

Vaillant 306788

Vaillant VR 11 Collector Sensor (Model 306788) Instruction Manual

For 2 Collector Panels

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Vaillant VR 11 Collector Sensor, Model 306788. Please read these instructions carefully before beginning any work with the device. Retain this manual for future reference.

2. PRODUCT OVERVIEW

The Vaillant VR 11 Collector Sensor is designed to monitor the temperature of solar collector fields, specifically for systems utilizing two collector panels. This sensor is a critical component for optimizing the performance and efficiency of solar thermal systems by providing accurate temperature data to the system's control unit.

Key features of the VR 11 Collector Sensor include:

- **Flexible Design:** Adaptable for various installation scenarios.
- **Quality and Durability:** Constructed for long-term reliability in demanding environments.
- **Robustness:** Engineered to withstand typical operating conditions of solar thermal systems.



Image 1: Vaillant VR 11 Collector Sensor. This image shows the compact design of the sensor, typically used for temperature measurement in solar thermal collector fields.

3. SAFETY INFORMATION

- **Qualified Personnel:** Installation and maintenance must only be performed by qualified and authorized personnel.
- **Electrical Safety:** Ensure all power supplies are disconnected before installation or servicing to prevent electric shock.
- **System Pressure:** Be aware of system pressure in solar thermal installations. Depressurize the system if necessary before working on components.
- **Temperature:** Solar thermal systems can reach high temperatures. Allow components to cool down before handling.
- **Original Parts:** Use only original Vaillant spare parts and accessories.

4. PACKAGE CONTENTS

Upon unpacking, please verify that all components are present and undamaged:

- Vaillant VR 11 Collector Sensor for 2 collector fields
- Transport packaging
- Instruction manual (this document)

If any items are missing or damaged, please contact your supplier immediately.

5. SETUP AND INSTALLATION

The Vaillant VR 11 Collector Sensor is designed for integration into solar thermal systems. Proper installation is crucial for accurate temperature measurement and system efficiency.

5.1. Mounting Location

- Install the sensor in the designated location within the solar collector field, typically on the absorber plate or in a sensor well, as specified by the solar collector manufacturer.
- Ensure the sensor is securely fastened to prevent movement or damage.
- Avoid locations where the sensor might be exposed to direct sunlight if it is meant to measure collector fluid temperature, or ensure it is properly shielded.

5.2. Electrical Connection

- Connect the sensor cable to the appropriate terminals on the solar thermal control unit. Refer to the control unit's instruction manual for specific wiring diagrams.
- Ensure polarity is correct if specified.
- Route cables to prevent damage from heat, sharp edges, or mechanical stress.
- All electrical connections must comply with local electrical codes and regulations.

Note: *Incorrect installation can lead to inaccurate readings, system malfunction, or damage. If you are unsure about any step, consult a qualified HVAC technician or Vaillant support.*

6. OPERATING PRINCIPLES

The VR 11 Collector Sensor operates by continuously measuring the temperature at its installed location within the solar collector. This temperature data is then transmitted to the solar thermal control unit. The control unit uses this information, often in conjunction with other temperature sensors (e.g., tank temperature sensor), to determine when to activate the solar pump to transfer heat from the collectors to the storage tank.

The sensor itself does not require direct user interaction during operation. Its function is entirely automatic, providing essential data for the intelligent control of your solar thermal system.

7. MAINTENANCE

The Vaillant VR 11 Collector Sensor is designed for minimal maintenance. However, periodic checks are recommended as part of your overall solar thermal system maintenance routine.

- **Visual Inspection:** Annually inspect the sensor and its cabling for any signs of physical damage, corrosion, or loose connections.
- **Cleanliness:** Ensure the sensor head is free from dirt, dust, or debris that could affect its temperature measurement accuracy. Clean gently with a soft, dry cloth if necessary.
- **System Performance Check:** Monitor your solar thermal system's performance. Unusual behavior or reduced efficiency might indicate a sensor issue.

Caution: *Do not attempt to open or repair the sensor. Tampering with the device will void any warranty and may lead to malfunction.*

8. TROUBLESHOOTING

If you suspect an issue with your VR 11 Collector Sensor, consider the following common troubleshooting steps:

Symptom	Possible Cause	Solution
Inaccurate temperature readings	Loose connection, sensor head obstructed, sensor fault	Check wiring, clean sensor head, consult a technician for sensor testing/replacement.
Solar pump not activating/deactivating correctly	Sensor fault, control unit settings, wiring issue	Verify sensor connection, check control unit parameters, have a technician diagnose the system.
Error code on control unit related to collector sensor	Sensor wiring fault, sensor failure	Refer to the control unit's manual for specific error code meanings. Check sensor wiring. Replace sensor if faulty.

For complex issues or if the problem persists, it is recommended to contact a qualified service technician or Vaillant customer support.

9. SPECIFICATIONS

- **Brand:** Vaillant
- **Model Number:** 306788 (VR 11)
- **Product Dimensions:** Approximately 19.69 x 19.69 x 19.69 inches (*Note: This dimension may refer to packaging. Please verify actual product dimensions.*)
- **Item Weight:** Approximately 4.9 ounces
- **Application:** Collector sensor for 2 collector fields
- **Key Features:** Flexible design, Quality/Durability, Robustness
- **Color:** Bianco (White)
- **Batteries Required:** No

Disclaimer: Specifications are subject to change without notice. Please refer to the product packaging or Vaillant's official website for the most current information.

10. WARRANTY AND SUPPORT

For information regarding the warranty period and terms for your Vaillant VR 11 Collector Sensor, please refer to the warranty card included with your product or visit the official Vaillant website for your region. Keep your proof of purchase for warranty claims.

For technical support, spare parts, or service inquiries, please contact your local Vaillant authorized dealer or Vaillant customer service. Contact details can typically be found on the Vaillant website or in your product documentation.

Vaillant Official Website: www.vaillant.com