

Rittal 3239110

Rittal TopTherm Filter Fan User Manual

MODEL: 3239110

1. Product Overview

The Rittal TopTherm Filter Fan, model 3239110, is designed for efficient ventilation and cooling within industrial enclosures. This light grey unit features a diagonal fan technology that ensures greater pressure stability and constant airflow, even with a contaminated filter mat. Its design prioritizes ease of installation and maintenance, requiring no tools for mounting or filter mat replacement.

Key features include:

- UL type 12; 50/60 hertz compatibility.
- Self-starting shaded pole motor diagonal fan for optimized airflow.
- Efficient power consumption at 19 W/18 W.
- Operates on 115 Volts.
- Tool-less installation and filter mat replacement.



Figure 1: Front view of the Rittal TopTherm Filter Fan (Model 3239110).

2. Safety Instructions

Please read and understand all safety instructions before installing, operating, or performing maintenance on the Rittal TopTherm Filter Fan. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure power is disconnected from the enclosure before any installation or maintenance work. Only qualified personnel should perform electrical connections.
- **Installation:** Use appropriate personal protective equipment (PPE) during installation. Ensure the mounting surface is stable and capable of supporting the fan's weight.
- **Operation:** Do not obstruct the fan's airflow. Keep hands and foreign objects away from moving parts during operation.
- **Maintenance:** Always disconnect power before cleaning or replacing the filter mat.
- **Environment:** Operate the fan within its specified temperature range (-5°F to 131°F).

3. Installation Guide

The Rittal TopTherm Filter Fan is designed for quick and easy installation without the need for special tools.

1. **Preparation:** Ensure the mounting surface on the enclosure is clean and free of obstructions. Use the provided drilling template to mark the mounting holes accurately.
2. **Mounting:** Insert the filter fan into the prepared opening. The fan is designed for tool-less mounting, typically involving clips or a snap-in mechanism that secures it firmly to the enclosure wall.

3. **Airflow Direction:** The airflow direction can be easily reversed by simply rotating the fan motor. This allows for flexible installation as either an intake or exhaust fan.
4. **Electrical Connection:** Connect the fan to a 115V power supply. Ensure all electrical connections comply with local codes and standards. The fan uses a 3-Pin power connector type.



Figure 2: Dimensions of the Rittal TopTherm Filter Fan (8.03"L x 4.49"W x 8.03"H).

4. Operation

Once properly installed and connected to power, the Rittal TopTherm Filter Fan operates automatically to provide ventilation. The diagonal fan technology ensures a consistent airflow even if the filter mat accumulates some dust, maintaining optimal cooling performance for your enclosure.

The fan is designed for continuous operation within its specified environmental conditions. Monitor the enclosure temperature to ensure adequate cooling is being provided.

5. Maintenance

Regular maintenance of your Rittal TopTherm Filter Fan is crucial for ensuring its longevity and optimal performance. The

primary maintenance task is the replacement of the filter mat.

- 1. **Filter Mat Replacement:** The filter mat should be replaced periodically, depending on the dustiness of the environment. The replacement process is tool-less and straightforward. Simply open the fan cover, remove the old filter mat, and insert a new one.
- 2. **Cleaning:** Periodically inspect the fan blades and housing for dust accumulation. If necessary, gently clean with a soft brush or compressed air after disconnecting power.

Note: Always use genuine Rittal replacement filter mats to ensure proper filtration and airflow.

6. Troubleshooting

This section provides solutions to common issues you might encounter with your Rittal TopTherm Filter Fan.

Problem	Possible Cause	Solution
Fan not running	No power supply; Loose electrical connection; Fan motor failure.	Check power source and circuit breaker. Verify all electrical connections are secure. If problem persists, contact support.
Reduced airflow	Clogged filter mat; Obstruction in airflow path; Fan motor issues.	Replace the filter mat. Remove any obstructions from the intake or exhaust. If airflow remains low, contact support.
Unusual noise	Loose components; Fan blade obstruction; Motor bearing wear.	Inspect for loose parts or foreign objects. Disconnect power and check fan blades for damage. If noise persists, contact support.

7. Technical Specifications

Specification	Value
Model Number	3239110
Dimensions (L x W x H)	8.03" x 4.49" x 8.03" (20.4 cm x 11.4 cm x 20.4 cm)
Voltage	115 Volts
Rated Current	0.24 A / 0.22 A
Power Consumption	19 W / 18 W
Air Flow Capacity (unimpeded)	71 CFM (120 m³/h)
Noise Level	46 / 49 dB (A)
Operating Temperature	-5°F to 131°F (-20°C to 55°C)
NEMA / IP Rating	IP 54 (NEMA 12) standard; IP 55 with fine filter mat; IP 56 (NEMA 4/4X) with hose-proof hood
Manufacturer	Rittal Corporation
Country of Origin	China





8. Warranty and Support



Rittal products are manufactured to high quality standards. For specific warranty information regarding your Rittal TopTherm Filter Fan (Model 3239110), please refer to the documentation included with your purchase or visit the official Rittal website.

For technical support, spare parts, or further assistance, please contact Rittal customer service or visit their official brand store:

[Rittal Official Brand Store on Amazon](#)

Related Documents - 3239110

	<p>Rittal Speed Control EC 3235.460: Assembly and Operating Instructions</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>Rittal Speed Control EC 3235.460 Assembly and Operating Instructions</p> <p>Assembly and operating instructions for the Rittal Speed Control EC 3235.460, a microprocessor-controlled thermostat for regulating enclosure internal temperature via EC fan-and-filter units. Includes technical data, safety information, and electrical connections.</p>
	<p>Rittal Blue e+ Refrigeradores para Armarios de Distribución: Manual de Instalación y Operación</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>Rittal One-Piece Consoles: Assembly and Operating Instructions</p> <p>Comprehensive assembly and operating instructions for Rittal's one-piece consoles (TP series), covering safety, installation, maintenance, and technical specifications. Includes guidance for various models like TP 6746.600, TP 6748.600, TP 6740.600, and TP 6742.600.</p>

	<p>Rittal RiTherm Manual: Climate Control Planning Software</p> <p>A comprehensive manual for Rittal RiTherm, a free software tool for enclosure climate control planning, including features for energy-efficiency calculation, CO2 footprint analysis, and F-gas information.</p>
	<p>Rittal SK 3114.200 Digital Enclosure Internal Temperature Display and Thermostat</p> <p>Technical specifications and features of the Rittal SK 3114.200, a digital enclosure internal temperature display and thermostat with a three-digit, 7-segment display, NTC sensor, and two relay outputs. Includes operating temperature, setting range, and voltage information.</p>