

Wiltec 50622

Wiltec SK-9 Pressure Switch User Manual

Model: SK-9 (Part No. 50622)

INTRODUCTION

This user manual provides comprehensive instructions for the safe and efficient installation, operation, and maintenance of your Wiltec SK-9 Pressure Switch. This device is designed to automatically control water pumps in household water systems, ensuring reliable pressure regulation and protection against dry running. Please read this manual thoroughly before installation and operation to ensure proper function and longevity of the product.

PRODUCT OVERVIEW

The Wiltec SK-9 is a single-phase 230V pressure switch suitable for various pumping systems, including domestic waterworks and garden pumps. It features adjustable cut-in and cut-out pressures and includes a dry-run protection function to prevent pump damage.



Figure 1: Front-side view of the Wiltec SK-9 Pressure Switch.



Figure 2: Bottom view of the pressure switch, highlighting the water connection point.



Figure 3: Close-up of the pressure connection, showing the threaded inlet.

SAFETY INSTRUCTIONS

- Always disconnect power before installation, maintenance, or repair.
- Installation should be performed by a qualified electrician in accordance with local electrical codes.
- Ensure the voltage and current ratings of the switch match your pump and electrical supply.
- Do not operate the switch if it is damaged or has exposed wiring.
- Protect the device from moisture and extreme temperatures.
- The maximum water temperature for operation is 50°C.

SETUP AND INSTALLATION

The Wiltec SK-9 pressure switch is designed for easy integration into existing pump systems. Follow these steps for proper installation:

1. **Mounting:** Securely mount the pressure switch in a dry, protected location close to the pump or pressure tank. Ensure it is easily accessible for adjustments.
2. **Electrical Connection:**
 - Disconnect the main power supply to the pump system.
 - Open the electrical housing of the pressure switch.
 - Connect the incoming power supply (230V, 1-phase) to the designated terminals. This switch simultaneously switches both the phase and neutral conductors.
 - Connect the pump's power cable to the output terminals.
 - Ensure all connections are tight and properly insulated.
 - If your pump has a power rating exceeding 1.1 kW, it is recommended to install a standard power protection device or a suitable power relay.
3. **Water Connection:**
 - Connect the pressure switch to the water line, typically between the pump and the pressure tank (if applicable), or directly to the pump's discharge side.
 - Ensure a watertight seal using appropriate thread sealant. The connection is typically 1/4" NPT.

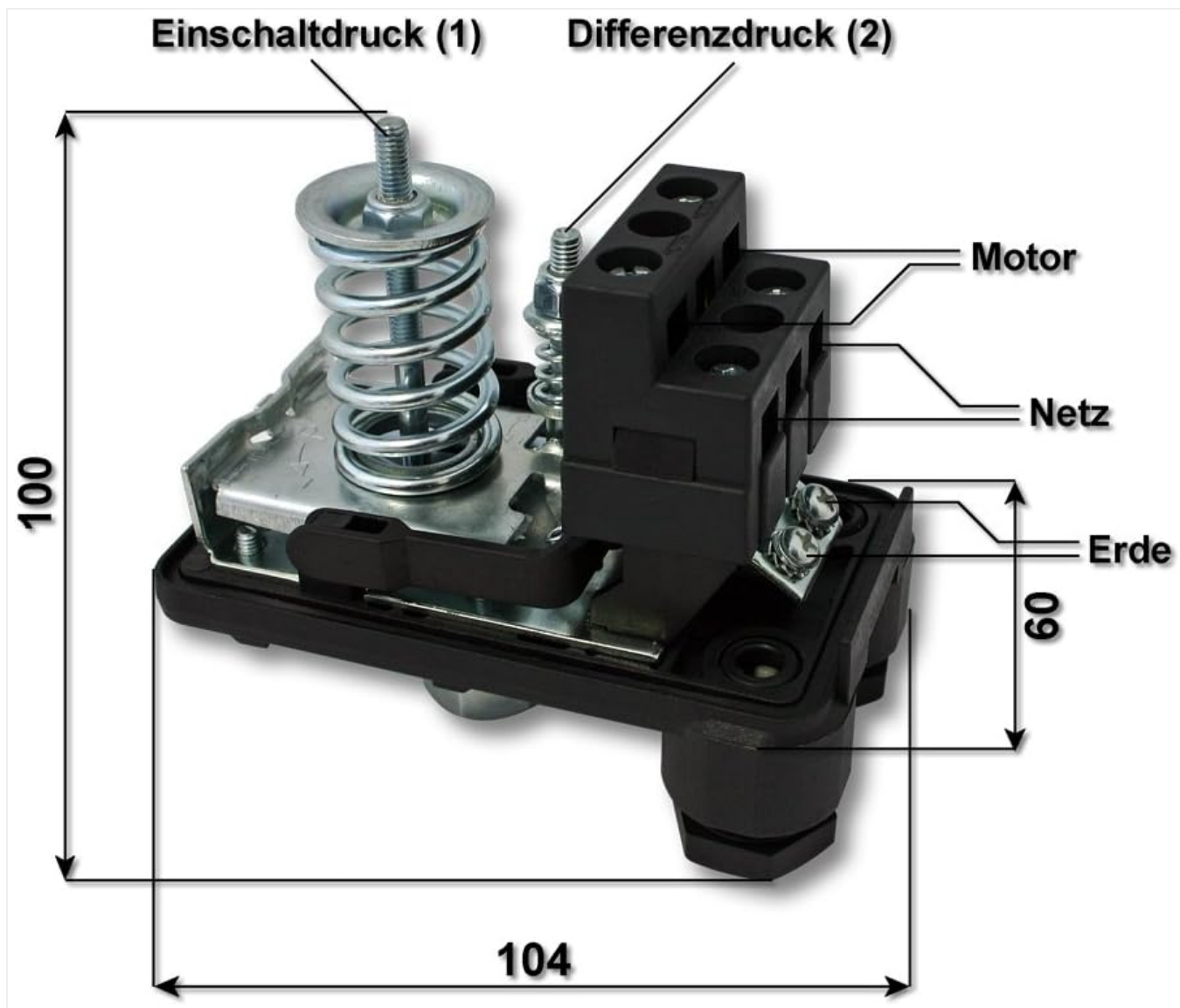


Figure 4: Internal components and connection points. (1) Cut-in pressure adjustment, (2) Differential pressure adjustment.

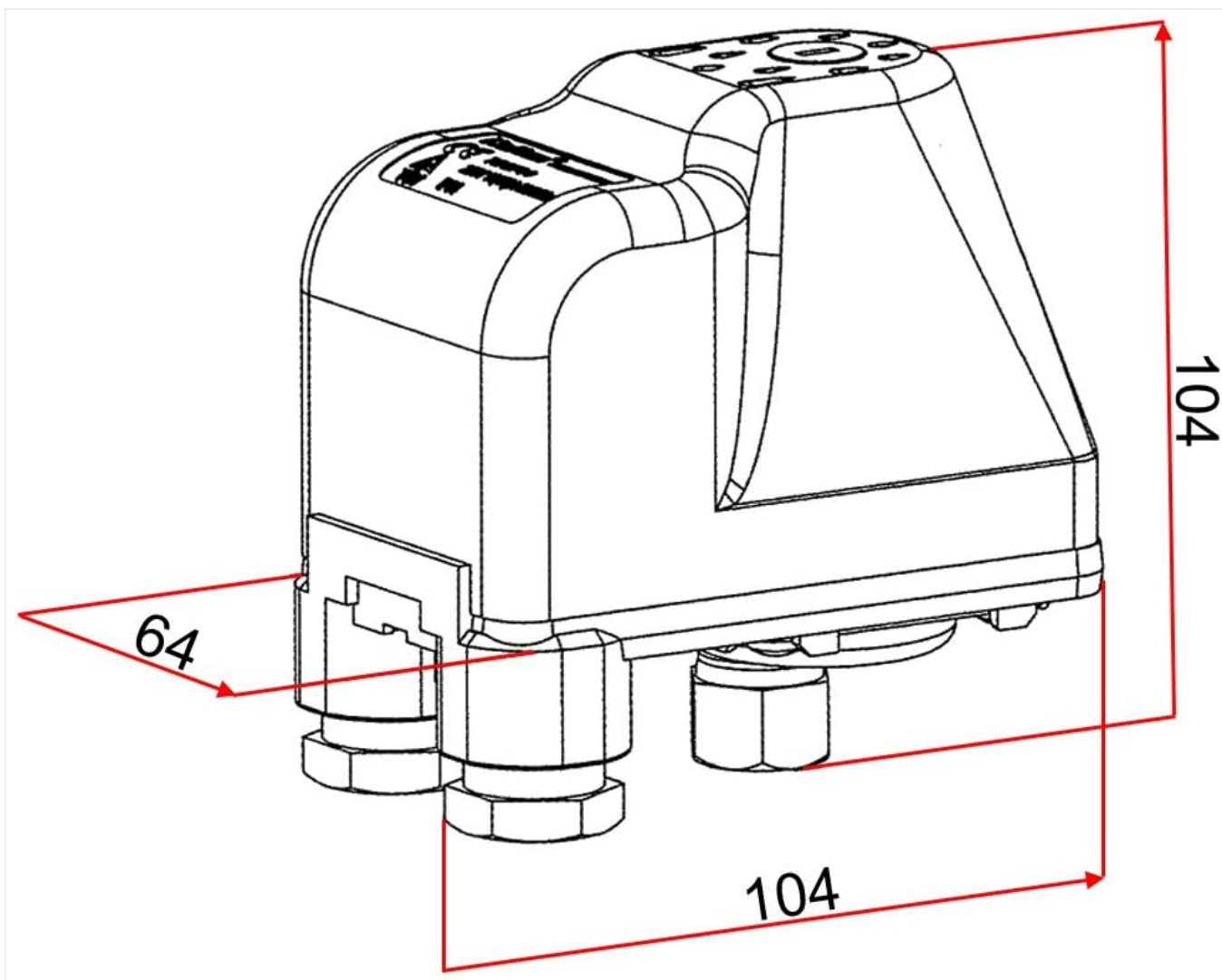


Figure 5: Product dimensions (approx. 104mm x 64mm x 104mm).

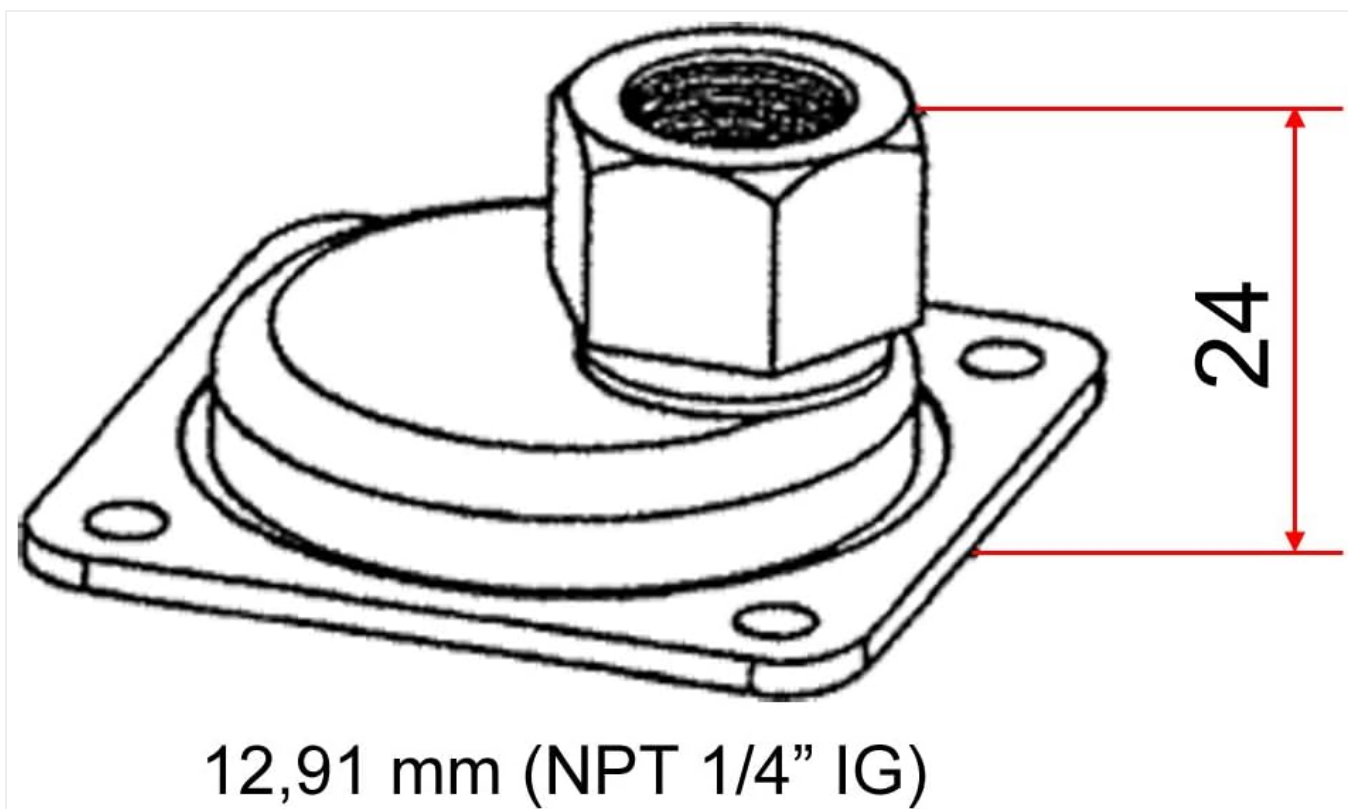


Figure 6: Detail of the 1/4" NPT internal thread connection.

OPERATING INSTRUCTIONS AND PRESSURE ADJUSTMENT

The Wiltec SK-9 automatically controls your pump based on the water pressure. Both the cut-in (switch-on) and cut-out (switch-off) pressures are continuously adjustable.

1. **Initial Setup:** After installation, ensure the system is filled with water and free of air.

2. **Adjusting Pressure:**

- The pressure switch has two adjustment points (refer to Figure 4):
 - **Cut-in Pressure (1):** This is the pressure at which the pump turns on. Adjust this using the main spring screw (1).
 - **Differential Pressure (2):** This is the difference between the cut-out and cut-in pressure. Adjust this using the smaller screw (2).
- To set the pressures:
 - a. Loosen the differential pressure nut (2).
 - b. Adjust the cut-in pressure (1) to your desired value. Turning clockwise increases pressure.
 - c. Tighten the differential pressure nut (2) until the desired cut-out pressure is reached. The cut-out pressure will be the cut-in pressure plus the differential pressure.
- The pump will switch on when the pressure drops below the set cut-in pressure and switch off when it reaches the set cut-out pressure.

3. **Dry-Run Protection:** The integrated dry-run protection feature will automatically shut off the pump if the water pressure drops too low, preventing damage to the pump from running without water.

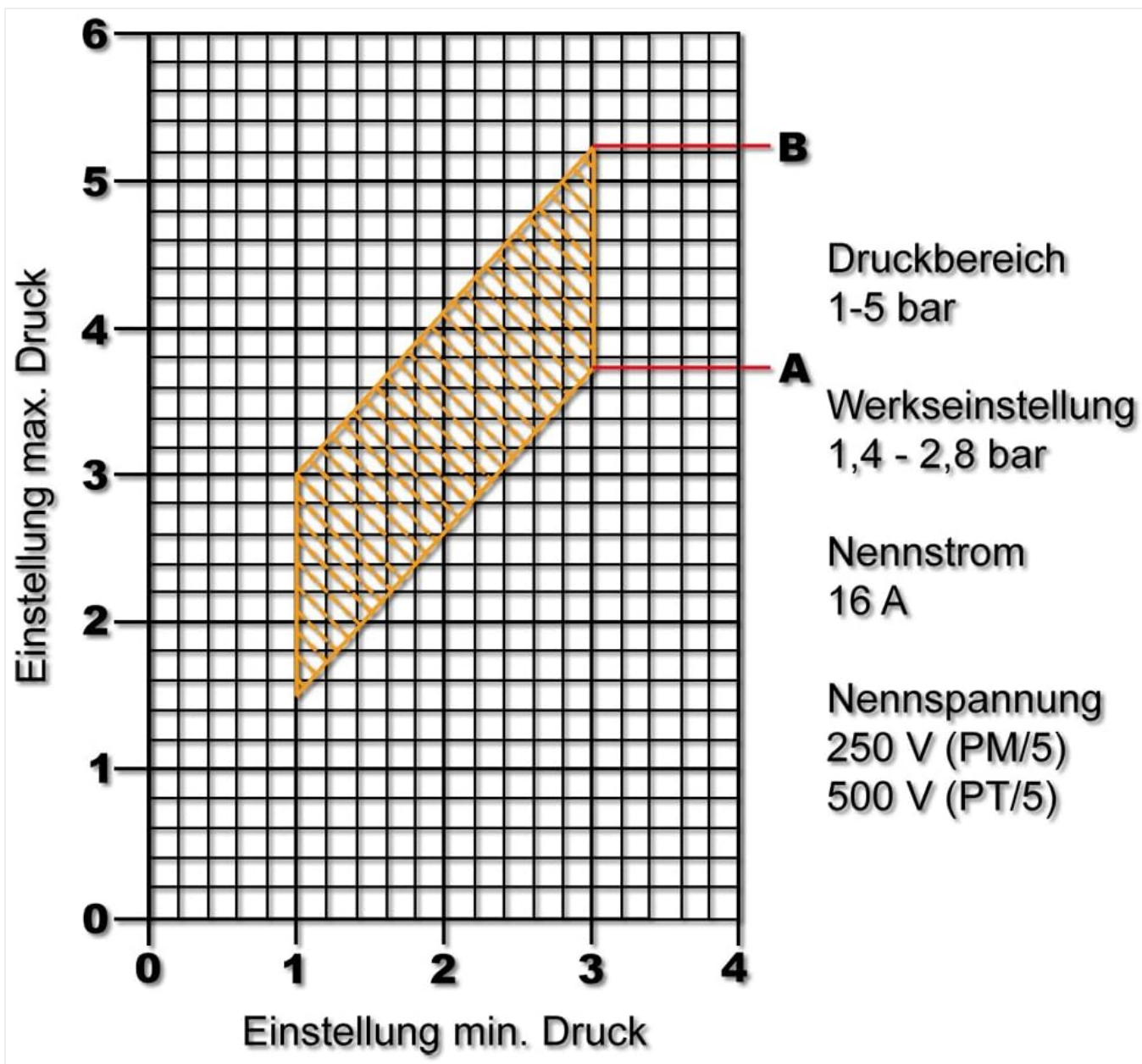


Figure 7: Pressure adjustment range. Factory setting: 1.4 - 2.8 bar. Pressure range: 1 - 5 bar. Rated current: 16A. Rated voltage: 250V (PM/5), 500V (PT/5).

MAINTENANCE

The Wiltec SK-9 Pressure Switch requires minimal maintenance. Regular checks can ensure optimal performance and extend its lifespan.

- **Regular Inspection:** Periodically check the switch for any signs of physical damage, corrosion, or loose connections.
- **Cleanliness:** Keep the exterior of the switch clean and free from dust and debris.
- **Pressure Verification:** Occasionally verify that the cut-in and cut-out pressures are still set correctly and that the pump is cycling as expected.
- **Winterization:** If the system is exposed to freezing temperatures, ensure the pressure switch and connected pipes are drained to prevent ice damage.

TROUBLESHOOTING

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
Pump does not start.	No power supply; Incorrect wiring; Pressure too high (above cut-in); Dry-run protection activated.	Check power connection and circuit breaker; Verify wiring according to instructions; Check system pressure, adjust cut-in pressure if necessary; Check water supply to pump.
Pump runs continuously.	System leak; Cut-out pressure not reached; Pressure switch faulty.	Check for leaks in the system; Adjust cut-out pressure; Replace pressure switch if faulty.
Pump cycles too frequently.	Small leak in system; Pressure tank issues (if applicable); Differential pressure too small.	Check for minor leaks; Inspect pressure tank (e.g., air charge); Increase differential pressure setting.
Dry-run protection activates prematurely.	Insufficient water supply to pump; Air in the system.	Ensure adequate water source; Bleed air from the pump and system.

SPECIFICATIONS

Feature	Detail
Model	SK-9
Part Number	50622
Voltage	230 V (1-phase)
Max. Current	10 A (up to 16 A for certain configurations, refer to graph)
Adjustable Cut-in Pressure	1.4 - 2.8 bar
Adjustable Cut-out Pressure	Up to 4.1 bar (max. operating pressure 6 bar)
Dry-Run Protection	Integrated
Max. Water Temperature	50 °C
Dimensions (L x W x H)	10.5 x 6.4 x 10.3 cm (approx. 104 x 64 x 104 mm)
Weight	380 g
Material	Metal, Plastic (Black)
Connection Thread	1/4" NPT Internal Thread






WARRANTY AND SUPPORT

Wiltec products are manufactured with high quality standards. For information regarding warranty terms and conditions, please refer to the documentation provided with your purchase or visit the official Wiltec website. For technical support or inquiries, please contact Wiltec customer service.

EU Spare Parts Availability: 2 Years

For further assistance, you may visit the [Wiltec Store on Amazon](#).

Related Documents - 50622

	<p>Manuale d'uso: Mini-incubatrice per 12 uova Wiltec 52016</p> <p>Scopri come utilizzare al meglio la tua mini-incubatrice Wiltec per 12 uova (modello 52016) con questo manuale d'uso completo. Include istruzioni dettagliate, consigli per l'incubazione e risoluzione problemi.</p>
	<p>Handleiding: 4-in-1 Tuingereedschap met 4-takt Motor (Model 64757)</p> <p>Gedetailleerde handleiding en veiligheidsinstructies voor het Wiltec 4-in-1 multifunctionele tuingereedschap met 4-takt motor (model 64757). Leer hoe u dit veelzijdige tuinapparaat veilig en effectief bedient, onderhoudt en opslaat.</p>
	<p>Wiltec 64756 2-in-1 Multi Gardening Tool Operating Instructions</p> <p>Comprehensive operating instructions for the Wiltec 64756 2-in-1 Multi Gardening Tool with a 2-stroke motor. Learn about safe operation, maintenance, and troubleshooting for your gardening equipment.</p>
	<p>Wiltec Parcel Box 64118 Operation Manual and Assembly Guide</p> <p>Comprehensive operation manual and assembly guide for the Wiltec Parcel Box model 64118. Includes parts overview, step-by-step assembly instructions, safety precautions, and contact information.</p>
	<p>WilTec Egg Incubator Article 50034 Operating Manual</p> <p>Comprehensive operating manual for the WilTec Egg Incubator, Article 50034. Provides instructions on setup, operation, temperature and humidity control, hatching phases for various poultry and reptiles, and disposal guidelines.</p>

Operating Instructions
Petrol Brushcutter with Wheels

wiltec



Please read carefully the operating instructions and safety information before using the product.
Consult the user manual.
Responsible for the design and development of the product: Wiltec (UK) Ltd.

[Wiltec Petrol Brushcutter with Wheels Operating Instructions and Safety Guide](#)

Comprehensive operating instructions and safety guide for the Wiltec Petrol Brushcutter with Wheels (Model 64746). Covers proper use, maintenance, troubleshooting, and safety precautions for safe and effective operation.