



Installation
Local alarm
 English

Question	Answer
Does the local alarm function satisfactorily?	Briefly press the TEST-button. Immediately hereafter 2 sound signals are sent out - a short one and a long one. If no other signals are sent out within the next 30 sec., the alarm unit and the connection to MULTICAL® is correct. The alarm signal consists of a number of sounds and blinks which are sent out after each other. The number of sounds and blinks indicates the reason for the alarm (see the paragraph "Functions"). The alarm sequence is repeated every 30 sec. for a 10 min. period, and this 10 min. period is repeated every 4 hours around the clock. Probably this is due to another cause (a battery has been connected or the TEST-button has been pressed recently), which activated the data reading sequence for the local alarm. During this sequence the local alarm will not react to the TEST-button.
What does the alarm signal indicate?	If the TEST-button is pressed several times with an interval of more than 30 sec., no signal is given. The local alarm sends out a single beep now and then
I press the TEST-button, but nothing happens?	Either the connection to MULTICAL® is defective or the battery is worn. Replace the battery. If the signals continue with the new battery, please contact the heat supplier.
The local alarm beeps twice after each other	This is normal. When the battery has been replaced, a test sequence is activated to test the sounding body. This test can also be activated by pressing the TEST-button.
When the battery is replaced, the local alarm sends out a number of sounds	An alarm has been given. Count the number of beeps and compare with the description on the inner side of the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the battery cover. If the alarm is caused by leakage or bursting, the main valve must be turned off immediately, and the telephone line.
The local alarm sends out more than 2 beeps after each other	Please note that repair to the heat and water system, replacement of pipes etc. must ONLY be made by authorised plumbers or the utility.

Application

The local alarm unit is used as equipment for Kamstrup's leakage surveillance system, which enables the private consumer himself to limit the damage caused by leakages, which occur in the heat or domestic water systems.

Mechanical installation

The local alarm should be installed in a conspicuous and accessible place in one of the most often used rooms, e.g. the kitchen, family room or hall. The installation height should be between 100 and 170 cm from the floor to make it possible to operate the alarm.

The alarm must not be mounted in non-heated or non-insulated rooms, as cold and moisture reduce the lifetime of the alarm.

Remove the battery cover and use the local alarm to mark-out the two holes on the wall for mounting.

The holes should be made with a 6 mm stone drill, and the local alarm is mounted by means of the enclosed fittings. When using a machine for screwing the screws, use the lowest moment in order not to deform the plastic housing of the local alarm.

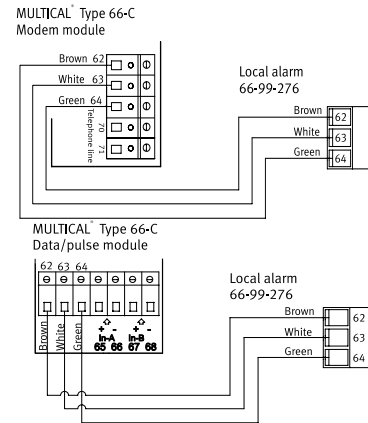
Wiring

The local alarm is connected to the data terminals 62-63-64 in the MULTICAL® modem module or data/pulse module. A 3-wire cable must be used with an outside diameter of max. 5 mm and the cable length must not exceed 25 meter.

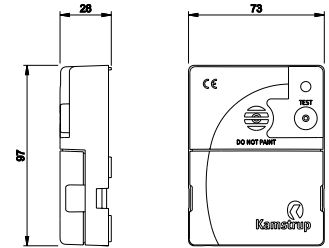
The cable must be discharged in the cable labyrinth in the local alarm and lead either downwards

or to the rear of the local alarm. The cable must always be installed at distance of min. 25 cm to other electric installations to prevent electric noise problems.

Connection drawings



Dimensional drawings



Function

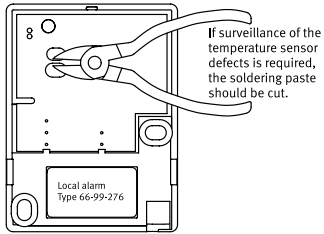
The alarm unit has a number of different sound and light sequences to indicate the reason for the alarm. Sounding body and light-emitting diode always function parallelly.

If MULTICAL® registers a burst in the heat system, the alarm is activated within 90 sec. and it continues until it is deactivated by pressing a key on the front.

Functions (cont.)

Other alarms are only sent out for a period of 10 minutes every 4th hour.

*) Alarm for defective temperature sensors is only sent out, if the soldering paste on the back of the unit is broken.



To test the unit briefly, press the TEST key on the front. The unit returns with a short and a long signal, which is repeated.

If the unit does not give further signals within 30 sec., the unit and connection to MULTICAL® is complete.

- - - - - Bursting in the heat system
- - - - - Leakage in the heat system
- - - - - Leakage in the cold-water system
- - - - - Temperature sensor error *)
- - - - - No connection to the meter
- - - - - Battery replacement
- - - - - Test signal

Battery replacement

The battery placed in the local alarm should not be connected until the electrical installation to MULTICAL® has been made, as the local alarm will otherwise give sound signals for “No contact to the meter”.

The local alarm is supplied with a 9V lithium battery with an expected lifetime of approx. 5 years. If using alkaline batteries, such as Duracell, the expected lifetime is approx. 2 years.

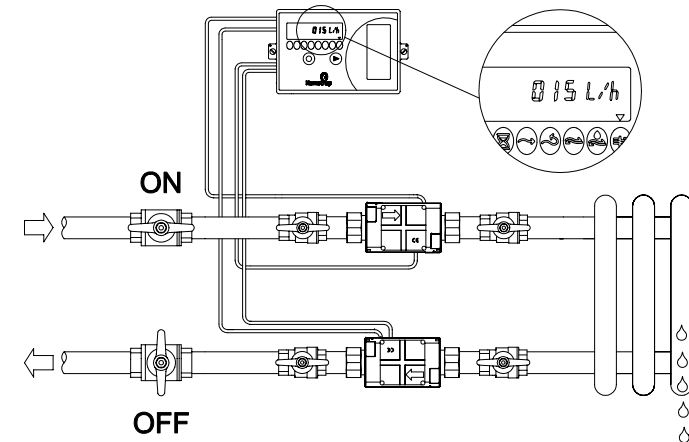
Ordinary batteries and other cheap 9V batteries on the market are not recommended for the local alarm.

NB! Remember to dispose of the batteries environmentally correct. Irrespective of the type, batteries may not be disposed of through ordinary garbage disposal.

Leak testing of the heat installation

In connection with leakage alarms or in cases where a leakage in the heat installation is suspected, a visual inspection must be made at first of all visible installations. Then a “simple” test of the tightness of the installation must be made: Cut off the return main valve and read the flow in the display. The flow display is updated every 10 sec., and after 20-30 sec. the reading should fall to 0 l/h.

If there is a suspicion that the main valve are not tight when closed, it is possible to cut off the valve at the return flow meter as well.



If the reading is larger than 5 l/h after 1 minute, the entire heat installation must be ventilated thoroughly. Remember both radiators and floor heating.

Repeat the leak test, and if the reading is still larger than 5 l/h. This indicates a leakage in the heat system and a specialist must be sent for to investigate the installation.