

MICROSAFE®

Installation instructions/User instructions



mKomfy 1.8 16R (mKomfy 1.8 16R Plug & Play)

Part No. 6251650 (P&P 6251655)

SAVE THIS GUIDE

Facts

The mKomfy Cooker Guard is a security product developed to minimise the risk of fire when cooking.

mKomfy 1.8 sensor from SN: 2024-000001 has a new fixing bracket (with lug) which is not compatible with the previous version. The sensor works only with from SN: 1840-000001.

mKomfy 1.8 is a Class B cooker guard and does not react to flames or smoke. It relies on a clear view from the sensor to the cooker hob in order to detect heat. The cooker guard will thus be unable to prevent a fire if the cooker hob is covered with flammable materials (e.g. cardboard, newspaper), or if such materials catch fire near to the cooker hob.

The product assumes normal care in the use of the cooker and associated cookware. In normal use the cooker should be kept under frequent observation, even if safety equipment such as mKomfy is installed. Lots of smoke will be produced before the device is triggered, so additional equipment such as Strømkutt could help to make the kitchen a safer place.

The product must be installed and maintained correctly as described, and may only be fitted by an authorised electrician (does not apply to Plug&Play socket).

Accessories



Optional extras for the mKomfy 1.8 cover additional needs and safety. Compatible with newer wireless accessories labelled "v2".



External reset button



External master switch



Power Cut-off



mTouch[©] HUB

Safety functions

mKomfy 1.8 has been developed for use in private homes. In order to avoid too many false alarms, the cooker guard spends a short amount of time analysing the information from the cooker hob. Cooker hobs which are so powerful that they are able to start a fire in under 120 seconds work so quickly that the cooker guard may find it hard to react before a fire is ignited, depending on the cookware and the substances in it on the cooker hob.

Overheating

The Cooker Guard monitors the temperature of the cooker and sounds the alarm if it exceeds the upper limit.

The temperature alarm beeps 3 times every 5 seconds for 20 seconds and a red light comes on in the sensor. Reduce the temperature of the cooker immediately to prevent it being turned off, or press the control button on the sensor to approve the higher temperature for a set time.

Anti-tamper function

The cooker guard has an integral safety function which detects if the sensor is not correctly mounted in the fixing bracket. If the cooker is in use and the sensor is incorrectly mounted, the security function will be activated and beep 5 times in 5 seconds before turning the cooker off. Replace the sensor in the wall bracket and press the control button to continue using the cooker.

Optional timer function (see page 10 for activation)

When the Cooker Guard detects that the cooker has been turned on, it can start a built-in timer (countdown clock). When the timer reaches zero, the cooker is turned off. The Cooker Guard will alert the user for the last 5 minutes. To restart the timer, press the control button on the sensor once.

To extend cooking time, hold the control button in for 10 seconds (see page 4).

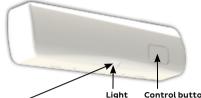
NB: Where current measurement is used, the timer will start up when power consumption is detected. If there is no power consumption for over 1 minute, the timer will revert to zero.

For example, when using the oven, the oven thermostat can disconnect the power for over 1 minute, thus resetting the timer.

Use of current measurement (DIP 9)

When current measurement is used, the cooker guard safety function will only be activated when power consumption by the cooker hob is detected. The standard consumption here is approx. 280W. If the cooker consumes less than 280W during use, the safety function will not be activated. This limit can be tested and calibrated, see page 11.

Everyday use



Temperature sensor

Clean regularly with a damp cloth and soapy water.

Control button

- Reset alarm
- Extend cooking time
 - Reset cut-out

Things to think about when cooking

Sliding a pan across to another ring will expose a very hot surface, and the Cooker Guard may register this as overheating, causing the alarm to go off.





Use pans that cover the whole ring to reduce the chance of unwanted temperature alarms.

Temporarily extended cooking time

(Only applies if Timer Function is activated, see page 3)

The timer (countdown clock) can temporarily be extended to 2 hours (12 hours if 120/360 min. is set) by holding the control button in for 10 seconds.

The sensor beeps twice to confirm that the cooking time has been extended. When the time expires or the cooker has been turned off for at least 2 minutes, the countdown is reset to the standard time.

To cancel the extended cooking time, hold the control button in for 10 seconds. The sensor beeps once to confirm.

Battery

We recommend changing the battery every 5 years or if there is a low battery warning.

- Take the sensor off the wall. 1.
- 2. Remove the back cover (2 screws) and change the batteries, 3 x "AA".
- 3. Reattach the cover and replace the sensor on the wall.
- 4 Press the control button

Alarm signal

| Alarm signal: | One (1) light and sound signal every 15 seconds for 5 minutes. |
|--|--|
| Cause: | Cooker Guard warning that timer is in last 5 minutes. |
| Action: | Press control button to restart timer. |
| Alarm signal: | Two (2) light and sound signals every 5 minutes. |
| Cause: | Battery change necessary. |
| Action: | Change batteries. NB: Make sure you have new batteries to hand first (3 x AA). |
| Alarm signal: | Two (2) light and sound signals and the cooker shuts off 10 min after use. |
| Cause: | Battery change necessary. |
| Action: | Change batteries. NB: Make sure you have new |
| | batteries to hand first (3 x AA). |
| A1 | |
| Alarm signal: | Three (3) light and sound signals every 5 seconds and a steady red light between signals. |
| Cause: | |
| | and a steady red light between signals. |
| Cause: | and a steady red light between signals. Overheating. Reduce temperature, or press control button to |
| Cause: Action: | and a steady red light between signals. Overheating. Reduce temperature, or press control button to temporarily approve high temperature. |
| Cause: Action: Alarm signal: | and a steady red light between signals. Overheating. Reduce temperature, or press control button to temporarily approve high temperature. Three (3) light and sound signals every 30 seconds. |
| Cause: Action: Alarm signal: Cause: | and a steady red light between signals. Overheating. Reduce temperature, or press control button to temporarily approve high temperature. Three (3) light and sound signals every 30 seconds. Excess temperature continuing after shut-off. |
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EMERGENCY MODE

In the event of problems with the cooker guard which you are unable to resolve, you may activate the emergency mode, which will allow power to the cooker for 12 hours (can be repeated for a further 12 hours). NB: All safety functions are deactivated in this period. Use the time to contact an electrician who will be able to resolve the problem.

To activate the emergency mode:

Turn the cooker fuse off and on three times at intervals of at least 1 second for a period of 10 seconds.

Installation - Socket

The sensor and socket are paired at the factory and ready to install.

If re-pairing is necessary (NB!) May only be carried out by an authorised electrician):

Remove at least once battery from the sensor (you can get batteries ready for the sensor, but DO NOT fit them).

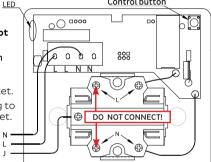
- 1 Give the socket control button a guick press. Yellow LED flashes.
- 2 Hold the control button on the sensor in and fit batteries in the sensor.
- There are 4 beeps, the blue LED on the socket flashes and the socket turns off
- NB! Socket cover may only be removed Release the control button on the sensor. by an authorised electrician. 4

The sensor and socket are now paired

1. Fitting the socket (does not apply to Plug&Play)

NB! May only be carried out by an authorised electrician.

- 1 Connect and fit the socket.
- 2. Connect the cooker plug to the Cooker Guard's socket
- Check that power is connected to the socket.



Control button

Status LEDs (does not apply to Plug&Play - requires authorised electrician)

| Green | lights up | when socket is ON |
|-----------------|----------------------|--|
| Blue | flashes | when data is received from paired units (e.g. sensor) |
| Blue + Green | flash alternately | 1 minute after emergency mode* is activated, and continues to flash while the product is in emergency mode (12 hours). |
| Red | flashes | if socket overheats – socket is turned OFF |
| Red | flashes + beeping | if there is an error, e.g. external switch paired before sensor |
| Yellow | lights up | when cooker's electricity consumption exceeds 1.2 A** |
| Yellow | flashes | in pairing mode |

^{*} emergency mode = all safety functions deactivated. See page 5.

If there is no radio communication from the sensor, the plug will shut off after 5 minutes.

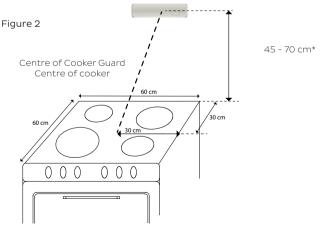
^{** 1.2} A is the factory default. After calibration, the LED lights up when the new setting is exceeded (page 11)

Installation - Sensor

2. Fitting the sensor

NB: If testing the sensor prior to mounting, the sensor must be placed in the fixing bracket so as not to activate the anti-tamper function. mKomfy 1.8 sensor from SN: 2024-000001 has a new fixing bracket (with lug) which is not compatible with the previous version.

- Remove the battery cover and fit batteries (3 x AA).
 beeps = battery OK.
- Tear off the red protective film on the bracket. Mount the sensor on a flat, clean surface on the wall above the centre of the cooker at a height of 45–55 cm, see figure 2. For other installation heights, see page 9.
 NB: If the material on the wall surface is unsuitable for mounting with tape, a screw must be used in the centre of the bracket foot.
- 3. Press the control button on the sensor once. A short beep confirms that the sensor is in communication with the socket and working. If there is no beep, check that the sensor has been correctly mounted in the fixing bracket (anti-tamper function).
- 4. Make sure that only the green LED on the socket lights up when the cooker is connected and turned off. If the yellow LED lights up, the cooker's standby electricity consumption is higher than the standard setting. In this case the level in the mKomfy can be calibrated to the cooker's actual electricity consumption, see pages 10 and 11.



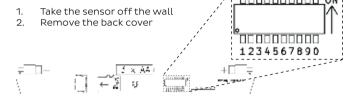
sensor height 45-70 cm for hobs <= 60 cm wide sensor height 65-70 cm for hobs <= 90 cm wide

Installation - Settings

Settings

All settings are made with DIP switches on the PCB in the sensor.

The switch marked 0 activates test mode.



List of DIP switch functions

You will find more information on the individual functions and settings on the following pages.



| DIP | Function | Standard | Set to |
|-------|----------------------|----------|--------|
| DIP1 | Sound | ON | |
| DIP 2 | Light | ON | |
| DIP 3 | Installation height | OFF | |
| DIP4 | Installation height | OFF | |
| DIP 5 | Timer | OFF | |
| DIP 6 | Timer | OFF | |
| DIP7 | Timer | OFF | |
| DIP8 | Autoconnect* | ON | |
| DIP 9 | Current measurement* | ON | |
| DIP 0 | Test mode | OFF | |

^{*} For Autoconnect, DIP9 must also be set to ON. If DIP9 is set to OFF, Autoconnect will be deactivated.

Installation - Settings

DIP 1: Audible alarm

| DIP1 | Audible alarm | Standard |
|------|-----------------------|----------|
| OFF | Deactivates all sound | |
| ON | | • |

DIP 2: Visual alarm

| DIP 2 | Visual alarm | Standard |
|-------|------------------------|----------|
| OFF | Deactivates all lights | |
| ON | | • |

DIP 3 and 4: Installation height / hob type

For hobs up to a width of 60 cm the sensor can be fitted 45-70 cm above the hob. Any lower and it might not comply with EN50615. For wider hobs (up to 90 cm) the sensor must be fitted 65-70 above the hob to cover the full width.

| DIP 3 | DIP 4 | Installation height | Standard |
|-------|-------|---------------------------------------|----------|
| OFF | OFF | 45-55 cm – Normal | • |
| ON | OFF | 56-70 cm – Normal | |
| OFF | ON | 45-55 cm – Increased alarm threshold* | |
| ON | ON | 56-70 cm - Increased alarm threshold* | |

^{*} Increased alarm threshold

Ceramic hobs give off a lot of radiant and residual heat, which can lead to false alarms, as the sensor also measures the heat outside the actual ring. Allowance can be made for this by increasing the alarm threshold for the smallest rings.

NB: Increasing the alarm thresholds will reduce safety, because in certain cases the Cooker Guard will not differentiate between the smallest plates and radiant/residual heat. Nor will the Cooker Guard comply with EN50615 in some cases when a higher alarm threshold is set.

We would, however, recommend using cookware that covers the entire heating zone instead and turning the ring off BEFORE removing the cookware. NB! Does not apply to induction hobs.

Installation - Settings

DIP 5, 6 and 7: Timer function

The countdown starts when the cooker is turned on. When 5 minutes of the set time are left, the Cooker Guard beeps once every 15 seconds for 5 minutes. Pressing the control button restarts the countdown.

| , | | | , | , |
|-------|-------|-------|--------------------|----------|
| DIP 5 | DIP 6 | DIP 7 | Minutes (extended) | Standard |
| ON | OFF | OFF | 15 (2 h) | |
| ON | ON | OFF | 30 (2 h) | |
| ON | ON | ON | 45 (2 h) | |
| OFF | ON | ON | 60 (2 h) | |
| OFF | OFF | ON | 90 (2 h) | |
| OFF | ON | OFF | 120 (12 h) | |
| ON | OFF | ON | 360 (12 h) | |
| OFF | OFF | OFF | Off | • |

DIP 8: Autoconnect

NB: In order for this function to work, DIP 9 must be ON. Fifteen minutes after turning the cooker off, the Cooker Guard will automatically be reset and turn the power back on. On a cooker with rotary switches, all the rings and oven must be turned off before the Cooker Guard will reset itself automatically.

If this function is not activated or to reset the Cooker Guard manually, press the control button on the sensor (or external switch panel, optional extra).

| DIP8 | Autoconnect | Standard |
|------|-----------------|----------|
| OFF | Autoconnect off | |
| ON | | • |

DIP 9: Current measurement

When current measurement is ON, the Cooker Guard will only give an alarm when the cooker is in use. This includes all types of alarm signal, including low battery.

NB! We recommend that you <u>do not turn off</u> current measurement, as this will reduce battery life considerably.

| DIP9 | Current measurement | Standard |
|------|-------------------------|----------|
| OFF | Current measurement off | |
| ON | | • |

Installation – Calibration and function test

Calibrating electricity consumption

If the yellow LED on the SOCKET comes on

NB! May only be carried out by an authorised electrician.

continuously when the hob is OFF and does not disappear when the control button on the sensor is pressed, the cooker's standby current is higher than the Cooker Guard's preprogrammed standby level.

In this case the level can be recalibrated to actual electricity consumption by:

- 1. Holding the SOCKET's control button in until the red and green LEDs flash then release the button within two seconds.
- 2. The green LED flashes three times to acknowledge the change.

NB: We strongly recommend measuring the hob's electricity consumption in standby BEFORE doing this calibration. High electricity consumption could be caused by a fault in the hob. Incorrect calibration in the case of high electricity consumption can result in the Cooker Guard never starting or not working as intended.

Function test

There are two different function tests:

1 = On/Off test 2 = Current test.

To activate the function test:

- 1. Remove the SENSOR cover and set DIP switch 0 to ON
- 2. Put the cover back on temporarily to stop the batteries falling out.

To change between the two function tests, hold the control button on the SENSOR in for five seconds.

The sensor acknowledges with one or two beeps to indicate the test type.

1 beeps On/Off test The sensor acts as an ON/OFF switch.

Pressing the control button switches between turning the power to the cooker ON/OFF.

The light on the SENSOR comes on when the cooker socket is on (sending power to the cooker).

NB! May only be carried out by an authorised electrician.

Indicates electricity consumption for the hob.

Following activation turn the hob on ON. A few seconds later the red LED on the SENSOR should come on continuously and the green and yellow LEDs on the SOCKET should light up.

Now turn the hob off. The red LED on the SENSOR goes out and only the GREEN LED on the SOCKET should be on.

When you have performed the function test(s), remember to set DIP switch 0 to OFF.

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Technical data

Cooker Guard mKomfy 1.8 16R

Operating voltage: 230 VAC (+/- 10%)

Battery:

3 x AA/LR06 **RF**:

868.100 MHz +5 dBm Max. load: 16A

Battery life: Up to 5 years

Cooker guard type: Category B







