

Hamworthy Trigon

Remote Alarm Module AM1

**Installation, Commissioning,
Operation & Service Instructions**

IMPORTANT NOTE

**THESE INSTRUCTIONS MUST BE READ
AND UNDERSTOOD BEFORE INSTALLING,
COMMISSIONING, OPERATING OR
SERVICING EQUIPMENT**



Heating *at work.*

Customer After Sales Services

Telephone: **0845 450 2866** E-mail: **aftersales@hamworthy-heating.com** Fax: **01202 662522**

Technical Enquiries

To supplement the detailed technical brochures, technical advice on the application and use of products in the Hamworthy Heating range is available from our technical team in Poole and our accredited agents.

Site Assembly

Hamworthy offer a service of site assembly for many of our products in instances where plant room area is restricted. Using our trained staff we offer a higher quality of build and assurance of a boiler built and tested by the manufacturer.

Commissioning

Commissioning of equipment by our own engineers, accredited agents or specialist sub – contractors will ensure the equipment is operating safely and efficiently.

Maintenance Agreements

Regular routine servicing of equipment by Hamworthy service engineers inspects the safety and integrity of the plant, reducing the risk of failure and improving performance and efficiency. Maintenance agreements enable our customers to plan and budget more efficiently.

Breakdown service, repair, replacement

Hamworthy provide a rapid response breakdown, repair or replacement service through head office at Poole and accredited agents throughout the UK.

Spare Parts

A comprehensive spare parts service is operated from our factory in Poole, providing replacement parts for both current and discontinued products. Delivery of parts and components is normally from stock within seven days. However, a next day delivery service is available for breakdowns and emergencies.

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THE TRIGON REMOTE ALARM MODULE AM1 COMPLIES WITH ALL RELEVANT EUROPEAN DIRECTIVES.

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**Image Of Hamworthy Trigon
Remote Alarm Module AM1**

1.0 INTRODUCTION TO GUIDE

Please read this guide carefully to get the best performance from the Hamworthy Trigon Remote Alarm Module AM1.

1.1 Safety Advice

Please pay attention to the safety advice in this guide in order to avoid danger and damage to people & property.

Attention must be paid to the valid national standards, regulations and directives relating to fault alarm devices.

1.2 Description Of Symbols Used In This Guide



ATTENTION !

Warnings are indicated with a warning triangle !

→ They contain information on how to avoid the danger described.

Signal words describe the danger that may occur, when it is not avoided.

→ Arrows indicate instruction steps that should be carried out.



NOTE

Notes are indicated with an information symbol.

1.3 Installer Requirements

Electrical installation must be carried out by a qualified electrician.

2.0 PRODUCT INFORMATION

2.1 How To Use The Remote Alarm Module AM1 Properly

The Hamworthy Trigon Remote Alarm Module AM1 is to be used as an interface for the failure signal transmission between the Hamworthy Trigon devices and external applications in compliance with the technical data specified in this manual.

Improper use excludes all liability claims.



NOTE

Strong electromagnetic fields can impair the function of the device.

→ Make sure the device is not exposed to strong magnetic fields.

2.2 CE Declaration Of Conformity



The product complies with the relevant directives and is therefore labeled with the CE mark.

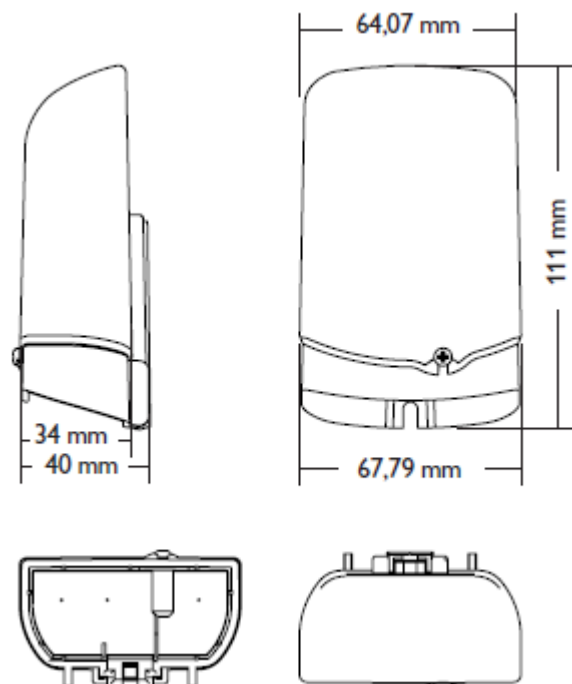
2.3 Responsible Disposal Of Packaging

Dispose of the packaging of the Remote Alarm Module AM1 in an environmentally sound manner. Dispose of all old Trigon appliances in an environmentally sound manner.

2.4 Technical Data

Housing	Plastic
Upper part of the housing	PC 2207 UV
Base part of the housing	Karilen E 42 D - H201
Protection type	IP 54
Ambient temperature	-25 ... +70 °C
Dimensions	111 × 68 × 40 mm
Mounting	Wall mount
Display	1 LED
Power supply	VBus®
Interface	VBus®
Output	1 potential-free relay
Switching capacity	30VDC, 1 A 125 VAC, 0,5 A

2.5 - Dimensions



3.0 REMOTE ALARM MODULE AM1 FEATURES

- **Reliable failure signal by LED**
- **Connection to a Building Management System Possible**
- **Supply & Control via V-Bus**
- **Sturdy and weather proof housing**
- **Shapely design**
- **Simple Installation**

The Remote Alarm Module AM1 is designed to signal system failures.

It is to be connected to the VBus of the Trigon DeltaSol BS2 or M Solar controllers and WMZ Calorimeter. It issues an optical signal via a red LED if failure has occurred.

It also has a potential-free relay output, which can be connected to a building management system (BMS).

Thus, a collective error message can be issued in the case of a system failure.

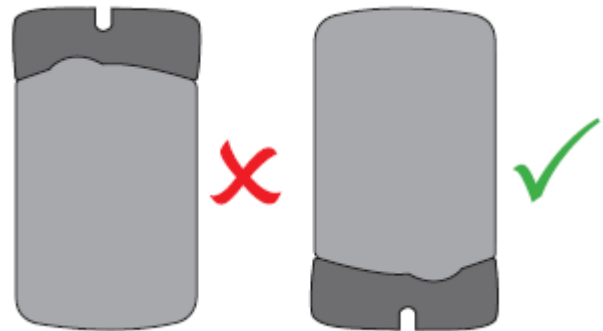
Depending on the controller and the sensors connected, different fault conditions can be signaled, e.g sensor failures, excess or negative system pressure as well as errors in the flow rate, such as a dry run of the pump.

The Remote Alarm Module AM1 ensures that occurring failures can be immediately recognized and repaired, even if the system and the controller are difficult to access or located in a remote place.

The Remote Alarm Module AM1 can be connected to all Hamworthy Trigon Solar Thermal devices equipped with a VBus.

4.0 MOUNTING & ASSEMBLY

For optimum protection against moisture, the Remote Alarm Module AM1 must be fitted vertically.

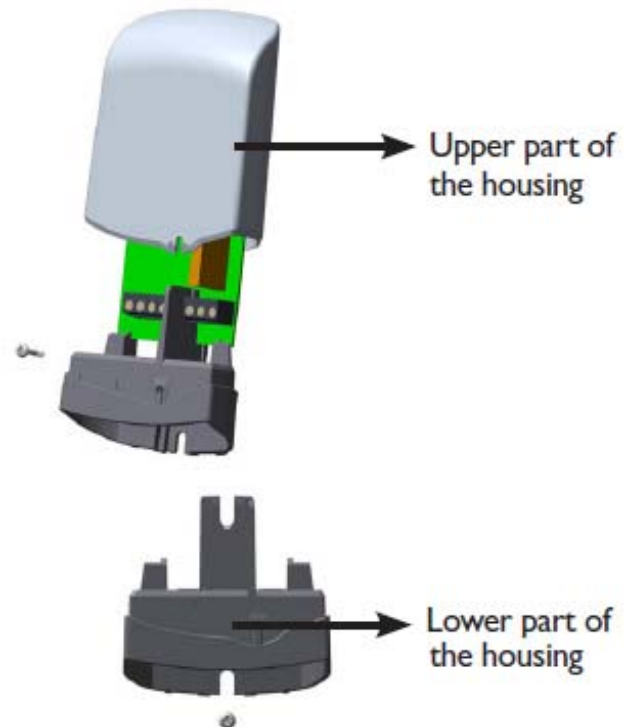


Unscrew the housing screw and remove the upper part of the housing.

Mark the fastening points on the wall and drill (centers 5cm) .

→ Attach the lower part of the housing to the walls using the screws.

→ Put the Upper part of the housing onto the lower part & attached with screw.



ATTENTION ! ESD damage !

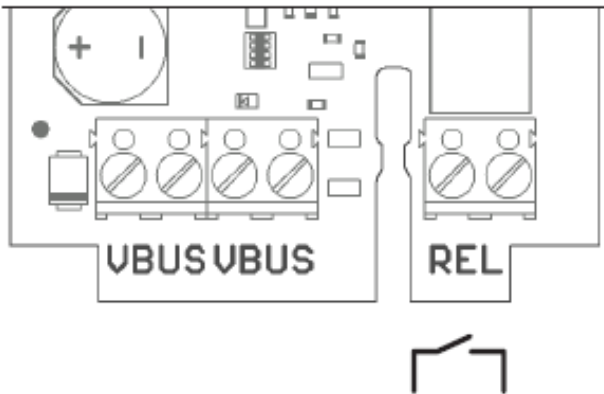


Electrostatic discharge can lead to damage to electronic components !

→ Take care to discharge properly before touching the inside of the device !

5.0 ELECTRICAL CONNECTIONS

Terminals of Remote Alarm Module AM1



The Remote Alarm Module AM1 is designed for simple connection to the Hamworthy Trigon DeltaSol BS2 or M Solar Controllers or WMZ Calorimeter via the VBus. An additional power supply connection is not necessary.

Connect the VBus cable to the terminals marked "VBus" with either polarity.

To the terminals marked "REL" a load can be connected with either polarity.

The bus cable can be extended with a two-wire cable. The cross section of the cable must be at least 0.5mm² and the cable can be extended up to 50m in the case of a single connection.

ATTENTION !

Low Voltage cables must not run together in a cable conduit with cables carrying a higher voltage than 50V.



→Always Route high & low voltage cables separately !

→Pay attention to the local regulations !

6.0 REMOTE ALARM MODULE AM1 OPERATION

The Remote Alarm Module AM1 is an interface for the failure signal transmission between Hamworthy Trigon devices and external applications. It is to be connected to a the Hamworthy Trigon DeltaSol BS2 or M Solar Controllers or Trigon WMZ Calorimeter via the VBus.

When the Remote Alarm Module AM1 is operational, the LED will glow continuously to signal operational readiness. If the LED does not glow, check the connections to the device !

The Remote Alarm Module AM1 receives and processes the Vbus data of the devices connected. In the case of a failure signal, the integrated Flash-LED flashes and the AM1 operates a potential-free relay.

The relay can be used to connect an additional signaling device, or to connect to a building management system (BMS).

7.0 IMPORTANT NOTICE

The texts and drawings of this manual are correct to the best of our knowledge. As faults can never be excluded, please note:

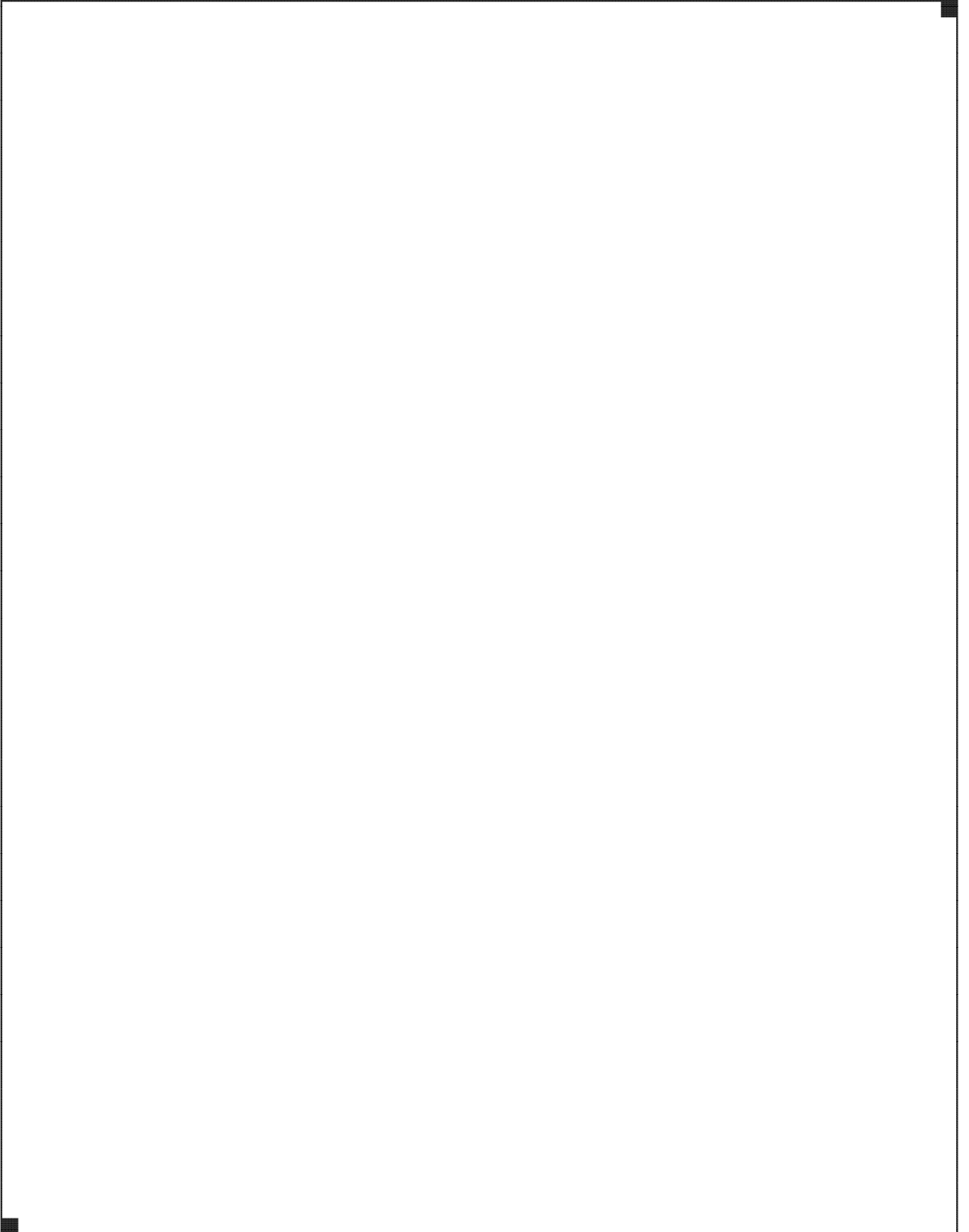
Your own calculations and plans, under consideration of the current standards & directions should only be basis for your projects. We do not offer a guarantee for the completeness of the drawings and texts of this manual—they only represent some examples. They can only be used at your own risk. No liability is assumed for incorrect, incomplete or false information and / or the resulting damages.

Note

The design and the specifications can be changed without notice.

The illustrations may differ from the original products.

Notes



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North West England (Sales & Service)

Gillies Modular Services
210-218 New Chester Road, Birkenhead, Merseyside L41 9BG
tel: **0151 666 1030** fax: **0151 647 8101**

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