

**CTM
LYNG**

MICROSAFE®

Installation and User Instructions



mKomfy 16R400V-D

SAVE THESE INSTRUCTIONS

Practical information

The mKomfy cooker is a safety product developed to minimise the risk of fire when cooking.

The product provides normal safety when using a cooker and associated cookware. The cooker must not be left unattended while in use even if safety equipment such as the mKomfy is installed.

The product must be installed and maintained correctly as described, and may only be fitted by an authorised electrician.

Accessories



Optional extras for the mKomfy 1.8 include several products that increase the level of safety. Compatible with wireless accessories labelled "v2".



External
reset button



External
master switch



Smoke
shut-off

Hotplate temperature

The cooker guard monitors the temperature of the hotplates 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 hotplates immediately to prevent them being turned off or press the control button on the sensor to approve the higher temperature for a set time.

Anti-tamper function

If the sensor is removed from the bracket, a security function will be activated and beep 5 times in 5 seconds before the hotplates are turned off. Put the sensor back and press the control button to continue using the cooker.

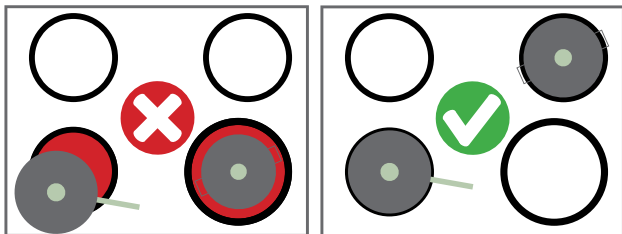
Optional timer function (see page 10 for activation)

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. Press the control button on the sensor once to restart the timer.

Hold the control button in for 10 seconds to extend the time (see page 5).

Things to remember when cooking:

Moving a hot pan to another hotplate will expose a very hot surface. The cooker guard may register this as overheating and sound the alarm. To reduce the risk of unwanted temperature alarms, only use pans that cover the entire hotplate.



Everyday use

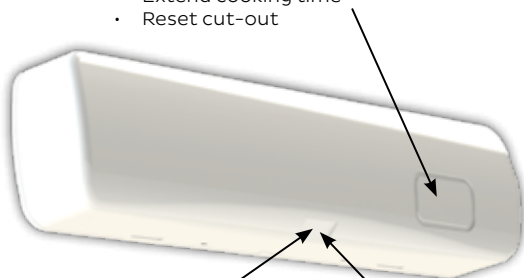
Control button

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

Temperature sensor

Clean regularly with a damp cloth and soapy water.

Light



Batteries

We recommend changing the batteries every five years or if the sensor gives a low battery warning.

1. Remove the sensor from the wall bracket.
2. Take the battery cover off.
3. Replace the batteries, 3 x AA.
4. Put the battery cover back on and return the sensor to the wall bracket.
5. Press the control button.

Alarms

Alarm signal:	One (1) beep every 15 seconds for 5 minutes.
Cause:	Cooker guard warning that timer will run out in 5 minutes.
Action:	Press control button to restart timer.

Alarm signal:	Five (5) beeps in 5 seconds.
Cause:	Anti-tamper function detects that sensor is not positioned correctly in wall bracket.
Action:	Position sensor properly in bracket and press control button.

Alarm signal:	Two (2) beeps every five minutes.
Cause:	Batteries are nearly flat.
Action:	Replace batteries. Remember to check that you have new batteries before taking the old ones out of the sensor (3 x AA).

Alarm signal:	Three (3) beeps every 5 seconds and red light.
Cause:	Hotplates overheating.
Action:	Turn temperature down or press control button to temporarily approve high temperature.

Temporarily extended 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 extended cooking time has been activated. When the time expires or the hotplate has been turned off for at least two minutes, the countdown is reset to the default time.

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

Installation – Relay

The sensor and relay are configured at the factory and ready to install.

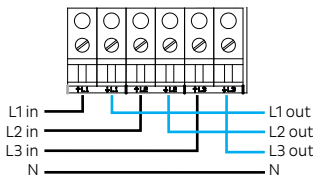
If re-pairing is necessary: Remove at least one battery from the sensor (have batteries ready for the sensor, but DO NOT fit them).

1. Give the control button a quick press. Yellow LED flashes.
2. Hold the control button on the sensor in and fit the batteries in the sensor.
3. There are 4 beeps, the blue LED on the relay flashes and the relay turns off.
4. Release the control button on the sensor. The sensor and relay are now paired.

Sensor and relay are now paired.

1. Connecting wires in the relay (must be carried out by an authorised electrician)

1. Connect the input wires to the terminals.
2. Connect the output wires to the terminals.
3. Turn on the power.



Status LEDs

(Troubleshooting must be carried out by an authorised electrician)

Green	lights up	when relay is on.
Blue	flashes	when data is received from paired unit (excluding sensor)
Blue +	flash	if connection with sensor is lost (emergency mode*)
Green	alternately	
Red	flashes	if relay overheats – power must be turned off.
Red	flashes + beeping,	if error in external units interrupts pairing before sensor is paired
Yellow	lights up	when cooker's electricity consumption is too high, 1.2 A **
Yellow	flashes	in pairing mode

* Emergency mode = all safety functions deactivated

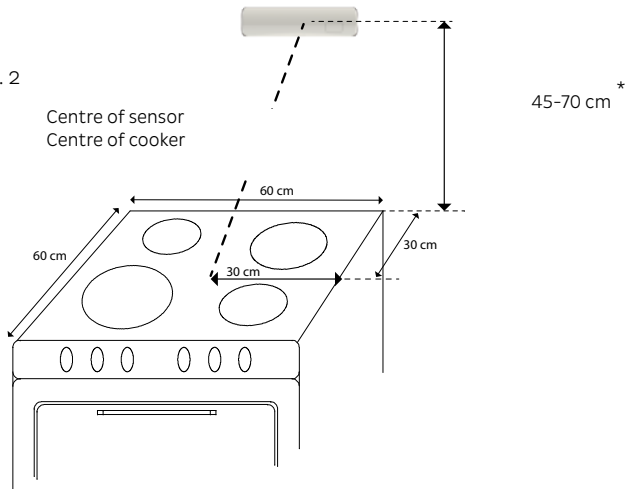
** 1.2 A is the factory default. After calibration, the LED lights up if the new calibration level is exceeded.

2. Installing the sensor

NB: For the sensor to be tested before fitting, it must be placed in the bracket and kept horizontal and perpendicular to prevent the anti-tamper function being activated.

1. Remove the battery cover and fit the batteries (3 x AA).
2 beeps = battery OK.
2. 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 hotplates at a height of 45-55 cm, see Fig. 2. For other installation heights, see page 9.
3. Press the control button on the sensor once. A short beep confirms that the sensor is in communication with the relay and working.
4. Make sure that only the green LED lights up when the cooker is turned on and off. If the yellow LED lights up, the cooker's standby electricity consumption is higher than the default setting. The level in the mKomfy can then be calibrated to the cooker's actual electricity consumption, see pages 10 and 11.

Fig. 2



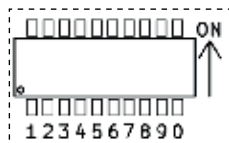
* Sensor height 45-70 cm for hobs up to 60 cm wide
Sensor height 65-70 cm for hobs up to 90 cm wide

Installation – Settings

Settings

All settings are made with the DIP switches on the PCB in the sensor. The switch marked 0 activates test mode.

1. Remove the sensor from the wall bracket
2. Take the back cover off



List of DIP switch functions

To be completed by installer

DIP	Function	Default	Complete
DIP 1	Sound	ON	
DIP 2	Light	ON	
DIP 3	Installation height	OFF	
DIP 4	Installation height	OFF	
DIP 5	Timer	OFF	
DIP 6	Timer	OFF	
DIP 7	Timer	OFF	
DIP 8	Autoconnect	ON	
DIP 9	Current measurement	ON	
DIP 0	Test mode	OFF	

DIP 1: Audible alarm

DIP 1	Audible alarm	Default
OFF	Deactivation of sound	
ON		•

DIP 2: Visual alarm

DIP 2	Visual alarm	Default
OFF	Deactivation of 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 DS/EN 50615. For wider hobs (max. 90 cm) the sensor must be fitted 65-70 cm above the hob to cover the full width.

DIP 3	DIP 4	Installation height	Default
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 cause false alarms, as the sensor also measures the heat outside the actual hotplate. Allowance can be made for this by increasing the alarm threshold for the smallest hotplates. Please note that raising the alarm threshold will reduce safety because in certain cases the cooker guard will not differentiate between the smallest hotplates and radiant/residual heat. Nor will the cooker guard comply with DS/EN 50615 in some cases when a higher alarm threshold is set. Instead, we recommend using cookware that covers the entire heating zone and turning the hotplate 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 there are 5 minutes to go, the cooker guard beeps once every 15 seconds for 5 minutes. The countdown can be restarted by pressing the control button.

DIP 5	DIP 6	DIP 7	Minutes (extended)	Default
ON	OFF	OFF	15 (2 hours)	
ON	ON	OFF	30 (2 hours)	
ON	ON	ON	45 (2 hours)	
OFF	ON	ON	60 (2 hours)	
OFF	OFF	ON	90 (2 hours)	
OFF	ON	OFF	120 (12 hours)	
ON	OFF	ON	360 (12 hours)	
OFF	OFF	OFF	Deactivated	•

DIP 8: Autoconnect

NB: In order for this function to work, DIP 9 must be ON. Fifteen minutes after the cooker is turned off, it is automatically reset and the power turned back on. On a cooker with rotary switches, all the hotplates and oven must be turned off before the cooker guard can be reset 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).

DIP 8	Autoconnect	Default
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 do not turn off current measurement, as this will reduce battery life.**

DIP 9	Current measurement	Default
OFF	Current measurement off	
ON		•

Installation – Calibration and function test

Calibrating electricity consumption NB: Must be carried out by an authorised electrician.

If the yellow LED on the RELAY comes on continuously when the hob is off and does not disappear when the control button on the sensor is pressed, the current to the cooker's hotplates is higher than the cooker guard's preprogrammed standby level.

The level can then be calibrated to the actual power supply as follows:

1. Hold the control button on the RELAY in until the red and green LEDs flash. Then release the button within 2 seconds.
2. The green LED flashes 3 times to confirm the change.

NB: We strongly recommend measuring the current to the hob in standby BEFORE doing this calibration. High consumption may be due to a fault in the hob. In this case, incorrect calibration to high power consumption may result in the cooker guard not starting or not working as expected.

Function test

There are two different function tests: 1 = On/Off test 2 = Current test.

To activate a 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 5 seconds. The sensor acknowledges with one or two beeps to indicate the test type

1 beep	On/Off test	2 beeps	Current test
The sensor acts as an On/Off switch. Every time you press the control button, the cooker is switched on and off in turn. The light on the SENSOR comes on when the cooker is on (sending power to the cooker).		Indicates electricity consumption for the cooker. Following activation turn the cooker on. A few seconds later, the red LED on the SENSOR will come on constantly, while the green and yellow LEDs on the RELAY will light up. Then turn the cooker off. The red LED on the SENSOR goes out and only the GREEN LED on the RELAY should be on.	

Remember to set DIP switch 0 to OFF after performing one or more function tests.

Thank you for choosing...

MICROSAFE®

1021 Art. No.: 14117

Technical data

Cooker Guard
mKomfy 16R400V-D

Voltage:
400 VAC 3-phase

Load:
16 A

Batteries:
3 x AA/LR06

Battery life:
Up to 5 years

RF:
868.100 MHz

Transmitter power:
+5 dBm



NORWEGIAN
QUALITY
PRODUCTS



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