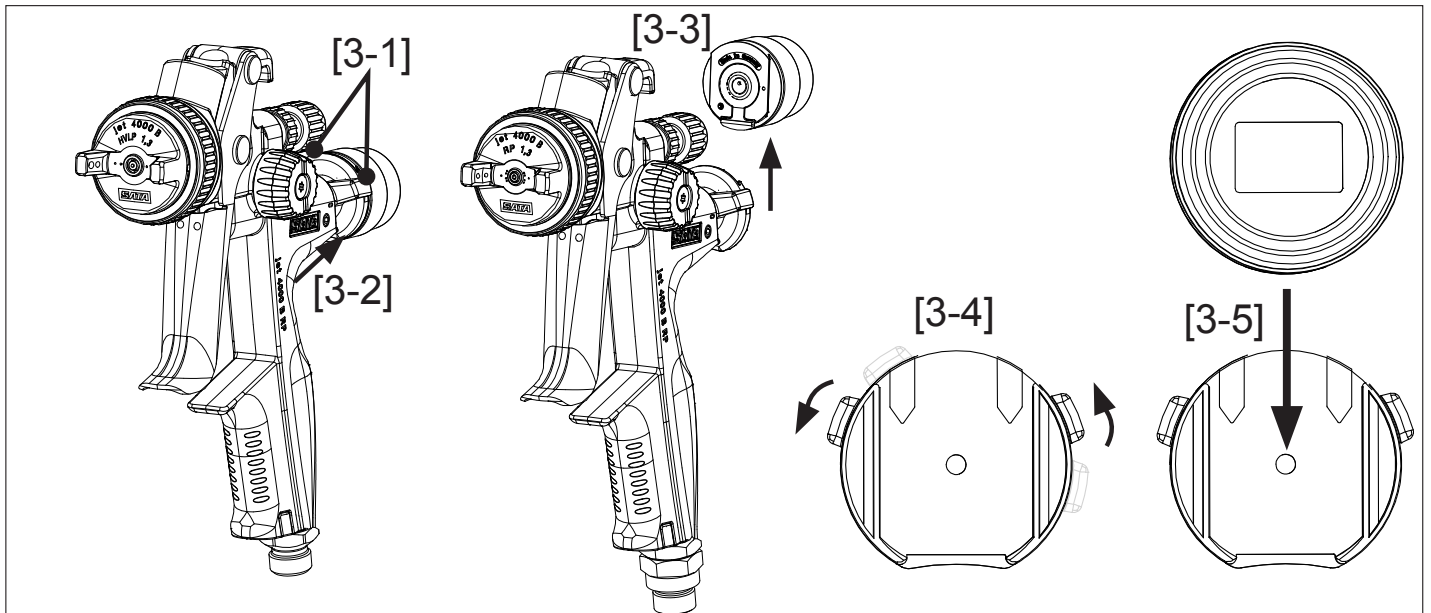
[1]

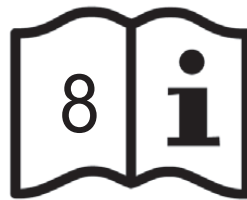
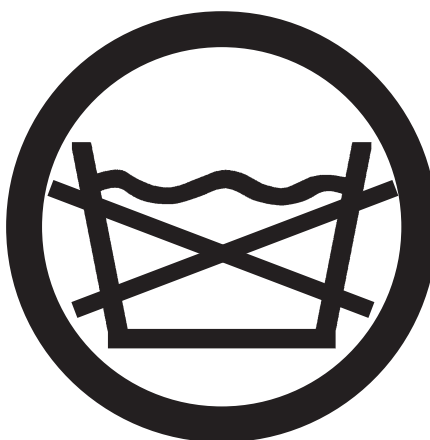
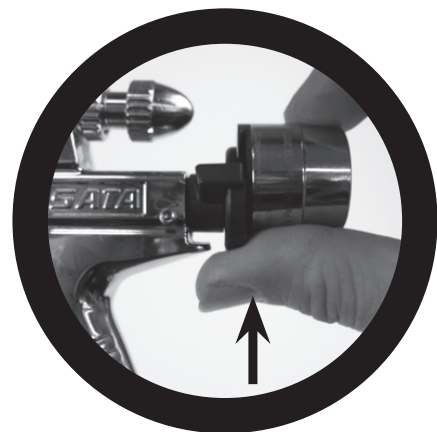
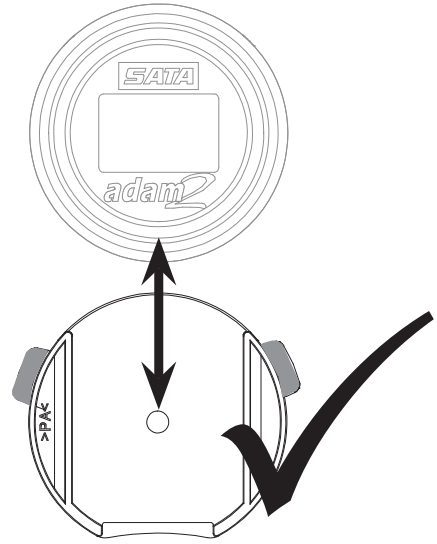
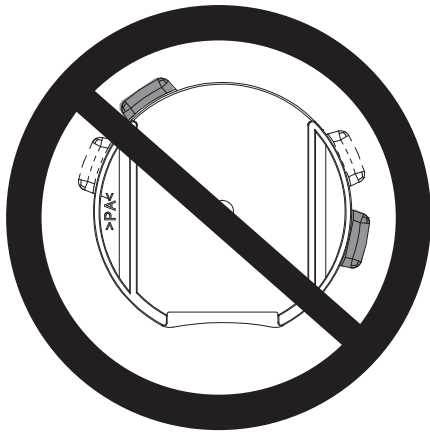


[2]



[3]









Content [Original Version: German]

1. Symbols.....	75	9. Battery Replacement.....	81
2. Technical Data.....	75	10. Troubleshooting.....	82
3. Scope of Delivery	76	11. Disposal.....	83
4. Technical Design	76	12. After Sale Service.....	83
5. Intended Use	76	13. Warranty / Liability.....	83
6. Safety Instructions.....	77	14. Spare Parts	83
7. Use	79	15. Declaration of Conformity.....	84
8. Cleaning of the Pressure Measuring Devices.....	80		

1. Symbols

	Warning! Risk which could cause heavy injuries or death.
	Warning! Risk which could cause damage.
	Explosion risk! Warning against risk which could cause heavy injuries or death.
	Notice! Useful tips and recommendations

2. Technical Data

Max. operating pressure	10.0 bar
Max. operating temperature	60 °C
Energy supply	Battery RENATA CR2032 (Art. No. 160739)
Display accuracy	+/- 0.05 bar
Approval for use in explosive areas	II 2G Ex ia IIC T4 (KEMA 05ATEX1090X)
EU directive	94/9 EG

3. Scope of Delivery

Product \ Component	SATA adam 2 display	SATA adam 2 dock	SATA adam 2 mini dock	SATA adam 2 U dock
SATA adam 2	X	X	-	-
SATA adam 2 mini	X	-	X	-
SATA adam 2 display	-	X	-	-
SATA adam 2 U	X	-	-	X

One RENATA CR2032 battery is included in the delivery.

4. Technical Design [1]

- | | |
|---|---|
| <p>[1-1] SATA adam 2 dock connection module for SATA spray guns except for SATAjet 5000 B</p> <p>[1-2] SATA adam 2 dock connection module for SATAjet 5000 B</p> <p>[1-3] SATA adam 2 mini dock connection module for SATA minijet spray guns</p> <p>[1-4] SATA adam 2 U dock</p> <p>[1-5] Regulation wing</p> | <p>[1-6] Ball valve</p> <p>[1-7] SATA adam 2 display</p> <p>[1-8] O-ring Please regularly lubricate with high performance grease (Art. No. 48173)</p> <p>[1-9] Locking clip</p> <p>[1-10] Digital display</p> |
|---|---|

5. Intended Use

The SATA adam 2 devices are designed for adjustment and control of the inlet pressure of a SATA spray gun.





Warning!

- The user is responsible for any damage and accidents caused by improper use!


6. Safety Instructions



6.1. General Safety Instructions

		Warning! Attention!
<ul style="list-style-type: none"> • Before using the device, please read all safety instructions as well as the operating instructions of the paint spray gun carefully. Safety instructions and indicated safety measures are mandatory. • Please keep all enclosed documents and make sure that the device is handed over only together with these documents. • Reading the operating instructions of the respective SATA paint spray gun is mandatory! 		

6.2. Specific Safety Advice

	Warning!
<ul style="list-style-type: none"> • Local safety, accident prevention, work safety and environment protection regulations are mandatory! • Use, cleaning and maintenance by skilled personnel only! • People whose ability to react is impaired by drugs, alcohol, medication or for other reasons are not allowed to use the device! • Never use the device when it is damaged or when parts are missing! Especially, only use when locking screw (see chapter 7.) is firmly tightened! • Before use, always check and, if necessary, repair the device! • Put device out of operation when damaged, disconnect from compressed air supply! • Never manipulate or technically modify the device! • Use original SATA spare parts and accessories only! • Never apply spray media containing acid, alkaline or benzene! • Always keep the device away from ignition sources, such as open fire, burning cigarettes or non-explosion-proof electronic devices! 	

6.3. Personal Protection Equipment



Warning!

- Always wear approved **breathing and eye protection** as well as suitable **protective gloves, overall and shoes** when using the device as well as during cleaning and maintenance!

6.4. Use In Explosive Areas

The device is approved for the use / storage in explosive areas classified as Ex-Zone 1 and 2.

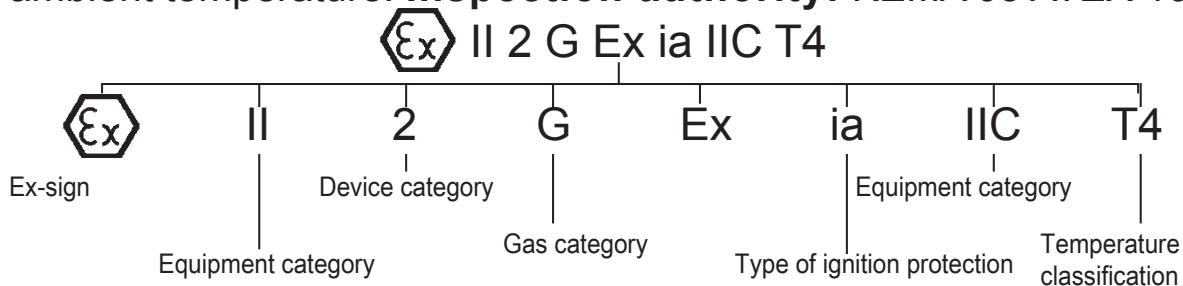


Warning! Risk of explosion!

The following applications and operations lead to the loss of the explosion protection and are, therefore, prohibited:

- The SATA adam 2 must not be brought along with or used on a spray gun in explosive areas classified as Ex-Zone 0!
- Do not use solvents and cleaning agents based on halogenised hydrocarbons! Chemical reaction which may occur when using these substances may be explosive!

The electronic pressure measuring device has been submitted to a design examination and is developed, constructed and manufactured in accordance with the EU directive 94/9 EU. It was classified to II 2 G Ex ia IIC T4 FM Global IS CL I, ZN 1, AEx ia IIC T4 IS CL I, DIV 1, GP A, B, C&D, T4 and may be used and stored in the explosive zones 1 and 2 up to 60°C ambient temperature. **Inspection authority:** KEMA 05 ATEX 1090 X.



IECEx label: IECEx KEM 09.0075

**Warning! Risk of explosion!**

The following applications and operations lead to the loss of the explosion protection and are, therefore, prohibited:

- Battery replacement in explosive areas!
- Installation of a battery other than CR 2032, RENATA (**SATA Art. No. 160739**)!

7. Use [2]

**Warning! Attention!**

- Please disconnect spray gun from the air supply prior to the installation of the SATA adam 2 to the spray gun.
- Please ensure that all screws are firmly tightened.

Steps 1. - 4. only apply to the SATA adam 2 (mini)

25. Loosen and remove the locking screw **[2-1]**.

26. Remove air micrometer (air flow control knob) **[2-2]**

27. Insert SATA adam 2 **[2-3]** in the spray gun.

28. Tighten locking screw firmly **[2-4]**.

**Warning!**

- Check if locking screw has been firmly tightened! SATA adam 2 (mini) could otherwise shoot out from the spray gun in an uncontrolled way!

7.1. Disassembly and Assembly of the Display [3]

Disassembly:

- Place the regulation wing **[3-1]** in the horizontal **centre position**.
- Press down the locking clip **[3-2]** and slide display **[3-3]** upwards out of the groove.

Assembly:

- Place the regulation wing **[3-4]** in the horizontal **centre position**.
- Place display **[3-5]** correctly in the groove and slide in until it snaps home.

7.2. Adjust Spray Gun Inlet Pressure [4]



Note!

- Fully pull the trigger [4-1] and adjust the spray gun inlet pressure with the regulation wing [4-2], then release the trigger.
- With SATA adam 2 U fully pull the trigger [4-1] – air micrometer on spray gun must be fully opened –and adjust the spray gun inlet pressure according to [4-1], the release the trigger.
- If the required spray gun inlet pressure is not reached, please increase pressure at the air supply; high pressure leads to increased trigger forces.

8. Cleaning of the Pressure Measuring Devices



Warning! Attention!

- Please make sure to remove the SATA adam 2 display before cleaning the spray gun in a gun washing machine (see chapter 7.1). **Never clean SATA adam 2 display in the washing machine!** SATA adam 2 dock can remain on the spray gun while cleaning the spray gun in the gun washing machine.
- Please also observe the cleaning instructions for your SATA spray gun.
- Blow dry spray gun and material passage, air cap incl. thread and gravity flow cup as well as the **dock** connection module **with clean compressed air after cleaning!**
- **Never soak** the SATA adam 2 **display** or a spray gun **in cleaning agent!**
- The SATA adam 2 **display is exclusively to be cleaned with a cloth soaked in cleaning agent.** Afterwards, **lubricate O-ring [1-6] with high performance grease (Art. No. 48173).**
- **Use neutral cleaning solution (pH value 6 to 8)!**
- **Do not use acids, lyes, pickling agents, unsuitable reclaimed materials or other aggressive cleaning media, such as Toluol, for example!**
- Do not clean the glass plate of the SATA adam 2 display with pointed, sharp or abrasive objects!
- **Please open the display in case of battery exchange only!**

**Note!**

- Further cleaning tips can be found at www.sata.com/TV.

9. Battery Replacement [5]

**Warning! Risk of explosion!**

- Replace the battery outside of explosive areas only!
- **Please observe safety instructions in chapter 6.4!**

Only RENATA batteries (CR2032) must be used. Use the battery kit (**Art. No. 160739**) consisting of battery, O-rings, locking clip, elastic rubber strap and special tool. According to the intensity of use, the battery will last between 1 to 3 years. The battery capacity is electronically controlled. To exclude measurement errors, the display switches off with insufficient battery power. In this case, the battery has to be replaced.

Depending on display and use, the battery must be replaced within the following time frames:

Display:

Battery symbol	4-5 weeks
Exclamation marks (flashing)	2-3 weeks
Display "Lo ^b " upon switching-on	<1 week

1. Disassembly of the display **[5-1]** (also see chapter 7.1).
2. Open display using the special tool and the elastic rubber strap **[5-2], [5-3]**.
3. Remove the battery with special tool **[5-4]**.
4. Insert a new RENATA CR 2032 (observe polarity of battery!).
5. Remove the sealing with the special tool **[5-5]** and insert the new sealing.
6. Screw the housing back onto the display. To prevent penetration of cleaning agent, please ensure to tighten the housing hermetically (completely) **[5-3]**.
7. If required, replace the locking clip and the small O-ring. Flat side of locking clip must be visible **[no illustration]**.

10. Troubleshooting

Malfunction	Cause	Corrective action
No pressure is displayed.	<ul style="list-style-type: none"> • Display has not properly snapped into the dock • Battery is empty 	<ul style="list-style-type: none"> • Slide in the display until it snaps home, chapter 7.1 • Replace the battery
Display cannot be removed at all or only with difficulty.	<ul style="list-style-type: none"> • Regulation wing is not in horizontal centre position • Slide-in groove is clogged. • Locking clip has not snapped in. • Special O-ring [1-6] is swollen due to soaking in solvent. 	<ul style="list-style-type: none"> • Place regulation wing in horizontal centre position, chapter 7.1 • Clean the slide-in groove. • Press in the locking clip, chapter 7.1 • Avoid soaking in solvent, chapter 8
Air leaks between display and connection module dock	O-Ring beneath the locking clip is missing or damaged.	Replace the O-ring, chapter 9
Air leaks from the ball valve [1-8] (when using without display)	Ball valve is clogged	Clean ball valve, chapter 8
Display does not snap-in	<ul style="list-style-type: none"> • Locking clip is damaged. • Slide-in groove of the connection module is clogged or damaged 	<ul style="list-style-type: none"> • Replace locking clip, chapter 9 • Clean the groove or replace the dock, respectively
Digital display is either black or blurred.	Display has been excessively exposed to cleaning solution.	Cleaning, chapter 8 , replacement of the digital unit

11. Disposal

To protect the environment, batteries as well as SATA adam 2 have to be disposed of appropriately. Please observe local regulations!

12. After Sale Service

Please contact your SATA dealer for accessories, spare parts and technical support.

13. Warranty / Liability

The SATA General Conditions of Sale and Delivery and further contractual agreements, if applicable, as well as the valid legislation at the time apply.

SATA cannot be held responsible especially in the following cases:

- In case when the cleaning instructions are not observed (**please see chapter 8**)
- In case when liquids have penetrated the SATA adam 2 display because it has not been hermetically (completely) tightened (**please see chapter 9**)
- In case of any other form in which the operating instructions are not observed.
- When the product is used in other than the intended ways of usage.
- When untrained staff is employed.
- When no personal protection equipment is worn.
- When no original accessories and spare parts are used.
- When the product is manipulated, tampered with or technically modified.
- In case of normal wear and tear.
- In case when the product has been exposed to untypical shockloads and impacts during usage.
- Assembly and disassembly

14. Spare Parts

Art. No.	Description
160739	Battery kit for SATA adam 2 and SATA adam 2 mini
160788	SATA adam 2 dock (außer SATAjet 5000 B)

Art. No.	Description
160796	2 pieces SATA adam 2 dock (except for SATAjet 5000 B)
211565	SATA adam 2 dock for SATAjet 5000 B
211573	2 pieces SATA adam 2 dock for SATAjet 5000 B
160861	SATA adam 2 mini dock
160689	SATA adam 2 display (bar)
160697	SATA adam 2 display (psi)
162164	5x locking clip
162172	2x O-ring
162081	5x dock protect
195214	SATA adam 2 U (air micrometer G 1/4 with adam 2 display >bar<)
195222	SATA adam 2 U (air micrometer G 1/4 with adam 2 display >psi<)
195230	SATA adam 2 U dock (without display)
195925	SATA dock with G 1/8 Male thread

15. Declaration of Conformity

Manufacturer:

SATA GmbH & Co. KG
Domertalstrasse 20
D-70806 Kornwestheim

We hereby declare that the product named in the following, on the basis of its conception, construction and type of construction in the model we have brought on the market, corresponds to the fundamental safety requirements of the 94/9/EC guideline, EC Directive 2014/34/EC including the changes applicable at the time of this declaration and can be used according to EC-Directive 94/9/EC, EC Directive 2014/34/EC in explosion hazard areas (ATEX), appendix X, B.

Product description:digital pressure measuring device

Product type:..... SATA adam 2 (mini),
..... SATA adam 2 display, SATA adam 2 U
ATEX classification: II 2 G Ex ia IIC T4

Inspection Authority: 0344
KEMA 05 ATEX 1090
IECEX KEM 09.0075X
DEKRA Certification B.V.
Meander 1051
6825 MJ Arnhem

Corresponding EC directive

- EN 60079-0:2013, EN 60079-11:2012, EN 60079-26:2007
- EU machinery directive 2006/42/EU
- EC Directive 94/9/EC Devices and protection systems for intended use in explosion hazard areas, valid until 19.04.2016
- EC Directive 2014/34/EC Devices and protection systems for intended use in explosion hazard areas, valid from 20.04.2016

Applied harmonised norms:

- DIN EN 1127-1:2011 "Explosion control part 1: Basics and methodology"
- DIN EN 13463-1:2009 "Non-electronic devices for the use in explosive areas - Part 1: Basics and Requirements"
- DIN EN ISO 12100:2011; "Machine safety, general requirements"
- DIN EN 1953:2013 "Spray and application devices for coating materials - safety requirements"

Applied national norms:

DIN 31000:2011 "General guidelines for the safety-compliant design of technical products"

The documents required according to guideline 2014/34/EC appendix VIII are filed for 10 years in the named location number 0123 with the document number 70023722.

70806 Kornwestheim, 18.01.2016



Albrecht Kruse

President

SATA GmbH & Co. KG