briidea HAPS-01DE-B

briidea HAPS-01DE-B Mains Priority Switching Station User Manual

Model: HAPS-01DE-B / br-047

1. Introduction

The briidea HAPS-01DE-B Mains Priority Switching Station is designed to manage power supply in applications such as motorhomes, caravans, boats, and solar systems. It automatically switches between two available power sources, typically an inverter and a public mains supply, ensuring continuous power to your devices while preventing damage to the inverter or connected appliances.

This manual provides essential information for the safe and efficient installation, operation, and maintenance of your switching station. Please read it thoroughly before use.

Figure 1.1: The briidea HAPS-01DE-B Switching Station integrated into a motorhome power system, alongside solar panels, demonstrating its application in mobile and off-grid setups.

Figure 1.2: An illustrative diagram highlighting the broad range of applications for the switching station, including RVs, caravans, cars, boats, yachts, and solar power systems.

2. Safety Information

Always observe the following safety precautions to prevent injury or damage to the device and connected equipment:

- Installation must be performed by a qualified electrician in accordance with local electrical codes and regulations.
- Ensure all power sources are disconnected before installation, maintenance, or troubleshooting.
- Do not exceed the specified maximum current (16 A) or power ratings (ohmic load: 2800 VA, inductive load: 550 VA).
- The device is designed for AC220V-AC245V systems. Do not connect to other voltage systems.
- The housing is made of flame-retardant material and is IP55 rated for protection against dust and water jets. However, avoid submerging the device.
- Never open the device housing while it is connected to a power source.

- Improper connection can lead to severe damage to the inverter, appliances, or the switching station itself.

3. Product Features

- **Automatic Power Switching:** Seamlessly switches between two power inputs (inverter and mains) within approximately 2 seconds.
- **Priority Selection:** Allows selection of either the "Master" or "Slave" input as the preferred power source when both are available.
- **High Reliability:** Equipped with VDE certified (116934) and TÜV certified (R 50278579) relays for accurate switching.
- **Durable Design:** IP55 weatherproof rating protects against rain, snow, and dust, suitable for outdoor use.
- **Wide Application:** Ideal for use in motorhomes, caravans, boats, cars, and solar power systems.

4. Package Contents

Please verify that all items are present and undamaged upon opening the package. If any items are missing or damaged, contact your retailer.

- briidea HAPS-01DE-B Mains Priority Switching Station
- User Manual (this document)
- Mounting hardware (screws, anchors) - *(Assumed, not explicitly stated in product info)*

Figure 4.1: Front view of the briidea HAPS-01DE-B Switching Station. The device features three cable glands for connections: "Slave",

"Master", and "Load". The briidea logo and model number HAPS-01DE are visible, along with power specifications and IP55 rating.

5. Setup and Installation

Before beginning installation, ensure all power sources are disconnected. This device must be installed by a qualified professional.

5.1 Mounting the Device

The switching station is designed for surface mounting. Choose a location that is:

- Accessible for wiring and inspection.
- Protected from direct mechanical impact.
- Within the operating temperature range of -20°C to 60°C.
- Allows for proper cable routing.

1. Mark the drilling points using the device as a template.
2. Drill appropriate holes and insert wall anchors if necessary.
3. Secure the switching station to the mounting surface using suitable screws.

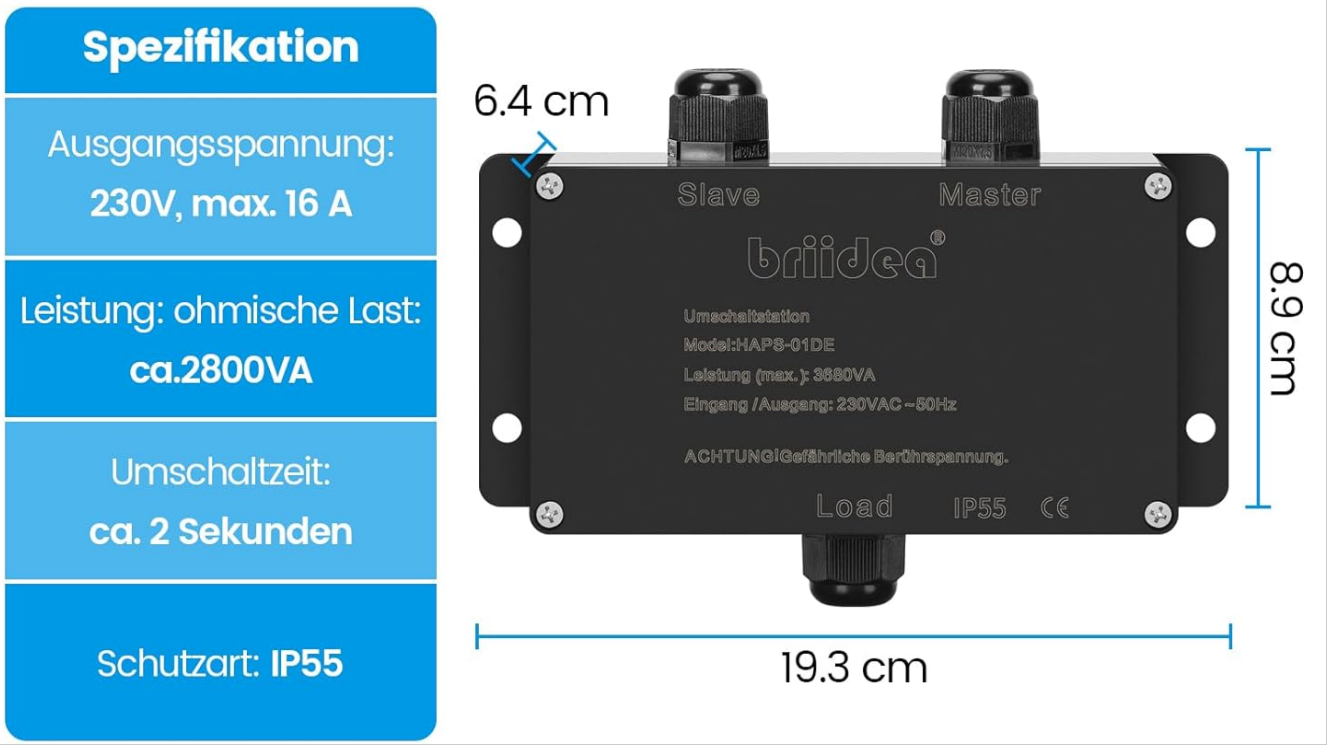


Figure 5.1: Dimensions of the briidea HAPS-01DE-B Switching Station. The device measures approximately 19.3 cm in length, 8.9 cm in width, and 6.4 cm in height (excluding cable glands). These dimensions are crucial for planning installation space.

5.2 Electrical Connections

The switching station has three connection points: "Master", "Slave", and "Load".

1. **Connect the "Master" Input:** This input is typically connected to your preferred primary power source, such as the public mains supply (shore power) in a motorhome or a dedicated generator.
2. **Connect the "Slave" Input:** This input is typically connected to your secondary power source, such as an inverter.
3. **Connect the "Load" Output:** This output connects to the electrical distribution panel or directly to the appliances you wish to power.

Ensure all connections are secure and properly insulated. Use appropriate cable gauges for the current rating.

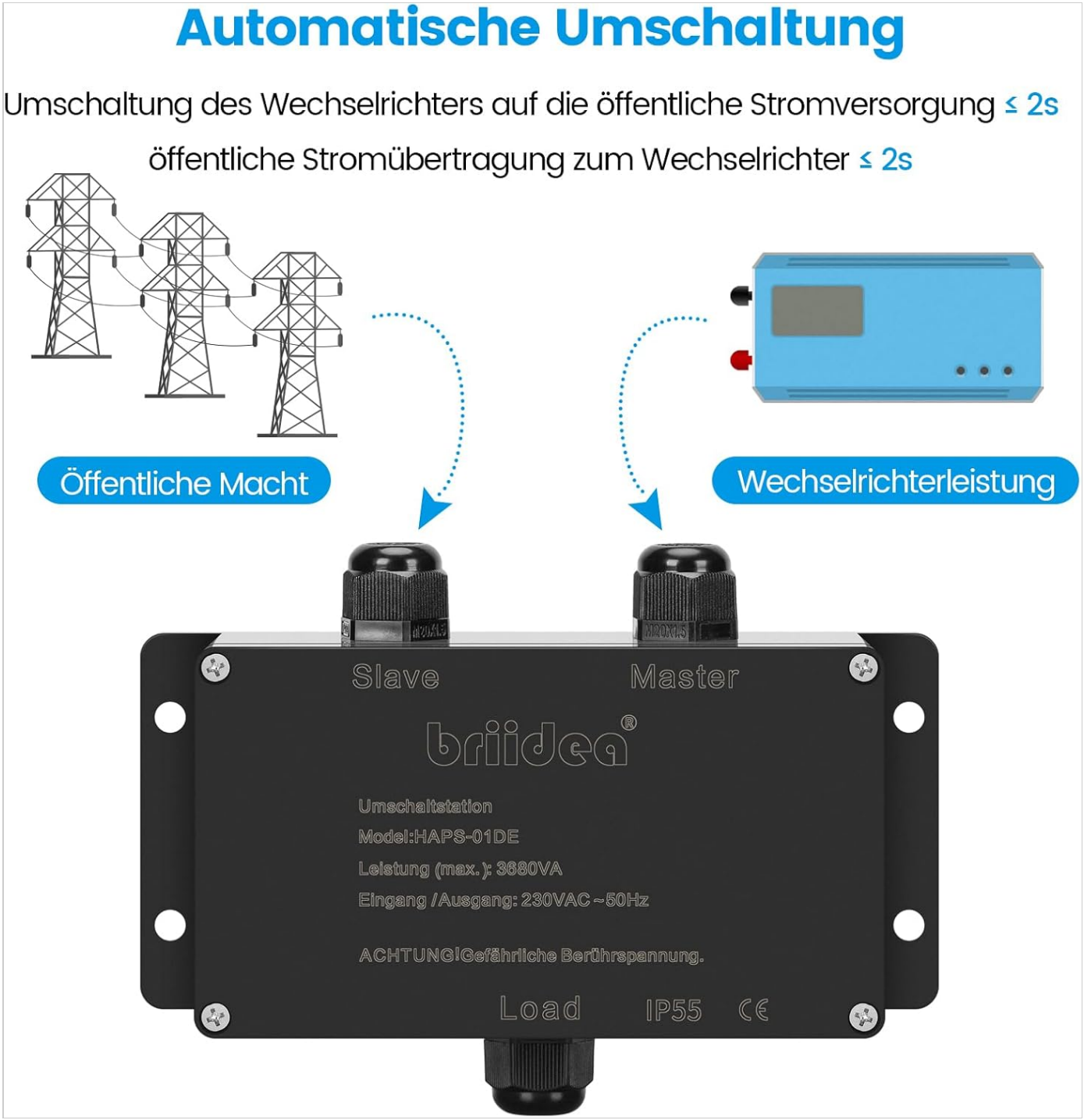


Figure 5.2: Diagram illustrating the automatic switching function. The "Master" input is shown connected to "Öffentliche Macht" (Public Power/Mains), and the "Slave" input to "Wechselrichterleistung" (Inverter Power). The device automatically selects between these two

sources to power the connected load.

Figure 5.3: The briidea HAPS-01DE-B Switching Station installed outdoors, demonstrating its IP55 weatherproof capability. Cables are securely connected via the glands, protecting internal components from environmental elements.

6. Operating Instructions

The briidea HAPS-01DE-B operates automatically once correctly installed and powered.

6.1 Automatic Switching Function

The device continuously monitors the availability of power from both the "Master" and "Slave" inputs. It is designed to switch between these sources to maintain power to the connected load.

- If the "Master" source is available, the device will prioritize it and supply power from the "Master" input to the load.
- If the "Master" source becomes unavailable (e.g., power failure), the device will automatically switch to the "Slave" source (if available) within approximately 2 seconds.
- If the "Master" source becomes available again, the device will switch back to the "Master" input.

6.2 Priority Selection (Master/Slave)

The device allows you to define which input is considered "Master" and which is "Slave" based on your wiring. The "Master" input will always be prioritized when both power sources are present. This flexibility allows you to configure the system according to your specific power management needs.

7. Specifications

Parameter	Value
Input Voltage	2 x AC220V-AC245V ~ (max. 16 A each)
Output Voltage	AC220V-AC245V max. 16A
Recommended Output Power (Ohmic Load)	Approx. 2800 VA
Recommended Output Power (Inductive Load)	Approx. 550 VA
Switching Time	≤ 2 seconds
Power Consumption (Master)	Approx. 1.8 watts
Power Consumption (Slave)	Approx. 1 watt
Operating Temperature	-20°C ~ 60°C
Protection Type	IP55
Dimensions (L x W x H)	19.5 x 14.2 x 7.2 cm (Package) / Approx. 19.3 x 8.9 x 6.4 cm (Device)
Weight	0.44 Kilograms
Model Number	br-047

Figure 7.1: Image displaying the safety certifications for the briidea HAPS-01DE-B Switching Station. It highlights VDE certification (116934), TÜV certification (R 50278579), and CE certification, indicating compliance with European safety standards.

8. Maintenance

The briidea HAPS-01DE-B Switching Station is designed for minimal maintenance. However, regular checks can ensure optimal performance and longevity.

- **Periodic Inspection:** Annually inspect the device and all electrical connections for any signs of wear, corrosion, or damage. Ensure cable glands are tight.
- **Cleaning:** If installed in a dusty environment, gently wipe the exterior of the device with a dry or slightly damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Environmental Protection:** While IP55 rated, ensure the device is not exposed to prolonged standing water or extreme conditions beyond its specified operating range.

Do not attempt to open or repair the device yourself. Refer all servicing to qualified personnel.

9. Troubleshooting

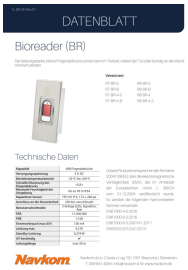
If you encounter issues with your briidea HAPS-01DE-B Switching Station, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power to load	◦ No power from Master or Slave input. ◦ Loose connection. ◦ Internal fault.	◦ Check both Master and Slave power sources. ◦ Verify all wiring connections are secure. ◦ Contact customer support if problem persists.
Device not switching automatically	◦ One power source is consistently present. ◦ Faulty input detection.	◦ Confirm both power sources are functioning and fluctuating as expected. ◦ Ensure correct wiring of Master/Slave inputs. ◦ Contact customer support.
Overload or tripping circuit breaker	◦ Connected load exceeds device capacity. ◦ Short circuit in load.	◦ Reduce the total load connected to the switching station. ◦ Check connected appliances for faults. ◦ Refer to specifications for maximum load.

10. Warranty and Support

briidea products are manufactured to high-quality standards and are guaranteed against manufacturing defects. Specific warranty terms and conditions are typically provided with your purchase documentation or can be found on the official briidea website.
For technical support, warranty claims, or further assistance, please contact your retailer or briidea customer service. Have your model number (HAPS-01DE-B or br-047) and purchase information ready when contacting support.
You can find more information and contact details on the briidea official website: www.briidea.com *(Placeholder URL, as no specific support link was provided)*

Related Documents - HAPS-01DE-B

	[Briidea HASS-05 AC Soft Starter User Manual] User manual for the Briidea HASS-05 AC Soft Starter, detailing its features, benefits, specifications, and installation guide. This soft starter is designed to reduce inrush current for AC motors, offering reverse motor protection and easy installation.
	[briidea HASS-05 AC Soft Starter User Manual and Installation Guide] Comprehensive user manual and installation guide for the briidea HASS-05 AC Soft Starter. Learn about its features, benefits, technical specifications, safety precautions, and step-by-step wiring and installation procedures for HVAC systems.
	[Bioreader (BR) Fingerabdruckscanner Datenblatt] Technisches Datenblatt für den Navkom Bioreader (BR) Fingerabdruckscanner. Enthält Spezifikationen, Abmessungen, Konformitätserklärungen und Montageinformationen.
	[Coachmen Galleria Class B RV: Your Guide to Success] Discover the Coachmen Galleria Class B motorhome, a comprehensive guide to its features, benefits, and specifications. Learn about the Mercedes-Benz Sprinter chassis, luxurious interior, advanced technology, and efficient systems designed for the ultimate RV experience.
	[2018 Motorhomes: New Models, Travel, and RV Lifestyle Guide] Discover the latest 2018 motorhome models, explore RV travel destinations, get tech tips, and learn about classic RVs. This guide from MotorHome Magazine covers new RV innovations, lifestyle features, and expert advice for enthusiasts.
	[Hörmann Промышленные Приводы: Обзор Запасных Частей] Обзор запасных частей для промышленных приводов Hörmann, включая серии WA 400, ITO 400, WA 300 S4, WA 100, WA 200, WA 80, ITO 80, ITS 80, и соответствующие блоки управления. Документ содержит схемы и перечни компонентов для промышленных секционных ворот.