

WFCO WF-9875-AD-CB

WFCO WF-9875-AD-CB RV Converter/Charger Instruction Manual

Model: WF-9875-AD-CB

1. INTRODUCTION

This instruction manual provides essential information for the safe and efficient installation, operation, and maintenance of your WFCO WF-9875-AD-CB RV Converter/Charger. This unit is designed to provide clean, reliable DC power and automatically charge your RV's Lead-Acid or Lithium-Ion batteries using patented Auto-Detect technology.

Please read this manual thoroughly before installation and operation to ensure proper use and to prevent potential hazards.



Image 1.1: WFCO WF-9875-AD-CB RV Converter/Charger, front view with power cord.

2. SAFETY INFORMATION

Adherence to the following safety precautions is crucial for preventing injury and damage to the unit or your RV.

- **Electrical Hazard:** Always disconnect AC power to the RV before installing, servicing, or performing any maintenance on the converter/charger. Failure to do so can result in severe injury or death.
- **Qualified Personnel:** Installation and service should be performed by a qualified technician. If you are unsure about any step, consult a professional.
- **Ventilation:** Ensure adequate ventilation around the converter/charger. Do not block ventilation openings. Overheating can cause damage to the unit.
- **Fuse Replacement:** Replace fuses only with the same type and rating as specified on the unit. Using incorrect fuses can lead to fire or electrical shock.
- **Water Exposure:** Do not expose the unit to water, rain, or excessive moisture.
- **Flammable Materials:** Do not operate the unit near flammable materials or gases.
- **Grounding:** Ensure the unit is properly grounded according to local and national electrical codes.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- WFCO WF-9875-AD-CB RV Converter/Charger
- Instruction Manual (this document)


4. FEATURES

The WFCO WF-9875-AD-CB RV Converter/Charger incorporates several advanced features for optimal performance and user convenience:

- **Patented Auto-Detect Technology:** Automatically recognizes Lead-Acid or Lithium-Ion battery chemistries and adjusts the charging profile accordingly. This eliminates the need for manual switches or settings.
- **Multi-Stage Charging:** Provides optimized charging for both Lead-Acid and Lithium-Ion batteries, maximizing battery life and ensuring efficient charging.
- **75 Amp DC Output:** Delivers a robust 75 Amps of DC power, suitable for powering various RV electronics and appliances.
- **Load-Based Fan Operation:** The cooling fan operates only when needed, based on the current load, ensuring quiet operation and extending fan life.
- **FCC Class B Compliance:** Designed to minimize interference with televisions, radios, and other signals within your RV.
- **Full Output Capacity Down to 100 Volts AC:** Maintains full charging performance even when campground AC power is low.

INDUSTRY'S HIGHEST OUTPUT RATING

Ideal for toy haulers and long-stay RVs



35 AMP
ATO/ATC
Fuses

WFCO

Fuse(s): 35 AMP
(Automotive type)
CAUTION
For continued protection against
risk of fire or electrical shock.
Replace only with same type and
rating of fuse.
Fuse Blows When Battery Is Hooked Reverse
MAX TORQUE 45 IN.-LBS. USE 5/32" HEX KEY
POS+ NEG-

Load-controlled
Fan

Ground Lug

75 AMPS

12V Output Terminals

Image 4.1: Illustration of Auto-Detect technology and quiet fan operation.



Image 4.2: Advanced Power System design for minimal interference and FCC compliance.

PATENTED TECHNOLOGY

US Patent #12,113,377



INTELLIGENT BATTERY DETECTION

Automatically Recognizes Lithium-Ion and Lead Acid Battery Chemistries

Image 4.3: Diagram illustrating the patented Auto-Detect technology for Lead-Acid and Lithium battery recognition.

5. SETUP AND INSTALLATION

The WF-9875-AD-CB is a deck mount converter/charger. Follow these general guidelines for installation. Always refer to your RV's specific wiring diagrams and safety standards.

1. **Select Mounting Location:** Choose a dry, well-ventilated area for mounting the converter/charger. Ensure there is sufficient space for air circulation and access to connections. The unit should be mounted securely to a stable surface.
2. **Disconnect Power:** Before making any connections, ensure all AC power to the RV is disconnected at the shore power pedestal and the RV's main breaker. Disconnect the RV's battery terminals.
3. **AC Input Connection:** Connect the AC input wiring from your RV's AC distribution panel to the converter/charger. Ensure proper wire gauge and secure connections according to electrical codes.
4. **DC Output Connections:** Connect the positive (+) DC output terminal (red) to the RV's 12V DC distribution panel or battery positive terminal. Connect the negative (-) DC output terminal (black) to the RV's 12V DC ground bus or battery negative terminal. Ensure these connections are tight and use appropriate wire gauges for 75 Amp output.

5. **Grounding:** Connect the chassis ground lug of the converter/charger to the RV's chassis ground.
6. **Fuse Installation/Check:** The unit typically comes with pre-installed fuses. Verify that the correct 35 Amp ATO/ATC fuses are securely in place in the designated fuse holders.
7. **Restore Power:** Once all connections are secure and verified, restore battery connections, then restore AC power to the RV.

Note: If you are not experienced with electrical installations, it is highly recommended to seek assistance from a certified RV technician.

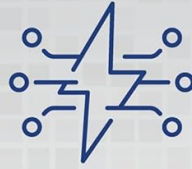
A Smarter Way to Power Your RV.



- ⚡ **Power Factor Correction requires 30% less input**
- ⚡ **Eco-friendly 12-volt system**
- ⚡ **Quiet operation with automatic cooling fan**
- ⚡ **Auto-Detect automatically adjusts the charging profile to match battery type**



Image 5.1: Side view of the converter/charger showing DC output terminals and fuses.



Advanced Power System

Designed not to cause interference
with televisions, radios or other signals.



 **Delivers
clean power
with or
without
a battery**

Image 5.2: Back view of the converter/charger, indicating AC input and ventilation.



Image 5.3: Detailed view of the converter/charger with labels for fuses, 12V output terminals, load-controlled fan, and ground lug.

6. OPERATING INSTRUCTIONS

The WF-9875-AD-CB converter/charger operates automatically once properly installed and connected to AC power and batteries.

- **Automatic Battery Detection:** Upon connection to a battery and AC power, the unit's patented Auto-Detect technology will identify whether a Lead-Acid or Lithium-Ion battery is connected. It will then automatically select the appropriate multi-stage charging profile. No user intervention is required for battery type selection.
- **Multi-Stage Charging:** The converter/charger will provide optimal charging based on the detected battery type. This process ensures the battery is charged efficiently and safely, preventing over or under-charging, which can extend battery lifespan.
- **DC Power Supply:** The unit continuously provides stable 12V DC power to your RV's electrical system, even when the battery is fully charged or not present.
- **Fan Operation:** The internal cooling fan is load-based, meaning it will only activate when the unit generates sufficient heat due to current draw. This ensures quiet operation during periods of low

demand.



Image 6.1: An RV at a campsite, demonstrating typical usage of the converter/charger.

7. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your converter/charger.

- **Periodic Inspection:** Annually inspect all wiring connections for tightness and corrosion. Ensure the unit is securely mounted.
- **Cleaning:** Keep the ventilation openings clear of dust and debris. Use a soft, dry cloth to clean the exterior of the unit. Do not use liquid cleaners.
- **Fuse Check:** If the 12V DC system is not functioning, check the ATO/ATC fuses on the converter/charger. Replace any blown fuses with new ones of the exact same type and rating (35 Amp). Always disconnect AC power and battery before checking or replacing fuses.

8. TROUBLESHOOTING

If you experience issues with your WF-9875-AD-CB converter/charger, consider the following troubleshooting

steps:

Problem	Possible Cause	Solution
No 12V DC power output	No AC input power	Check shore power connection, RV main breaker, and AC circuit breaker for the converter.
	Blown DC fuses on converter	Disconnect AC power and battery. Replace blown 35 Amp ATO/ATC fuses with new ones of the same rating.
Battery not charging	Loose or corroded battery connections	Inspect and clean battery terminals and connections. Ensure they are tight.
	Battery is severely discharged or faulty	Test battery voltage. A severely discharged battery may require a specialized charger to initiate charging. If faulty, replace the battery.
Fan not running	Low power demand	This is normal. The fan is load-based and only runs when needed. If the unit is hot and under load, and the fan is not running, contact support.

If these steps do not resolve the issue, contact WFCO customer support for further assistance.







9. SPECIFICATIONS

Specification	Value
Manufacturer	WFCO
Model	WF-9875-AD-CB
Item Weight	6.75 pounds
Product Dimensions	12 x 6.25 x 4 inches
Wattage	120 watts (AC input)
DC Output	75 Amps
Battery Compatibility	Lead-Acid, Lithium-Ion (Auto-Detect)
Compliance	UL/CSA Listed, FCC Class B Compliant
Date First Available	June 15, 2022

10. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries regarding your WFCO WF-9875-AD-CB RV Converter/Charger, please contact WFCO customer service directly. Refer to the official WFCO website or product packaging for the most current contact details and warranty terms.

Related Documents - WF-9875-AD-CB

	<p>WFCO WF-9800 Series ULTRA III Deckmount Converter Installation Manual & Specifications</p> <p>Official installation manual and specifications for the WFCO WF-9800 Series ULTRA III Deckmount Power Converter. Includes model details, dimensions, output curves, and installation guidelines for WF-9835, WF-9845, WF-9855, WF-9865, and WF-9875.</p>
	<p>WFCO WF-9800 Series Installation and Operator Manual</p> <p>Comprehensive installation, operation, and troubleshooting guide for the WFCO WF-9800 Series Deckmount Power Converter, including technical specifications and warranty information.</p>
	<p>WFCO WF-8700-AD Series Power Center Product Manual</p> <p>This product manual provides detailed information on the WFCO WF-8700-AD Series Power Center, including safety precautions, operational features, installation instructions, troubleshooting guides, specifications, and warranty details for RV applications.</p>
	<p>WFCO WF-8700-AD Series Power Center Operator's Manual</p> <p>Operator's manual for WFCO WF-8700-AD Series Power Centers (WF-8725-AD, WF-8735-AD, WF-8740-AD), detailing features like Auto-Detect charging, installation, troubleshooting, and warranty for RVs.</p>
	<p>WFCO WF-8900LiS Series Operator's Manual - WFCO</p> <p>Comprehensive operator's manual for the WFCO WF-8900LiS Series Power Center, covering installation, operation, troubleshooting, and specifications for RV applications.</p>
	<p>WFCO WF-8900-AD-MBA Series Operator's Manual</p> <p>Operator's manual for the WFCO WF-8900-AD-MBA Series Power Center, detailing safety features, operational modes, troubleshooting, and specifications for RV electrical systems.</p>



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8930/50NNPB-DO-B, Door Only, Black..... ---XX-XXXX **WF-9875-AD-CB**,

75A-AUTO DETECT..... ---Note: All WF-8930/50 Series distribu...

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Output, reverse polarity fuses 20 amps AC Power Cord - Auto-Detect **WF-9875-AD-**

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Output, reverse polarity fuses 20 amps AC Power Cord - Auto-Detect 220V...

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