

# IKA

designed for scientists

EN



HEAT SAFELY | Integrated Safety protects both sample and user

imLab



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## HEAT SAFELY

/// Integrated Safety protects both sample and user

Safety is the highest priority for IKA. Our products meet the highest safety standards to protect all users of our devices in the laboratory: They have CE certifications and meet all the requirements described in commonly used standards such as DIN IEC EN 61010-1, DIN IEC EN 61010-2-010, DIN EN IEC 61010-2-051 or DIN IEC EN 61326-1.

High temperatures are often experienced during laboratory work with magnetic stirrers. This is precisely where special safety precautions are required. Our safety concept Integrated Safety protects the sample, laboratory, and the user, ensuring a successful outcome for your experiment. Integrated Safety includes the following features:



## Independent control circuits

In addition to the sensors which directly measure the sample and the hot plate, Integrated Safety also provides an additional, absolutely independent, safety circuit on the hot plate. This ensures that the critical temperature of the medium can never be exceeded – even when the temperature sensor in the medium or in the heating element is defective or fails completely.

## Locking function

A locking function prevents accidental changes to the set speed and temperature values. Safety circuits are also adjustable.



## Safety glass

The latest generation of our magnetic stirrers have a display with hardened, unbreakable glass which is also particularly resistant to chemicals.

## Automatic self-monitoring

All safety-relevant components have a self-monitoring function. This guarantees safety in case of breakdown.

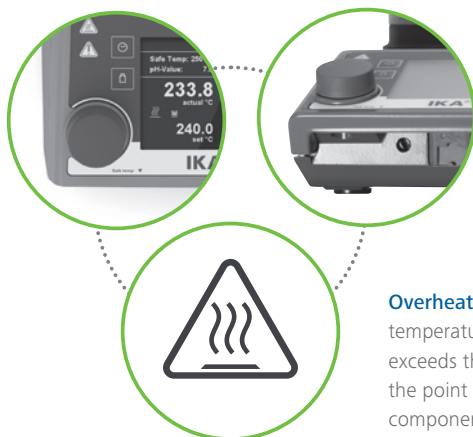
## Temperature warning

The magnetic stirrer with heating function delivers an automatic warning as soon as the residual heat of the hot plate exceeds 50 °C when the heating is switched off. RET control-visc, RCT digital, and C-MAG digital and control displays the hot plate temperature when it is above 50 °C, even when the device is switched off, to inform the user the plate is still hot.

## Safety functions at a glance

**Setting the required temperature** is simple. This function is used to heat the medium safely until the set required temperature is reached.

**The safety temperature** device is an adjustable safety circuit for the temperature, which prevents a specific required temperature from exceeding. The safety temperature device also adjusts using the tool provided.



**Overheating protection:** If the internal temperature of the RET® control-visc exceeds the permissible temperature, to the point where the internal electronic components would be damaged, the heat output is reduced automatically.





## Custom safety temperature

Since every sample is different, it is possible to individually set the maximum temperature allowed to ensure its safety. Integrated Safety from IKA ensures that the respective flashpoint of the medium used is not reached, independently of any device defects, glass breakages, or physical effects such as thermal distortion.

## Adjust your individual safety temperature device as follows:

A small tool is provided as an accessory for all IKA laboratory devices with Integrated Safety which you can manually adjust the safety temperature for every laboratory procedure.

The screw opening provided for this is usually next to the On/Off switch on the device. Insert the tool through the opening and turn it until the desired maximum temperature is reached.

**Only by manual adjustment using a tool can the total independence of the safety circuit from the normal control circuit required in DIN EN IEC 61010-2-010 be achieved.**

Further detailed information can be taken from the operating manual for your specific device.





## HEAT SAFELY WITH IKA MAGNETIC STIRRERS

### DEVICES WITH ADJUSTABLE SAFETY CIRCUIT:

#### IKA Plate (RCT digital)

Ident. No.: 0025004601

#### RET control-visc

Ident. No.: 0005020000

#### C-MAG HS 7 control

Ident. No.: 0020002694

#### RCT 5 digital

Ident. No.: 0020002704

#### RET basic | RCT basic

Ident. No.: 0003622000 | 0025005927

#### RH basic | digital

Ident. No.: 0005019700 | 0005019800

#### C-MAG HS 4 | HS 7 | HS 10

Ident. No.: 0003581000 | 0003581200 | 0003581400

#### RT 5 | RT 10 | RT 15

Ident. No.: 0003690600 | 0003691100 | 0003692600

### DEVICES WITHOUT ADJUSTABLE SAFETY CIRCUIT:

#### C-MAG HS 4 | HS 7 | HS 10 digital

Ident. No.: 0004240200 | 0003487000 | 0004240400

#### RH basic 2

Ident. No.: 0003339000

