

VOLKSWAGEN

AKTIENGESELLSCHAFT



Operating manual

Measurement adapter cable VAS 611 023



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Legal notice

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Preliminary information

Read through this operating manual carefully before using the product.

The product is delivered with a USB stick containing the operating manual in various languages. You can find the current version and additional languages on our homepage.

The operating manual is an essential part of the product and must be kept together with the product. If you sell or transfer ownership of the product, the operating manual must be handed over to the new operator.

In addition to this operating manual, you must observe all relevant regulations for diagnostics or troubleshooting of intrinsically safe high-voltage systems in road vehicles. This includes but is not limited to: instructions for the vehicle manufacturer's diagnostics systems, company-specific safety requirements and the state of the art for working with high-voltage systems.

Validity of the declaration of conformity

The declaration of conformity applies to the product described in the operating manual. Any changes, modifications or extensions shall void the declaration of conformity and the risk assessment.

Manufacturer specifications

Since its founding, our company has focused on groundbreaking solutions for electromobility. STODIA GmbH develops and produces custom solutions for the automotive industry, the energy storage sector, repair shops and special vehicle fleets.

Our core products are innovative energy storage systems, both stationary and mobile, which are essential technologies for advancing the energy revolution and energy autonomy. STODIA's portfolio also includes smart charging and battery technology, diagnostic systems, battery and cell management, and vehicle-wide measurement and diagnostic technology.

With experience in both software and hardware development, STODIA GmbH is your dependable partner at every production stage, from prototyping to series production.

This operating manual is only valid for the following product:

Item number 22102598

Designation Measurement adapter cable VAS 611 023

Warning levels

This chapter provides information about the warning levels used in this operating manual.

DANGER

Failure to observe the safety instructions WILL result in death or serious injury!

WARNING

Failure to observe with the safety instructions CAN result in death or serious injury!

Important safety instructions

This chapter contains the safety instructions that must be observed when handling the product.

Fehler! Kein gültiger Dateiname.



WARNING

Danger of electric shock

The electrical voltage in the product is dangerous and can cause serious injury from electric shock.

- Never attempt to power other devices with the product!

Fehler! Kein gültiger Dateiname.

Intended use

Use the product only in accordance with this operating manual; otherwise the electrical hazard protection provided by the product can no longer be guaranteed.

The measurement adapter cable is used to manually test that the 48 V vehicle electrical system is de-energized. The measurement adapter cable contains a branch with a laboratory safety socket for this purpose.

For performing measurements with the laboratory safety socket, use the measurement box provided for this purpose or other multimeters or insulation resistance testers suitable for the application.

Use the measurement adapter cable only on the DC+ line between the starter-generator and the 48 V battery! Any use beyond what is listed here is prohibited!

Requirements for the target group

Only qualified personnel may work with this product!

In this operating manual, qualified personnel is defined as personnel meeting all requirements for working on high-voltage systems applicable in the country of operation, as defined by:

- Regulations applicable in the country of operation
- Qualification according to DGUV 200-005 level 2 or higher, or equivalent
- Specifications from the vehicle manufacturer and/or the operator.

At all times while using the product, staff must wear the personal protective equipment prescribed by the vehicle manufacturer for work on high-voltage systems.

Duties of the operator

The operator is responsible for ensuring that all staff working with the adapter cable fulfills the requirements for the target group.

Furthermore, the operator is responsible for ensuring the following:

- The adapter cable is always in perfect working order.
- The regular inspection intervals for the adapter cable are observed and recorded.

Scope of delivery

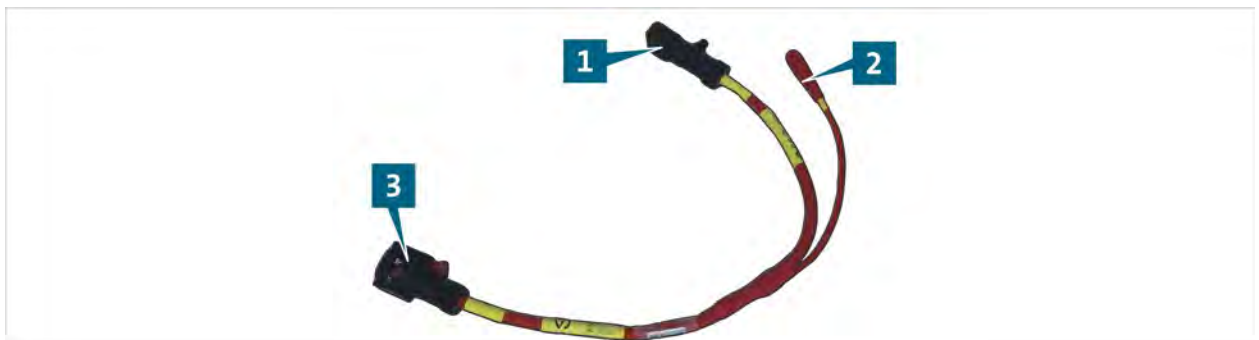
Immediately check the condition of the product and the completeness of the delivery. If anything is missing or defective, please contact the manufacturer immediately.



- (1) Measurement adapter cable
- (2) USB stick with operating manual

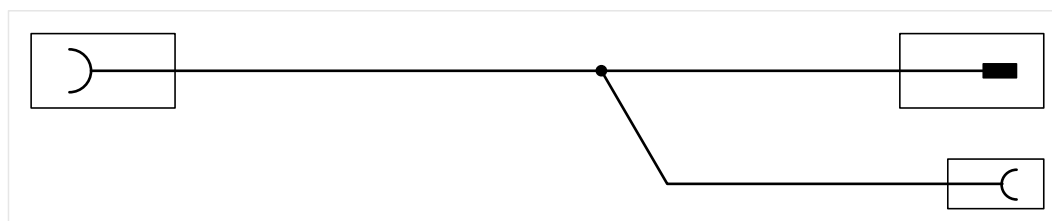
Design

Product design:










- (1) Plug
- (2) Branch with laboratory safety socket
- (3) Socket

Wiring diagram



Symbols and connections

The following symbols are shown on the product:

Symbol	Meaning
	Observe the operating manual!
	The serial number is used in conjunction with the manufacturer part number to identify the product.
	The manufacturer part number is used in conjunction with the serial number to identify the product.
	The disposal instructions prohibit disposal of the product with household waste. Always dispose of the product in accordance with all local disposal regulations.
	The CE marking certifies that the product complies with all applicable European regulations and has been subjected to the prescribed conformity assessment procedure.
	This label certifies that the product complies with the limits of GB/T 26572-2011 ("China-ROHS").
	The test seal identifies the product as having been approved for use in workshops and production facilities belonging to the vehicle manufacturer.

Technical data

Rated data	Values
Manufacturer number	22102598
Maximum rated voltage	DC 60 V
Maximum rated current	1 mA
Protection class	II / double insulated
Weight	~ 100 g
Cable length	500 mm

Ambient conditions	Operation	Storage	Transportation
Temperature	5 °C to 40 °C	-20 °C to 60 °C	-20 °C to 60 °C
Elevation above sea level	max. 2000 m	No limitation.	
Humidity	Max. 80% up to 31 °C, decreasing linearly to 50% at 40 °C	Max. 85%	
Pollution rating	2		
Condensation	Not permitted. Maximum permissible relative humidity: 60% in environments with corrosive gas/air.		

Startup



DANGER

Danger of fatal electric shock

The electrical voltage in high-voltage systems is lethal and will cause death by electric shock.

- Use the product only on high-voltage systems and components that have been certifiably de-energized!

1. Follow the safety instructions.



2. Connect the socket to the plug on the starter-generator.
3. Connect the plug to the socket on the 48 V battery.
4. Connect the measurement box to the laboratory safety socket.



- ✓ You can now perform measurements in accordance with the guided fault finding.
- ✓ You can now test that the circuit is de-energized.

Cleaning



DANGER

Danger of fatal electric shock

The electrical voltage in high-voltage systems is lethal and will cause death by electric shock.

- Disconnect the product from all power sources before cleaning the product!

Observe the safety instructions!

Use only a dry cloth to clean the product.

Storage

Store the product in a dry and dust-free location when not in use.

Disposal

Observe the safety instructions!

Always dispose of the product in accordance with all local disposal regulations.

Maintenance

Observe the safety instructions!

Test the product at regular intervals to ensure proper functioning.

Warranty

STODIA GmbH grants a warranty period of 24 months from the date of purchase. The warranty is valid for demonstrable defects in functional material and workmanship.

Further information on the warranty conditions can be found in the terms and conditions on the manufacturer's website.

Customer service

Always include the item number and, if available, the serial number with any product queries. Both numbers are found on the product.

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For internal use only
Subject to technical changes
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