

Goodman AMVT60DP1300

Goodman AMVT60DP1300 5.0 Ton Multi-Position Air Handler User Manual

Model: AMVT60DP1300

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation, installation, and maintenance of your Goodman AMVT60DP1300 5.0 Ton Multi-Position Air Handler. Please read this manual thoroughly before attempting any installation, operation, or maintenance procedures. Retain this manual for future reference.

The Goodman AMVT series air handler is designed to provide effective air distribution and comfort. Key features include an all-aluminum evaporator coil, a thermoplastic drain pan, a variable speed ECM fan motor, and an internal thermostatic expansion valve (TXV). These components contribute to system efficiency and consistent indoor comfort.



Figure 1: Goodman AMVT60DP1300 5.0 Ton Multi-Position Air Handler. This image shows the exterior of the air handler unit, typically a rectangular metal cabinet with access panels.

2. SAFETY INFORMATION

WARNING: Improper installation, adjustment, alteration, service, or maintenance can cause property damage, personal injury, or loss of life. Refer to this manual. For assistance or additional information, consult a qualified installer or service agency.

- Always disconnect power to the unit before performing any service or maintenance.
- This unit contains R-32 refrigerant. Handling of refrigerants should only be performed by certified technicians.
- Ensure proper grounding and wiring according to local and national electrical codes.
- Wear appropriate personal protective equipment (PPE) such as gloves and safety glasses during installation and service.
- Do not store flammable materials near the air handler.

3. SETUP AND INSTALLATION

Installation of the Goodman AMVT60DP1300 air handler requires specialized knowledge and tools. It is strongly recommended that installation be performed by a qualified HVAC professional.

3.1 Pre-Installation Checks

- Verify that the unit model matches the system design requirements.
- Inspect the unit for any shipping damage. Report any damage immediately.
- Ensure the installation site provides adequate space for the unit, ductwork, and service access.
- Confirm electrical supply matches unit specifications (208-230V, 1 Phase, 60 Hz).

3.2 Unit Placement

The AMVT60DP1300 is a multi-position air handler, allowing for upflow, downflow, or horizontal installation. Consult the detailed installation instructions provided with the unit for specific clearances and mounting procedures for each configuration.

3.3 Ductwork Connection

Connect supply and return air ductwork to the unit. Ensure all connections are sealed to prevent air leakage and optimize system performance.

3.4 Refrigerant Line Connection

The unit features an internal thermostatic expansion valve (TXV) for optimal refrigerant flow. Refrigerant lines must be properly sized, evacuated, and charged by a certified technician using R-32 refrigerant.

Your browser does not support the video tag.

Video 1: R-32 Fact vs Fiction. This video provides informational content regarding R-32 refrigerant, which is used in this air handler. It discusses common facts and dispels myths about R-32, offering insights into its properties and usage in HVAC systems.

3.5 Electrical Wiring

Connect the unit to the appropriate power supply and thermostat wiring. The AMVT60DP1300 is compatible with ComfortBridge Technology for enhanced control and diagnostics. Refer to the wiring diagrams in the full installation manual.

4. OPERATING INSTRUCTIONS

Once installed and commissioned by a qualified technician, your Goodman AMVT60DP1300 air handler operates in conjunction with your thermostat and outdoor unit to maintain desired indoor temperatures.

4.1 System Start-Up

After installation, the technician will perform an initial system start-up, checking refrigerant levels, electrical connections, and airflow. Ensure all access panels are securely closed before operation.

4.2 Thermostat Control

Control the air handler's operation (heating, cooling, fan modes) through your compatible thermostat. The variable speed ECM blower motor adjusts airflow to optimize comfort and efficiency based on system demand.

4.3 ComfortBridge Technology

If connected to a ComfortBridge compatible system, the air handler can communicate with other system components for optimized performance, remote diagnostics, and troubleshooting via mobile devices (Coolcloud app).

5. MAINTENANCE

Regular maintenance is crucial for the longevity, efficiency, and reliable operation of your air handler. It is recommended to have a qualified HVAC technician perform annual professional maintenance.

5.1 Air Filter Replacement

Check and replace the air filter regularly, typically every 1-3 months, depending on usage and environmental conditions. A dirty filter restricts airflow and reduces efficiency.

5.2 Evaporator Coil Cleaning

The all-aluminum evaporator coil should be inspected and cleaned annually by a professional to ensure optimal heat transfer and prevent mold growth.

5.3 Drain Pan and Condensate Drain

Inspect and clean the thermoplastic drain pan and condensate drain line periodically to prevent blockages and water overflow. Ensure the drain line is clear and sloped correctly.

5.4 Professional Inspection

An annual professional inspection should include checking refrigerant levels, electrical connections, blower motor operation, and overall system performance.

6. TROUBLESHOOTING

Before calling for service, review the following common issues. For complex problems, contact a qualified HVAC technician.

Problem	Possible Cause	Solution
No power to the unit	Blown fuse or tripped circuit breaker; power switch off	Check electrical panel and unit power switch. Reset breaker or replace fuse if necessary.
Unit not cooling/heating effectively	Dirty air filter; thermostat settings incorrect; low refrigerant; blocked coil	Replace air filter. Verify thermostat settings. Contact technician for refrigerant or coil issues.
Unusual noises from unit	Loose components; motor issues; debris in blower	Turn off unit and inspect for obvious loose parts or debris. If noise persists, contact a technician.
Water leaking from unit	Clogged condensate drain line; cracked drain pan	Clear condensate drain line. If pan is cracked, contact a technician for replacement.

7. SPECIFICATIONS

Model Number	AMVT60DP1300
Brand	Goodman
Capacity	5.0 Tons (60,000 BTU/H Nominal Cooling)
Refrigerant Type	R-32
Voltage	208-230 Volts, 1 Phase, 60 Hz
Motor Type	Variable Speed ECM Blower Motor
Special Feature	Internal Thermostatic Expansion Valve (TXV)
Dimensions (H x W x D)	58 in x 24-5/8 in x 21 in (Approx. 58"H x 25"W x 21"D)
Weight	172 lb (Approx. 157 Pounds)
Max Overcurrent Protection	50/60 A
Noise Level	60 Decibels
Air Flow Efficiency	2000 Cubic Feet Per Minute Per Watt
Included Components	Variable Speed ECM Blower Motor
Communication Feature	ComfortBridge Technology compatible

8. WARRANTY INFORMATION

The Goodman AMVT60DP1300 Air Handler comes with an enhanced 10-year limited parts warranty. To qualify for the full 10-year limited parts warranty, the product must be registered online within 60 days of

installation. Failure to register the product within this timeframe may result in a shorter warranty period. For complete warranty terms and conditions, please refer to the warranty certificate included with your unit or visit the official Goodman website.

9. SUPPORT

For technical assistance, service, or warranty claims, please contact your installing HVAC contractor or a qualified Goodman service provider. You can find more information and locate a dealer on the official Goodman website.

Goodman is a leading manufacturer of HVAC products, committed to quality and customer satisfaction. Visit the [Goodman Store on Amazon](#) for more products and information.