NUMENS
Professional Safety Products

Deltronic

205 DC Heat Alarm
User Manual

CE

Complies with BS 5446-2:2003

Features

Numens 205 DC heat alarms provide battery powered heat detection, together with alarm functions within a single unit. The technology provides reliable performance and low maintenance.

Numens 205 DC smoke alarms are powered by a long-life lithium-ion battery, and do not require a mains supply connection. Models are available with either user-replaceable batteries or non-replaceable batteries.

Interconnectable 205 DC heat alarms use a wireless transmission path. Configuration into a closed group ensures that other units within radio signal range are not affected by a test or fire alarm occurring within the configured group.

Numens 205 DC heat alarms are suitable for general residential applications where a smoke alarm may result in unwanted activation (such as cooking areas, parking garages with exhaust fumes, and areas subject to high levels of dust and other air-borne contaminants). The 205 DC heat alarm provides home owners and installers with an easy-to-install, long-life solution for property protection applications.

Normal Operation

When operating normally, a red LED adjacent to the Test/Hush button will flash every 40 s.

Alarm Condition

When heat is detected, an internal sounder will activate to alert occupants, and the red LED will flash every 1 s. The sounder is a loud, pulsating alarm.

Fault Conditions

Battery Low

When the battery is depleted, the heat alarm will emit a short audible signal every 40 s, synchronized with a single flash of the red LED indicator. The Battery Low indication will operate for at least 30 days.

Model 205-008

The battery for Model 205-008 (wireless interconnection) is replaceable by the user and will last up to 5 years under normal conditions. When the Low Battery signal is given, replace the battery without delay.

Model 205-009

The battery for Model 205-009 (wireless interconnection) is NOT replaceable by the user and will last up to 10 years under normal conditions. When the Low Battery signal is given, replace the whole unit without delay.

Heat Sensor Fault

When a fault is detected in the heat sensor, the heat alarm will emit a short audible signal every 40 s sounder, and a single flash of the red LED indicator midway between the audible indications.

Test/Hush Button

Test

When in the Normal condition, pressing and holding the Test/Hush button for 5 s will activate the heat alarm to check its operation. The alarm will sound, and the red LED will flash every 1 s. Releasing the Test/Hush button will cancel the alarm test.

For interconnected heat alarms a test performed on one unit will operate all interconnected units. After releasing the Test/Hush button, it may take up to 10 s for the interconnected units to silence.

Hush (Alarm Condition)

When in the Alarm condition, pressing the Test/Hush button reduces the sensitivity of the heat alarm for 9 min and silences the alarm sounder. The hush feature allows time for excess heat to dissipate. During the hush time, the red LED will continue to flash every 1 s on the unit in fire alarm, and every 6 s on any interconnected units.

⚠️ The hush feature should only be used after the cause of the alarm is known (such as an excessive heat from cooking).

After the hush time has expired, the heat alarm will automatically return to normal sensitivity. If heat is still present in the unit, the alarm sounder will re-activate. The hush feature can be used repeatedly.

Hush (Battery Low)

When the heat alarm signals that the battery is depleted, pressing the Test/Hush button silences the audible signal for 10 hours. During the hush time, the red LED will flash every 20 s.

After the hush time has expired, the heat alarm will automatically return to normal. If the battery or the whole Heat Alarm has not been changed, the low battery signal will re-activate. The hush feature can be used repeatedly.

Hush (Heat Sensor Fault Condition)

When the heat alarm signals a heat sensor fault, pressing the Test/Hush button silences the fault condition for 10 hours. During the hush time, the red LED will flash every 20 s.

After the hush time has expired, the unit will automatically return to normal. If the heat sensor fault is still present, the fault signal will re-activate. The hush feature can be used repeatedly.

Interconnection (Model 205-008 & 205-009)

⚠️ Interconnectable heat alarms use a wireless transmission path to connect units together. Individual units must first be configured into a closed Group so that sounders on all units in the group will activate during an Alarm condition, Alarm Hush, or a Test.

When excessive heat is detected in one unit, the sounders in all interconnected units will activate. The LED indicator on units that have not detected heat will flash every 6 s. This allows the homeowner to quickly locate the cause of the alarm.

When a unit is tested, the sounders in all interconnected units will activate and the LED indicator will flash every 40 s. After releasing the Test/Hush button, it may take up to 10 s for the interconnected units to silence.

The maximum transmission path between each interconnected unit is 500 m. There is no limit to the number of units that can be interconnected using the wireless interconnection function.

⚠️ **WARNING**: Wireless interconnection signalling may not operate in the low battery condition.

Understanding Indicator and Alarm Signals

205 DC heat alarms produce the following indicator and alarm signals, depending on the status condition.

Primary Smoke Alarm

LED	Audible Signal	Status Condition
Flash every 40 s	—	Normal
Flash every 1 s	0.5 s on / 0.5 s off	Fire alarm
Flash every 1 s	—	Hush after fire alarm.
Flash every 1 s	0.5 s on / 0.5 s off	Test
Flash every 40 s	Short beep at the same time of LED flash	Low battery
Flash every 20 s	—	Hush after low battery fault
Flash every 40 s	Short beep midway between LED flashes	Smoke chamber fault
Flash every 20 s	—	Hush after smoke chamber fault

Interconnected Units

When configured as a Group, interconnected units produce the following additional indicator and alarm signal when the primary unit is operated.

LED	Audible Signal	Status Condition
Flash every 6 s	—	Hush after fire alarm, activated from another device
Flash every 40 s	0.5 s on / 0.5 s off	Test activated from another device

Specifications

Quiescent condition indicator	Flashing red LED every 40 s
Expected battery life	205-009: 10 years 205-008: 5 years
Low battery indication	Short audible signal every 40 s, synchronized with a single flash of the red LED, for 30 days
Low battery hush indication	Flashing red LED every 20 s
Low battery hush time	10 h
Sounder output level	≥ 85 dB @ 3 m
Alarm sounder	0.5 s on / 0.5 s off
Alarm LED indicator	Flashing red every 1 s
Alarm hush indication	Flashing red LED every 1 s **Interconnected units**: Flashing red LED every 6 s
Alarm hush time	9 min
Test sounder	(0.5 s on / 0.5 s off
Test LED indicator	Flashing red every 1 s **Interconnected units**: Flashing red every 40 s
Heat sensor fault indication	Short audible signal every 40 s and a single flash of the red LED midway between the audible indications
Fault hush indicator	Flashing red LED every 20 s
Fault hush time	10 h
Interconnection (Model 205-008)	No device number limit 500 m between all devices in free air
Operating temperature	(0 ~ +55) °C
Operating humidity	(10 ~ 95) % RH, non-condensing

Compatibility

The 205-008 & 205-009 interconnectable heat alarm is compatible with the following devices.

Description	Part number	Datasheet
Smoke alarm, wireless interconnect	205-005	31-0047
Smoke alarm, wireless interconnect	205-015	31-0047

Accessories

The following accessories are compatible with 205-008 DC heat alarms with wireless interconnection.

Description	Part number	Datasheet
Alarm remote control	261-001	31-0084

Compliance

205 heat alarms are designed to comply with the following standards[a].

BS 5446-2:2003	*Fire detection and fire alarm devices. Specification for heat alarms*
CE	*Conformité Européenne*

[a] Third-party conformance assessment has not been undertaken.

Installation Preparation

Equipment

Before commencing installation, ensure all equipment and tools to mount and test the device are available, such as drills, mounting screws (supplied), cables and ladders.

Location Selection in Homes and Apartments

Heat alarms are suitable for residential applications where smoke or gas detectors may cause unwanted alarms. The following locations are suitable for heat alarms.

- Areas where combustion particles are present, such as kitchens with few windows or poor ventilation.
- Garages where there may be vehicle exhaust fumes.
- Near furnaces, combustion heaters, and space heaters.
- Damp or very humid areas, such as bathrooms with showers.
- In an environment of between (0 ~ +50) °C, and (10 ~ 90) % relative humidity (non-condensing).
- Dusty or dirty areas.
- Insect-infested areas.

⚠ **WARNING**: Hazardous levels of smoke and toxic gas can build up before a heat alarm might operate. Where life safety is the primary requirement in the event of a fire, smoke, gas or combination alarms usually provide earlier warning than heat alarms alone.

For complete coverage, smoke alarms should be installed in all rooms, halls, storage areas, basements, and attics in dwellings. The minimum coverage is one smoke alarm on each floor and one outside each sleeping area.

Installation Location

Install heat alarms as close to the centre of the ceiling as possible, away from light fittings and air-conditioning ducts. If this is not practical, mount the heat alarm on the ceiling, no closer than 50 cm from any wall or corner (see Fig. 1).
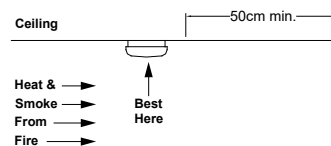

Fig. 1 – Heat alarm location from walls

If some of your rooms have sloped, peaked, or gabled ceilings, try to mount smoke alarms 0.9 m measured horizontally from the highest point of the ceiling.

Where *Not* to Install Your Heat Alarm

Heat alarms are not a suitable substitute for smoke alarms required in sleeping areas.

Installation and Test

Please read the previous section **Installation Preparation**, before commencing installation.

Install the Heat Alarm

⚡ **WARNING**: To avoid the electrical shock hazard, turn off power to the area where you plan to install the device at the fuse box or circuit breaker box.

1. At the place where you are going to install the unit, draw a 75 mm horizontal line.
2. Remove the unit from its base by rotating it counter-clockwise.
3. Place the base on the ceiling so that mounting-hole slots are aligned on the line. In each of keyhole slots, draw a mark to locate the mounting plugs.
4. Remove the base from the ceiling.
5. Drill two 5 mm holes at the marks and insert the plastic mounting plugs (supplied).
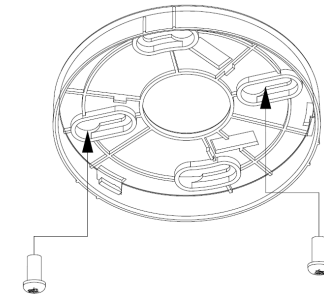6. Attach the base to the ceiling with the screws supplied (see Fig. 2).

Fig. 2 – Fixing the base

7. Align the unit with the base rotate it clockwise to lock it into place (see Fig. 3).

Note: Fitting the unit to its base internally connects the battery power to the unit.
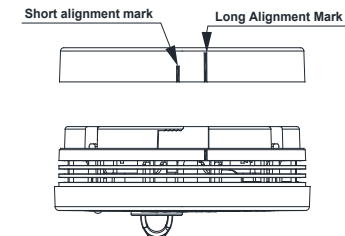

Fig. 3 – Fitting the heat alarm to the base

Activate the Heat Alarm

1. To activate your heat alarm, press and hold the Test/Hush button for 3 s until the LED flashes rapidly.
2. Once the LED starts flashing, release the Test/Hush button within 3 s. The unit will emit a short beep to indicate that it is activated.

Wireless Interconnection Function (Model 205-008)

⚠ **WARNING**: Do not connect this heat alarm to any device other than another 205-series alarm or other compatible Numens device (see datasheet). Connecting anything else may prevent this heat alarm from working properly.

There is no limit to the number of units that can be interconnected using the wireless interconnection function.

⚠️ Units must be configured into a Group for the interconnection function to operate.

When configured as a Group, the wireless function will operate automatically once a fire is detected in any unit.

NOTE: Units should be interconnected within only one family residence, otherwise nuisance alarms may occur when a unit activates or is tested in another residence.

Group Configuration

1. Activate your heat alarm (see above).
2. Ensure there are no Battery Low fault conditions on the units to be connected as a group.
3. Enter Group mode by pressing and releasing the Test/Hush button 5 times within 5 s. The sounder will emit a short beep and the red LED will flash every 0.5 s. Group mode configuration will last 50 s (unless cancelled earlier).
4. To add a unit to the Group, press and release the Test/Hush button on the second unit twice within 2 s. The red LED will flash every 0.5 s. The sounder on the connecting unit will emit a short beep to confirm connection to the Group.
5. Repeat Step 4 to add additional units to the Group.

NOTE: Group configuration must be completed within 50 s, after which time all units will return to the normal condition.

6. When all units are added to the Group, press and release the Test/Hush button on the first unit to end the Group configuration mode.

Remove a Unit from a Group

To remove a unit from the Group, press and release the Test/Hush button 8 times within 5 s. The sounder will emit two short beeps and the red LED will flash twice to confirm removal from the Group.

Test the Heat Alarm(s)

Stand-alone Heat Alarms

1. Press and hold the Test/Hush button for 3 s.
2. Check the sounder operates (0.5 s on / 0.5 s off) and the red LED flashes every 1 s.
3. Release the Test/Hush button to silence the alarm and resume normal operation.

🔵 **WARNING**: The heat alarm has a loud alarm signal. Use hearing protection when testing.

Interconnected Units

1. Press and hold the Test/Hush button for 3 s.
2. Check the sounder operates (0.5 s on / 0.5 s off) and the red LED flashes every 1 s.
3. On the interconnected units, check the sounder operates (0.5 s on / 0.5 s off) and the red LED flashes every 40 s.
4. Release the Test/Hush button to silence the alarm and resume normal operation.

NOTE: It may take up to 10 s for the interconnected units to silence.

5. Repeat Steps 1 ~ 4 for each unit.

Normal Operation

Once installed and activated, your heat alarm will immediately start monitoring for excessive heat. If the sounder in the device operates, check for a fire and execute your safety plan.

Hush (Alarm Condition)

⚠️ **WARNING**: Before using the hush feature, identify the heat source and be certain that safe conditions exist.

If investigation of the alarm signal is likely caused by a known nuisance source (such as excessive cooking heat), the Test/Hush button can be pressed to silence the sounder for 9 min.

⚠️ **WARNING**: If the temperature is too high, the hush function will not silence the alarm sounder.

After the Hush time has expired, the device will return to normal sensitivity. If excessive heat is still present, the alarm will re-activate. The hush feature can be used repeatedly.

Care and Maintenance

Weekly Tests

1. Press and hold the Test/Hush button for 3 s on the heat alarm.
2. Check the sounder operates with a loud pulsating sound, and the red LED in the Test/Hush button flashes rapidly.

🔵 **WARNING**: The heat alarm has a loud alarm signal. Use hearing protection when testing.

3. Where installed, check the activation of interconnected units (see above).

⚠️ **WARNING**: Never use a naked flame of any kind to test your heat alarm. You may set fire to and damage the device, as well as your home. The built-in Test feature accurately tests all alarm functions.

If the unit fails to operate correctly, contact your supplier or Numens (see below).

Annual Maintenance

Vacuum or carefully clean the heat alarm with a dry or damp soft cloth and ensure the sensor openings are free from dust and lint. Do not use solvents.

DO NOT PAINT this product.

Battery Replacement

The battery for model 205-007 is not user-replaceable. Once the battery is depleted, replace the heat alarm.

For other models, remove the unit from the base and replace the battery with an approved model (see Service below).

Service

For service or repair, return the unit intact to the supplier or to Numens (see the address at the end of this manual), stating the reason for the return and details of any fault.

The battery is replaceable by the user (excluding Model 205-007) and may be purchased from general hardware stores. Use only the specified batteries.

Lithium: Huiderrui CR123A

When replacing the battery, check that the battery is installed in accordance with the polarity markings (+, −) shown in the battery compartment. To ensure the battery is correctly fitted and the heat alarm is functioning correctly, test the heat alarm (see **Care and Maintenance**, above).

References

Reference	Description
31-0094	205 DC heat alarm datasheet

Models

Model	Features
205-008	Test, hush, 5-year battery, wireless interconnection
205-009	Test, hush, user-replaceable 10-year battery

Disposal

This product is designed to work reliably for 10 years after the installation date. Smoke alarms and replaceable batteries should not be disposed of as land-fill. Please dispose in an environmentally friendly manner, for example at your local authority recycling centre.

⚠️ **WARNING**: This is an important document. Retain it for the life of the device.

Limited Warranty

To protect your rights, we encourage you to keep the original of the purchase receipt as proof of purchase. No guarantee can be offered without the original the purchase receipt.

Deltronic Security AB (Deltronic) guarantees you as a buyer that the smoke alarm will come to be free from defects in material, workmanship or construction below normal use for a period of:2 years. This guarantee is non-transferable and not valid for replaceable batteries. Our liability to you under this warranty, is limited to repairing or replacing parts that we find to be defective in materials, execution or design. This is free of charge for you, contact us or send enter the item with an error description and proof of purchase date in a letter or package with paid shipping to the address below, in the case of replaceable batteries attach these to the side. The terms of this warranty do not apply in the following circumstances: if the smoke alarm has been modified, disassembled, contaminated, damaged, neglected or otherwise misused or altered after the date of purchase or if it does not work due to incorrect placement / installation or if damage was caused by the designated instructions were not followed. We would like to draw your attention to the fact that we do not replace damage to unit or degradation in service life if the smoke alarm has been in alarm mode for a long time and / or saved property and life.

Deltronic's liability, arising from the sale of this smoke alarm or under the terms of this warranty, may under no circumstances exceed the cost of replacing the same.

Deltronic is under no circumstances responsible for damage or consequential damage that occurs due to the smoke alarm failing to warn under this or any other warranty, express or implied or for damages caused by failure to follow the instructions given. This warranty does not affect your statutory rights.

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