

## Rittal 3383500

# Rittal Top Therm Roof Mounted Air Conditioner - Model 3383500 User Manual

Comprehensive guide for installation, operation, and maintenance.

## 1. PRODUCT OVERVIEW

The Rittal 3383500 Top Therm Roof Mounted Air Conditioner is designed for efficient cooling of industrial enclosures. Featuring a comfort controller, this unit provides reliable temperature management for sensitive equipment. It is built for durability and ease of installation, offering a robust solution for thermal management.

### Key Features:

- Fully wired ready for connection, including drilling templates and assembly hardware.
- Equipped with a nano-coated condenser coil and integrated condensate evaporator.
- Operates on 230 Volt power supply with 50/60 Hertz operating frequency.
- Compact dimensions: 23-1/2" width x 16-21/64" height x 18-11/16" depth.
- Ratings: IP 54, NEMA 12.
- Cooling Capacity: 3688 BTU at 60Hz.



Figure 1: Front view of the Rittal 3383500 Top Therm Roof Mounted Air Conditioner, showcasing its light grey finish and front grille.

## 2. SETUP AND INSTALLATION

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Before beginning installation, ensure the power supply is disconnected. This unit is designed for roof mounting on industrial enclosures.

### 2.1 Pre-Installation Checks:

- Verify the enclosure roof can support the unit's weight (approximately 92.5 lbs).
- Confirm power supply matches unit requirements (230V, 50/60Hz).
- Ensure adequate clearance around the unit for proper airflow and maintenance.

### 2.2 Mounting Instructions:

1. Use the provided drilling templates to mark and cut the necessary openings on the enclosure roof.
2. Carefully position the air conditioner unit over the openings.
3. Secure the unit using the supplied assembly hardware. Ensure all fasteners are tightened to prevent vibration and maintain

the IP/NEMA rating.

## 2.3 Electrical Connection:

- The unit is fully wired ready for connection. Connect the power supply to the plug-in terminal strip.
- Ensure proper grounding according to local electrical codes.
- Recommended pre-fuse: T 10.0 A.

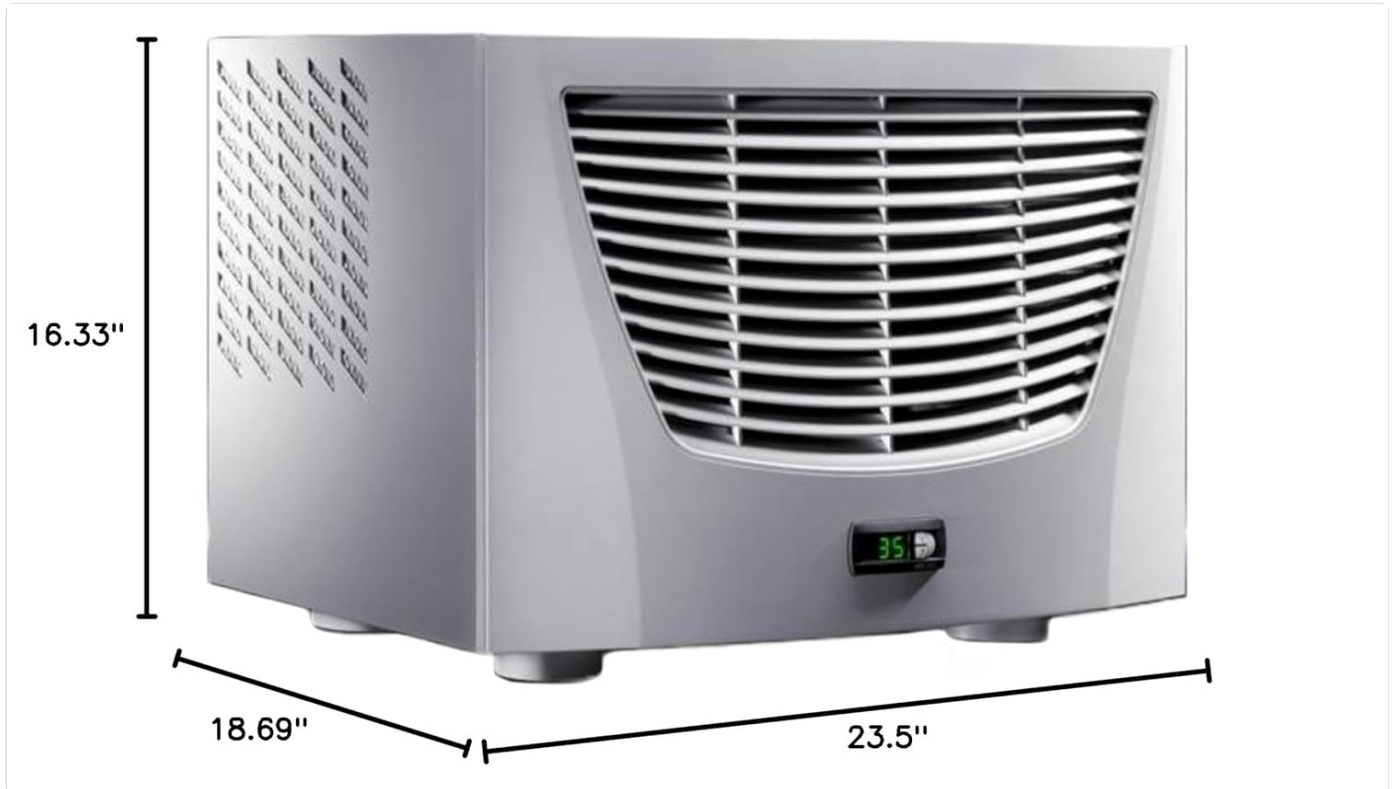


Figure 2: Dimensional drawing of the Rittal 3383500 unit, showing its width (23.5"), height (16.33"), and depth (18.69").

## 3. OPERATING INSTRUCTIONS

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The Rittal 3383500 features a comfort controller for easy temperature management.

### 3.1 Initial Power-Up:

1. After installation and electrical connection, restore power to the unit.
2. The comfort controller display will illuminate.

### 3.2 Setting Temperature:

- The factory setting for the comfort controller is 95°F (35°C).
- The temperature setting range is 68°F to 131°F (20°C to 55°C).
- Refer to the comfort controller's specific manual (if provided separately) for detailed instructions on adjusting the setpoint. Generally, buttons on the controller allow for increasing or decreasing the desired temperature.

### 3.3 Operation Modes:

The unit operates automatically to maintain the set temperature within the enclosure. It will cycle on and off as needed to achieve optimal cooling.

## 4. MAINTENANCE

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Regular maintenance ensures optimal performance and extends the lifespan of your Rittal air conditioner. Always disconnect power before performing any maintenance.

4.1 Filter Cleaning/Replacement:

- Inspect air filters regularly (e.g., monthly or quarterly, depending on environment).
- Clean filters using compressed air or mild detergent and water. Ensure they are completely dry before reinstallation.
- Replace filters if they are damaged or cannot be adequately cleaned.

4.2 Condenser Coil Cleaning:

- The unit features a nano-coated condenser coil, which helps reduce dirt buildup. However, periodic inspection and cleaning are still recommended.
- Gently clean the condenser coil fins with a soft brush or vacuum cleaner to remove dust and debris. Avoid bending the fins.

4.3 Condensate Evaporator:

- The integrated condensate evaporator manages condensation. Periodically check for any blockages or excessive water accumulation.

4.4 General Inspection:

- Check all electrical connections for tightness and signs of wear.
- Inspect the unit for any physical damage or corrosion.
- Ensure proper sealing between the unit and the enclosure to maintain environmental ratings.

5. TROUBLESHOOTING

This section provides solutions to common issues. For problems not listed here, contact Rittal customer support.

Problem	Possible Cause	Solution
Unit does not power on.	No power supply; Blown fuse/circuit breaker; Loose electrical connection.	Check power source; Inspect and replace fuse/reset breaker; Verify all connections are secure.
Unit runs but does not cool effectively.	Dirty air filters; Blocked condenser coil; Incorrect temperature setting; Refrigerant leak (less common).	Clean or replace air filters; Clean condenser coil; Adjust temperature setting; Contact qualified technician for refrigerant issues.
Unusual noise during operation.	Loose components; Fan obstruction; Motor issue.	Inspect for loose parts and tighten; Clear any obstructions from fans; If noise persists, contact support.
Water leaking from unit.	Blocked condensate drain/evaporator.	Inspect and clear any blockages in the condensate system.

6. SPECIFICATIONS

Parameter	Value
Model Number	3383500

Parameter	Value
Brand	Rittal
Dimensions (W x H x D)	23-1/2" x 16-21/64" x 18-11/16" (59.7 cm x 41.5 cm x 47.5 cm)
Weight	92.5 Pounds (42 kg)
Voltage	230 V
Frequency	50/60 Hz
Rated Current	4.3 A (50Hz) / 4.5 A (60Hz)
Starting Current	15.5 A
Pre-fuse	T 10.0 A
Cooling Capacity (L35 L35)	1000 W (3415 BTU) / 1080 W (3688 BTU)
Power Consumption (L35 L35)	550 W (50Hz) / 650 W (60Hz)
Refrigerant	R134a, 17.6 oz
Temperature Range	68°F to 131°F (20°C to 55°C)
Protection Rating (External)	IP 34 (NEMA 2)
Protection Rating (Internal)	IP 54 (NEMA 12)
Air Displacement (External)	1036 cfm
Air Displacement (Internal)	259 cfm

## 7. WARRANTY AND SUPPORT

For specific warranty information regarding your Rittal 3383500 air conditioner, please refer to the documentation provided with your purchase or contact Rittal directly. Rittal products typically come with a manufacturer's warranty covering defects in materials and workmanship.

### Customer Support:

If you require technical assistance, have questions about operation, or need to arrange service, please contact Rittal customer support. You can often find contact information on the Rittal official website or through your product distributor.

For general inquiries, you may visit the [Rittal Store on Amazon](#).

 <p>Assembly and installation instructions</p>	<p><a href="#">Rittal Roof-Mounted Fan Installation and Operation Manual</a></p> <p>Comprehensive guide for the installation, operation, and maintenance of Rittal roof-mounted fans, including safety instructions, technical specifications, and accessories.</p>
 <p>Montage- und Bedienungsanleitung Assembly and operating instructions Notice de montage et d'usage</p>	<p><a href="#">Rittal Wall-Mounted Enclosures AX, 3-Part: Assembly and Operating Instructions</a></p> <p>Comprehensive assembly and operating instructions for Rittal's Wall-mounted Enclosures AX, 3-part series. Covers safety, product description, installation, maintenance, and technical specifications.</p>
 <p>Assembly and operating instructions</p>	<p><a href="#">Rittal Speed Control EC 3235.460: Assembly and Operating Instructions</a></p> <p>Official assembly and operating instructions for the Rittal Speed Control EC unit (Model 3235.460). Covers application, safety, functional description, electrical connection, technical data, and warranty for Rittal enclosure climate control systems.</p>
 <p>Assembly and operating instructions</p>	<p><a href="#">Rittal Blue e+ Chiller: Assembly and Operating Instructions for Cooling Media</a></p> <p>Comprehensive assembly and operating manual for Rittal Blue e+ chillers (SK 3320200, SK 3334300, SK 3334400, SK 3334307, SK 3334407). Covers installation, commissioning, operation, maintenance, and troubleshooting for efficient cooling media management.</p>
 <p>Instrucciones de montaje, instalación y operación</p>	<p><a href="#">Rittal Blue e+ Refrigeradores para Armarios de Distribución: Manual de Instalación y Operación</a></p> <p>Manual de Rittal que detalla el montaje, instalación y operación de los refrigeradores Blue e+ para armarios de distribución (modelos SK 3178800 a SK 3184840), incluyendo seguridad, especificaciones y mantenimiento.</p>
 <p>Assembly instructions</p>	<p><a href="#">Rittal Air/Water Heat Exchangers: SK Series Technical Data and Assembly Guide</a></p> <p>A comprehensive guide to Rittal's SK series air/water heat exchangers, detailing technical specifications, assembly instructions, safety guidelines, water quality requirements, and maintenance information.</p>

