

Installation and Operating Instructions

Temperature sensor set for Water Heater

Figure 916 02 021




KEMPER
DRIVING PROGRESS



About this Manual | Safety Information for Assembly, Commissioning, Function and Maintenance

Original operating instructions

Manufacturer's address

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About this Manual

Read this manual carefully before starting installation, commissioning, operation and maintenance and follow the instructions! Always pass on the instructions to the current system operator and retain for future reference. Illustrations in this manual serve to aid basic understanding and may differ from the actual system configuration. This manual is protected by copyright. Copyright lies with the manufacturer.

Target group

This manual is intended for plumbing and electrical specialists who carry out the installation and commissioning of the water heater. It is also intended for the user of the controller software and the operator.

Personnel qualifications

Assembly and installation of the system may only be carried out by plumbing specialists who have been additionally trained in the field of electrical installation. They must be familiar with drinking water hygiene and be able to carry out standard-compliant maintenance work and lay and connect electrical cables. We particularly refer to VDE regulation 0100 and the regulations of the relevant local power utility.

Liability

The manufacturer assumes no warranty or liability in case of:

- failure to follow these instructions
- incorrect installation and/or use
- unauthorised modification of the product
- other improper methods of operation.

Assembly

Before commencing assembly, read the instructions carefully and follow all directions. Pass these instructions on to the operator and retain for later reference!



Warning!

Installation and maintenance must be carried out by qualified electricians.



Warning!

Priority must be given to the national standards and provisions on plumbing and electrical Installation and accident prevention.



Note!

The product may be installed only in dry rooms.

Warning Information

Be sure to read and follow the warning information in the instructions. Failure to follow the warning information can result in injury or damage to property. Labelling for important warning information:



Danger! Electricity!

Indicates hazards that may result in severe or fatal injury.



Safety Instructions for Assembly, Commissioning, Function and Maintenance



Warning!

Indicates hazards that may result in injury, material damage or contamination of the drinking water.

Use the system:

- in perfect condition
- as intended.



Note!

Indicates hazards that can result in damage to the plant or malfunctions.



Info

Indicates additional information and tips.



Danger! Electricity!

Danger of fatal electric shock!
Work on live components entails an immediate risk of a fatal electric shock.



Disposal

Local regulations on waste recycling and disposal must be followed. The product must not be disposed of with household waste but must be disposed of properly.

Important advice for the operator

Intended use

The temperature sensor set is intended solely for use in combination with KTS water heater. In combination with one or more KTS water heater(s), the job of the temperature sensor set is to also record system temperatures, in particular the cold water entry temperature and the temperature of the circulation return pipes. For this purpose, the sensors are linked with the KTS controller unit. Flawless operation can only be guaranteed when the information in this manual are taken into consideration.

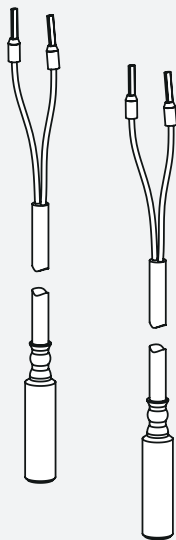
Use the water heater only in enclosed spaces in buildings with ambient air and without aggressive gases and liquids.

1

Technical Information

1.1

Setup and Scope of Delivery



Scope of delivery

The set comprises two Pt1000 sensors, each with 7m feed pipe.

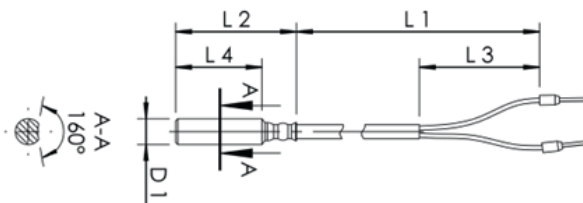


1.2

Technical Data

Part No. 9160202100

D1	6 mm
L1	7000 mm
L2	28 mm
L3	40 mm
L4	20 mm



1.3

Assembly and Installation

The optionally available sensor set (Fig. 916 02 021) enables all of the relevant temperatures in the system to be measured. Sensor S8 is installed on the circulation return pipe, sensor S9 on the cold water entry pipe. When attaching the sensors to the pipe, make sure that a heat conducting paste is applied to

improve heat transfer between the sensor and the pipe.

Moreover, the sensors should be attached to a straight piece of pipe and not near a bend or on other components.

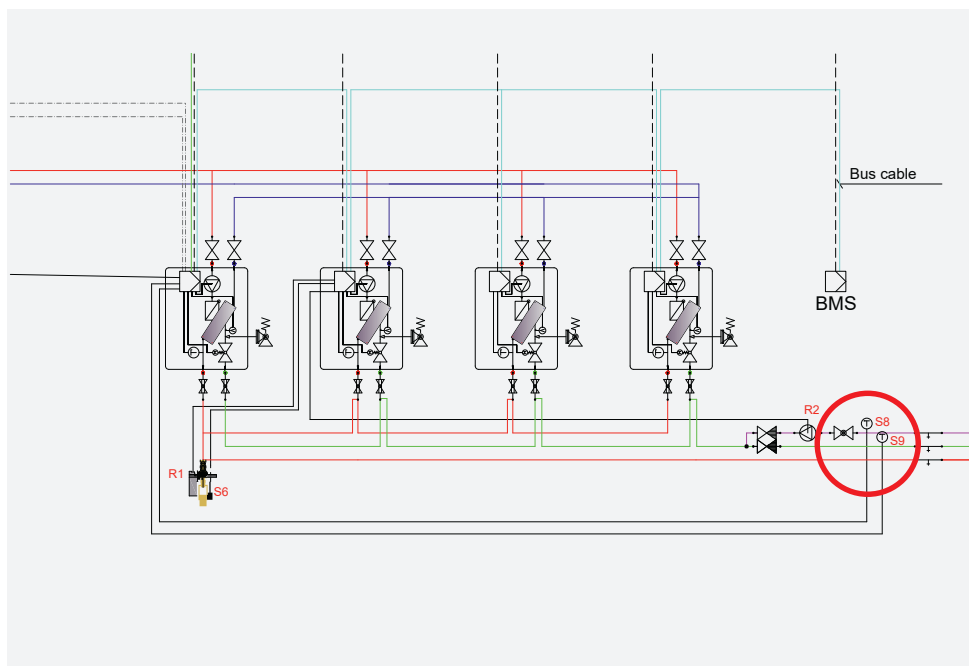


Figure 1

1.4

Terminal Assignment Single Unit and Cascade

Sensor S8 is attached to the hot water circulation, sensor S9 to the cold-water supply pipe and clamped to cascade unit 1 or the single unit. The temperature sensor of the hot water circulation connects to terminals 20-21, the temperature sensor of the cold-water pipe to terminals 22-23.

In cascade units, the cascade valve is also controlled via the controller of cascade unit 1. You therefore have to control the circulation pump, and the flush valve and the overflow sensor via the controller of cascade unit 2.

The terminal assignment of cascade units can be carried out according to the following diagram and the table below.



Note! Next to the water heater type plate, there is an overview diagram of the electrical installation. The terminal assignment of the single unit can be carried out according to the following diagram and the table below.

Example Diagram Single Unit

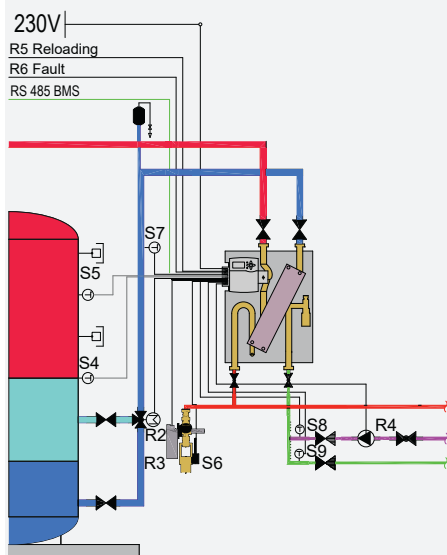


Figure 2

Example Diagram Cascade Operation Cascade Unit 1

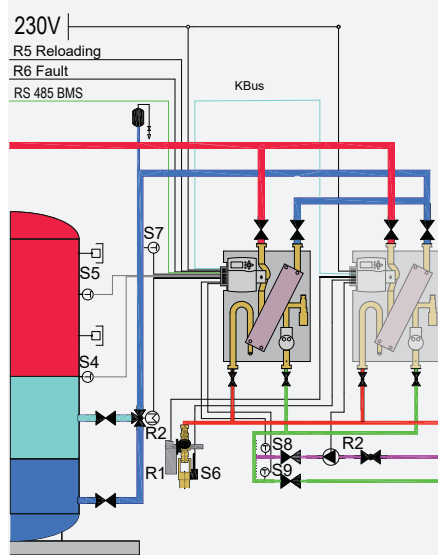


Figure 3



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