

Wireless Heat Detector HM-LES900



- ▶ Battery power supply
- ▶ Button for self-testing
- ▶ Simple connection to the house service call subscriber station
- ▶ Optical and acoustic alarm at the installation location
- ▶ Battery monitoring

In the event of the incidence of heat through fire or other sources of high heat development, the wireless heat detector gives a warning by means of a loud alarm sound. At the same time, an alarm is transmitted wirelessly to the Carephone, which then passes on the alarm via the external connection.

System Overview

The wireless heat alarm, HM-LES900, is used in conjunction with the house service call subscriber stations HTS10, HTS12, HTS52+, HTS62 as well as the TA72 and TA74 from TeleAlarm.

It consists of three parts:

1. Heat detector alarm head
2. Upper part wireless mounting base
3. Lower part wireless mounting base

The wireless heat detector senses the development of high heat through fire in kitchens, bathrooms, shower rooms and in other rooms in which smoke and steam are likely to occur and, in which, therefore, no smoke alarms can be fitted. The wireless heat detector is likewise suitable for rooms in which dust, dirt and exhaust fumes can occur such as, for example, workshops and garages.

In the event of heat development above 58°C at the installation site, the HM-LES900, emits a loud alarm. This continues for as long as the heat alarm remains operational. At the same time, the radio module of the wireless mounting base transmits an alarm to the Carephone.

Should high heat development occur through exposure to flames, the alarm signal ensures that targeted countermeasures can be taken in a timely manner. In addition, residents can be brought to safety in good time. The heat alarm is not suitable for uses in areas where there is a high risk of false detections and does not replace a smoke alarm.

The wireless heat detector is an ideal complement to a smoke alarm, thereby increasing the reliability of the warning system and aiding the avoidance of false alarms.

Function Description

The radio transmitter module is integrated in the base of the wireless heat alarm. The radio transmitter module in the upper part of the wireless mounting base and the alarm head are each powered by a battery. The heat detector head has a service life of minimum 8 years, and the date for replacing the alarm head is printed on the back. The replacement date is set with the production of the HM-LES900 wireless heat detector in accordance with the manufacturer of the heat detector head. The alarm head battery is designed to last for the entire lifetime of the device. The alarm head must be replaced on reaching its expiry date. The wireless mounting base is similarly designed for a service life of minimum 8 years and its battery is replaceable. The radio transmitter module does not need to be replaced.

The wireless heat detector functions in accordance with the principle of the change of electrical resistance with increasing temperature. The specific electrical resistance value of the element in the base of the heat detector changes steadily with increasing ambient temperature. If the temperature threshold value of 58°C is reached, an alarm is generated from the evaluation electronics. Once installed, an alarm can be generated manually by pressing the alarm head. In this way, the correct functioning of the on-site warning and the transmission of the alarm via the Carephone can be checked. The test function is also used to program the wireless heat detector to a Carephone.

The warning device uses radio technology so that no cables whatsoever need to be laid. For installation, the lower part of the radio mounting base must simply be fixed in place at the installation site using two screws.

Certificates and Approvals

Region	Certification
Europe	CE RED 2014/53/EU LVD 2014/35/EU IEC 62368-1 2014 +Corr.1 2015 EN 300 220-2 V3.1.1 EN 301 489-1 V2.2.0 EN 301 489-3 V2.1.1 EN 50130-4 EN 54-5, CI

Planning Instructions

Recommended Installation

The wireless heat alarm is not intended for use as a stand-alone device, but can be used in living areas in which the use of smoke alarms could lead to false alarms.

Use in combination with a wireless smoke detector is advisable in living areas and bedrooms as well as in corridors and hallways.

Installation

The wireless heat detector must be installed within the reception range of the Carephone so that there is a reliable radio connection for the transmission of the alarm.

As a rule, the wireless heat detector should be mounted on the ceiling.

Installation on the ceiling is possible up to a maximum height of 6 m.

With ceiling installation, the minimum distance from walls and items of furniture should be 50 cm. For wall mounting the minimum distance to the ceiling should be 30 cm and the maximum distance 50 cm. The minimum distance from a cooker is 30 cm and the maximum 50 cm.

Programming

The wireless heat detector has an individual coding that must be registered with the accompanying Carephone.

Scope of Supply

Number of Components

- 1 × Radio heat alarm – alarm head
- 2 × Installation housing
- 3 × Counterunk-head screws
- 2 × Wall plugs
- 1 × Instruction manual

Ordering Information

Part Number	Part Name
T.240.001.673	Radio heat detector HM-LES900

Technical Data

Wireless Heat Detector HM-LES900

Battery type

- Alarm head:	CR17345-Duracell or CR123A Huidrui internal, not replaceable
- Radio mounting base:	CR 1/2AA –Varta 3.0V lithium

Battery service life	min. 8 years
----------------------	--------------

Operating temperature	-10°C to +50 °C
-----------------------	-----------------

Storage temperature	-20°C to +60 °C
---------------------	-----------------

Relative humidity	max. 90 %
-------------------	-----------

Acoustic signals	Siren, normally 85 dB(A) (at 3m distance)
------------------	--

Optical signals	LED
-----------------	-----

Dimensions (H x Ø)	50 × 86 mm
--------------------	------------

Weight	approx. 97g
--------	-------------

Material and colour	White plastic
---------------------	---------------

Radio heat alarm

Detection principle	Thermoelectric
---------------------	----------------

Duration of the alarm	Local alarm: until the alarm criterion (heat) is no longer present One radio signal per alarm event
-----------------------	---

Function test

Optical signal	Flashing of the red LED (without an acoustic signal indicates that the device is operationally ready)
----------------	---

Acoustic signal	Loud pulsating sound signal, <i>approx. 85dB(A)</i>
-----------------	--

Radio module

Transmission frequency	869.2125 MHz
------------------------	--------------

Bandwidth	25 kHz
-----------	--------

Modulation type	FSK (frequency shift keying)
-----------------	------------------------------

Modulation deviation	±3kHz
----------------------	-------

Transmission power	0.5mW
--------------------	-------

Range in the open air	approx. 200 m
-----------------------	---------------

Code registration for the

Carephone	TA protocol
-----------	-------------