

Ballmers 1200-3633-010312

Ballmers RG148/1200-3633-010312 Blower Cooling Fan Instruction Manual

1. INTRODUCTION

This manual provides essential information for the safe and efficient installation, operation, and maintenance of the Ballmers RG148/1200-3633-010312 Blower Cooling Fan. Please read this manual thoroughly before using the product and retain it for future reference.

The Ballmers RG148/1200-3633-010312 Blower Cooling Fan is designed for various applications requiring efficient air movement. It features a compact design, low noise operation, adjustable speed, and is built for continuous use, making it suitable for both home and small studio environments.

2. SAFETY INFORMATION

- Ensure the power supply matches the fan's rated voltage before connection.
- Disconnect power before any installation, maintenance, or cleaning procedures.
- Do not operate the fan if any part is damaged.
- Keep hands and foreign objects away from moving parts during operation.
- Install the fan in a well-ventilated area, free from obstructions to airflow.
- This product is intended for use by qualified personnel or under their direct supervision.

3. PRODUCT OVERVIEW

The Ballmers RG148/1200-3633-010312 Blower Cooling Fan is engineered for reliability and performance. It is a direct replacement for part numbers RG148, 1200-3633-010312, and 1200-3633-010312-108.

Key Features:

- **High Quality Construction:** Manufactured from heat-treated high-quality alloy steel, ensuring durability, wear resistance, and corrosion resistance for a long service life.
- **Stable Performance:** Designed for high reliability and consistent operation.
- **Compact and Quiet:** Small footprint with low operational noise, suitable for various environments.

- **Adjustable Speed:** Allows for flexible control over airflow.
- **Continuous Operation:** Capable of running 24 hours a day with low power consumption.



Figure 3.1: Front view of the Ballmers RG148/1200-3633-010312 Blower Cooling Fan, highlighting its robust construction.



Figure 3.2: Close-up views of the fan's internal components, showcasing craftsmanship and durable materials.

4. SPECIFICATIONS

General Specifications:

Attribute	Value
Brand	Ballmers
Model Number	1200-3633-010312
Material	Alloy Steel
Cooling Method	Forced Air
Compatible Devices	Inverter
Item Weight	5.7 pounds

Attribute	Value
Package Dimensions	9.17 x 8.78 x 7.17 inches

Electrical Parameters:

Parameter	Value
Rated Voltage	115-120V
Frequency	50/60Hz
Rated Voltage Range	200~277V
Power Input	300W ±10%
Max Speed	9500 ±5% RPM
Airflow	250/147 CFM
Input Current	2.5A
Max Static Pressure	4100 ±5% PA
Power Connector Type	5-Pin
Motor	DC brushless motor
Insulation Class	Class B
Motor Protection	Locked rotor protection & Current-limiting protection, Soft start & Automatic restart capability
Speed Control	PWM Input
Signal Output	FG (Frequency Generator)
Type of Protection	IP20
Operation Mode	S1
Direction of Air Flow	Outlet
Direction of Rotation	Counterclockwise, seen on impeller
Dielectric Strength	3mA max. at 1500VAC 50Hz/s between frame and (+) terminal
EMC	EN55011 and EN50082-2

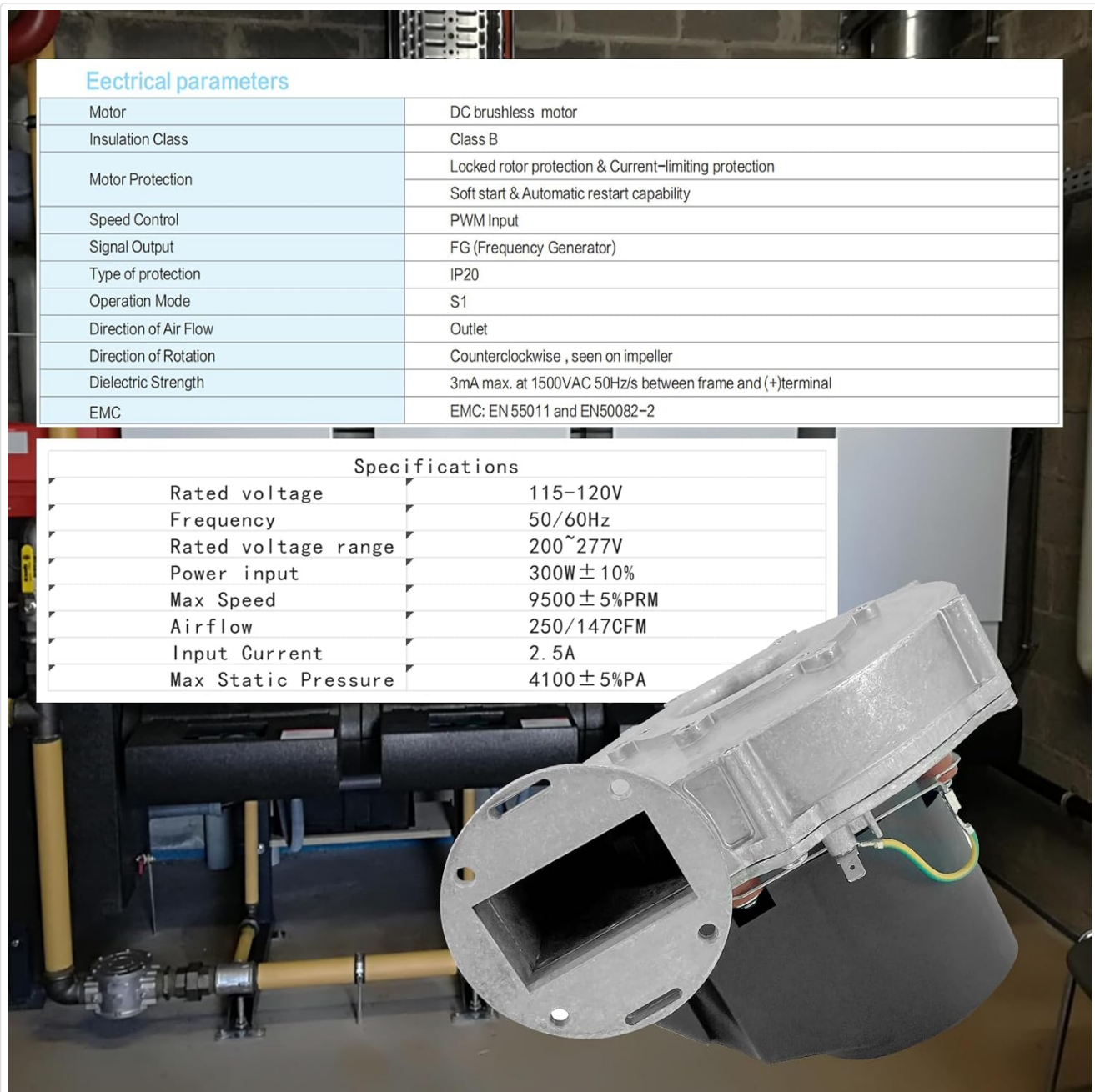


Figure 4.1: Detailed electrical parameters of the blower cooling fan.

Physical Parameters:

Parameter	Value
Dimension	Ø148mm
Material of Impeller	Pom anti-static & fire resistant plastic
Material of Housing	Aluminum die casting
Material of Electronics Cover	PA66+GF30 fibreglass-reinforced plastic
Mounting Position	Shaft horizontal or rotor on top
Bearing System	NMB maintenance-free ball bearing
Life time	20000 hours (L10) at 5000rpm, 25°C room

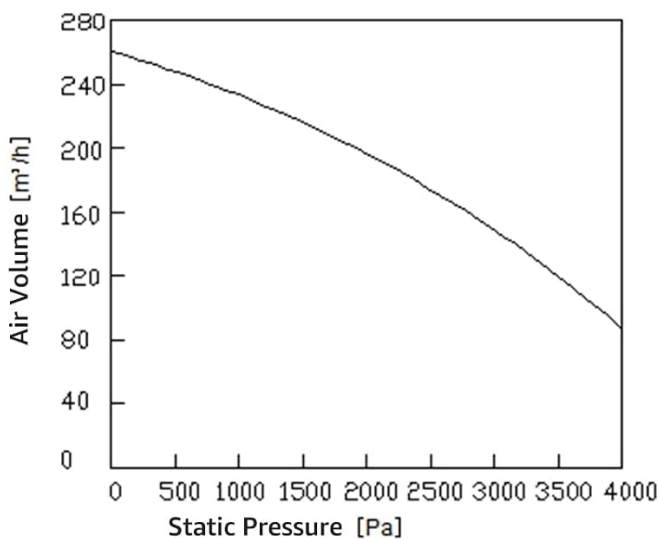
Parameter	Value
Terminal	Molex Mini-Fit Jr 39-30-3055 (Controls), RAST5 (Mains)
Lead Wire	AWG#22 UL1007 (Controls), AWG#18 UL1007 (Mains)
Operating / Storing temp.	0°C to +70°C / -25°C to +80°C
Operating / Storing humidity	0% to 95% RH
Max air temp. inside	0°C to +70°C
Approval	CE, and RoHS compliance
Shock Test	Apply peak acceleration 150m/s ² for 11ms / 150m/s ² /11ms
Vibration Test	Displacement amplitude 1.5mm Equivalent 10G. Freq range 10Hz~55Hz/30s. 1.5mm, 10Hz~55Hz/30s
Drop Test	In min packaging, three faces from 76cm distance height onto 10mm thickness of wooden board
Balance Test	≤30mg@2500rpm
Warranty	12 months after delivery



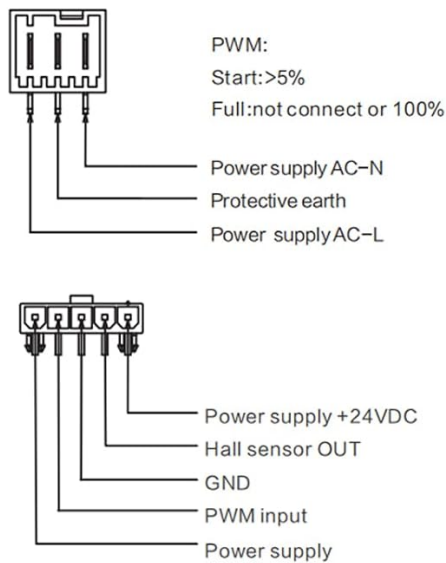
Figure 4.2: Detailed physical parameters and environmental ratings of the blower cooling fan.

Performance Curve and Wiring Diagram:

Blower Cooling Fan Performance Curve:



Wire Diagram:



Voltage	Freq.	Input Power	Current	Speed	Air Flow	Static Pressure
(V)	(Hz)	(W)	(A)	(PWM)	(m³/h)	(Pa)
230	50	297	2.33	7382	249.5	0
230	50	296	2.28	7519	229.9	500
230	50	294	2.27	7663	211.3	1000
230	50	293	2.35	7820	193.3	1500
230	50	288	2.25	8037	176.2	2000
230	50	279	2.18	8304	156.1	2500
230	50	272	2.16	8565	134.8	3000
230	50	255	2.0	8877	106.2	3500
230	50	246	1.96	9321	81.2	4000

Figure 4.3: Air volume vs. static pressure performance curve and electrical wiring diagrams for the fan.

Dimensional Drawing:

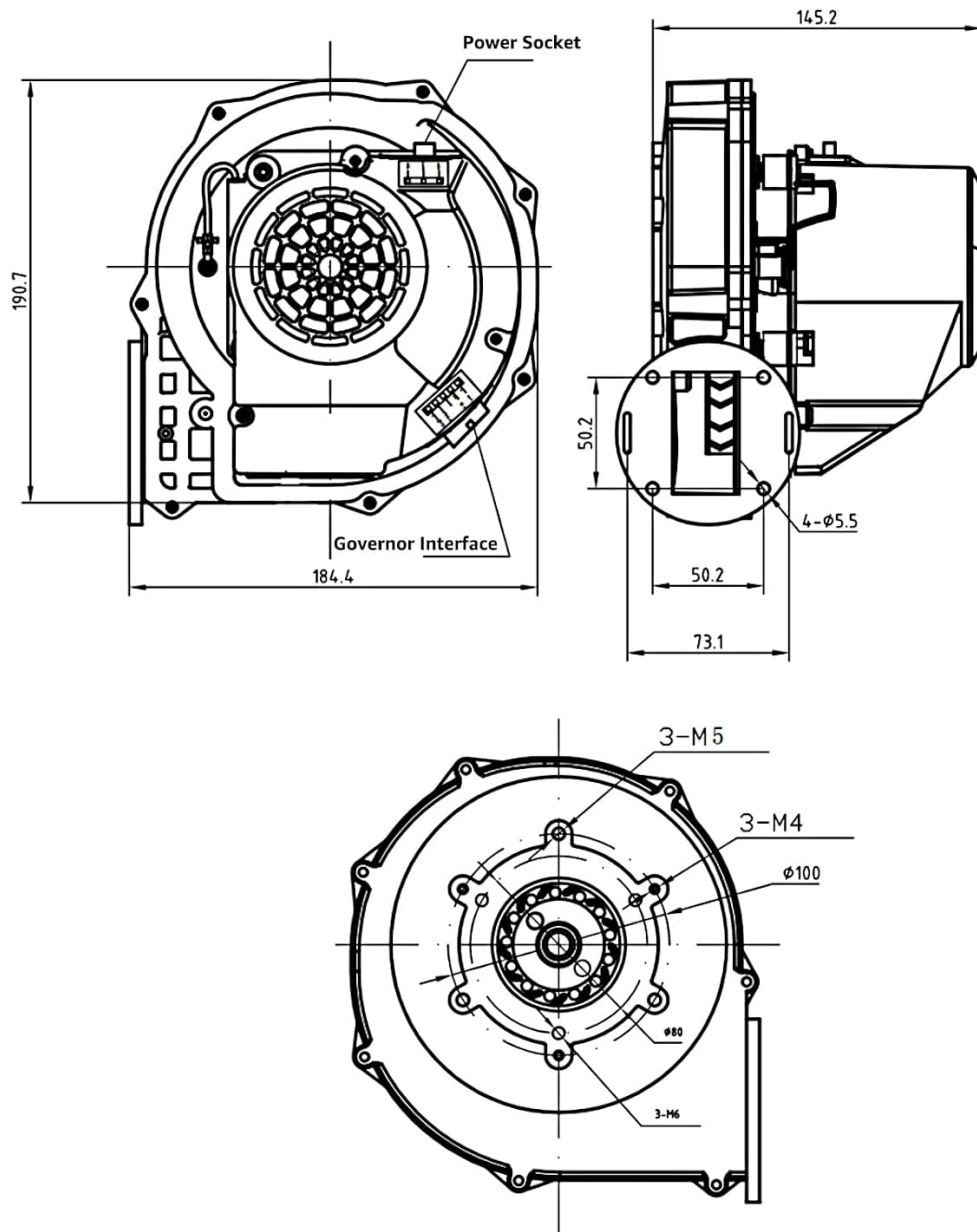


Figure 4.4: Technical drawing showing the dimensions and mounting points of the blower cooling fan.

5. INSTALLATION

The Ballmers RG148/1200-3633-010312 Blower Cooling Fan is designed for easy installation, often serving as a direct replacement for existing units. No complicated tools are typically required.

Installation Steps:

1. **Preparation:** Ensure the power supply to the area where the fan will be installed is completely disconnected.
2. **Mounting:** Secure the fan to the desired mounting surface using appropriate fasteners. Refer to the dimensional drawing (Figure 4.4) for mounting hole locations.
3. **Wiring:** Connect the fan's wires to the power supply according to the wiring diagram (Figure 4.3). Ensure all connections are secure and insulated.
4. **Verification:** Double-check all connections and mounting security before restoring power.

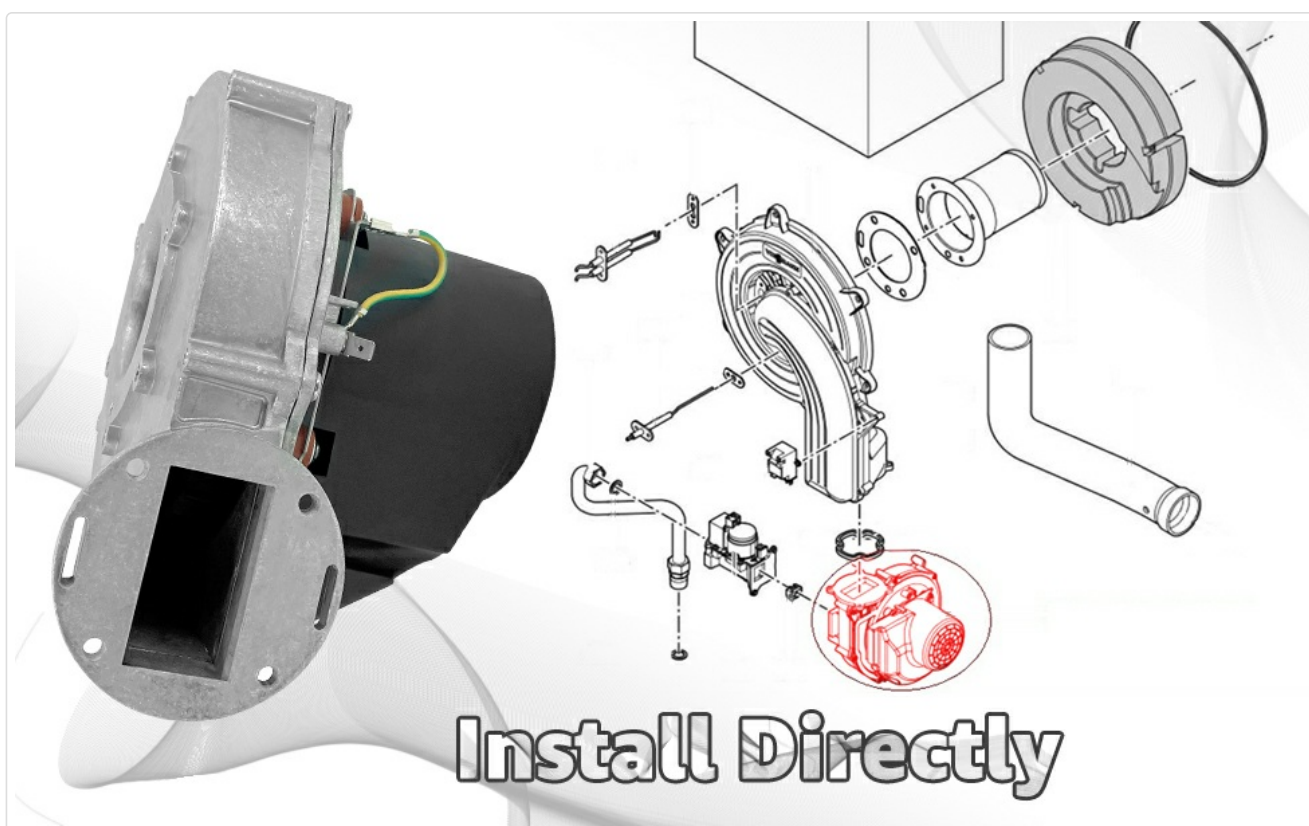


Figure 5.1: Illustration of the direct installation process for the blower cooling fan.

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Video 5.1: A detailed demonstration of the Ballmers RG148/1200-3633-010312 Blower Cooling Fan, showing its various angles and components, which can assist in understanding the installation process.

6. OPERATION

Once properly installed and connected to the power supply, the blower cooling fan is ready for operation. The fan is designed for continuous duty and can operate 24 hours a day.

- **Power On:** Restore power to the circuit. The fan should begin operating.
- **Speed Adjustment:** If your system supports PWM input, the fan speed can be adjusted accordingly. Refer to your system's control documentation for details on PWM signal generation.
- **Monitoring:** Periodically check the fan for proper operation, ensuring consistent airflow and minimal noise.

7. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Ballmers Blower Cooling Fan.

- **Cleaning:** Periodically clean the fan blades and housing to prevent dust and debris buildup, which can impede airflow and reduce efficiency. Disconnect power before cleaning.
- **Inspection:** Regularly inspect the fan for any signs of wear, damage, or loose connections.
- **Bearing System:** The NMB maintenance-free ball bearing system requires no lubrication.
- **Environmental Conditions:** Ensure the fan operates within the specified temperature and humidity ranges to prevent premature wear.

8. TROUBLESHOOTING

If you encounter issues with your blower cooling fan, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Fan does not start	No power, incorrect wiring, damaged motor	Check power supply, verify wiring connections, inspect for damage.
Reduced airflow	Dust/debris buildup, obstructed intake/outlet	Clean fan blades and housing, clear obstructions.
Unusual noise/vibration	Loose mounting, foreign object in fan, worn bearings	Tighten mounting screws, remove foreign objects, consider replacement if bearings are worn.
Fan runs intermittently	Loose electrical connection, overheating protection triggered	Check wiring, ensure adequate ventilation and operating temperature.

9. WARRANTY AND SUPPORT

The Ballmers RG148/1200-3633-010312 Blower Cooling Fan comes with a 12-month warranty after delivery, as per the product specifications. Ballmers offers a worry-free return and refund policy.

For any questions, technical assistance, or warranty claims, please contact Ballmers customer support. When contacting support, please provide the frame number of your product for the most accurate advice and service.

Contact information can typically be found on the product packaging or the official Ballmers website.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

