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RET basic HUB Solution

/// Data Sheet

Safe remote control and monitoring – ideal for operation in a fume hood

The RET basic HUB Solution expands the trusted RET basic to include remote control and monitoring via the IKA HUB. It has been specially developed for applications where heightened safety requirements apply – particularly when operating in a closed fume hood.

The IKA HUB allows setting parameters and process data to be viewed and adjusted without having to work directly on the device. This reduces contact with hazardous media and minimises the risk of accidents in line with significantly



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increased requirements.

Greater safety through operation outside the fume hood

The HUB.DS docking station included in the scope of delivery allows the IKA HUB to be permanently mounted, e.g. directly on the outside of the fume hood.

This ensures the fume hood remains closed throughout the entire experiment, whilst the user still has access to all relevant information at all times.

This offers crucial safety benefits for:

- Working with toxic, volatile or flammable substances
- High-temperature applications
- Long-term or unattended operation

Central control of multiple devices

With the IKA HUB, up to five devices can be read out and controlled simultaneously.

This simplifies monitoring in more complex experimental setups and supports structured, reproducible workflows in the laboratory.

Scope of delivery

- RET basic
- IKAFLON® 30 Magnetic stirring bar
- IKAFLON® 40 Magnetic stirring bar
- IKA HUB
- HUB-DS
- Screw driver (use for safety circuit)

Technical Data

Number of stirring positions	1
Stirring quantity max. per stirring position (H2O) [l]	20
Maximum load [kg]	25
Motor rating output [W]	9
Motor principle	Brushless DC
Direction of rotation	right
Speed display set-value	LED
Speed display actual-value	LED
Speed adjustment	Control knob (Rotating / Pressing)
Speed range [rpm]	50 - 1700
Setting accuracy speed [rpm]	10
Stirring bar length [mm]	20 - 80
Self-heating of the set-up plate by max. stirring (RT:22°C/duration:1h) [K]	+15
Heat output [W]	800
Temperature display set-value	LED
Temperature display actual-value	LED
Temperature unit	°C
Heating temperature range [°C]	Room temp. + device self heating - 340
Heat control	Control knob (Rotating / Pressing)
Display resolution [K]	0.1
Temperature setting range [°C]	0 - 340
Temperature setting resolution of heating plate [K]	1
Connection for ext. temperature sensor	PT1000, ETS-D5, ETS-D7, PT wireless
Temperature setting resolution of medium [K]	0.1
Operating temperature min. (with external cooling) [°C]	-20
Adjustable safety circuit [°C]	50 - 360
Set-up plate material	Aluminium alloy
Set-up plate dimensions [mm]	Ø 135
Automatic reverse rotation	optional (with IKA HUB)
Intermittent mode	optional (with IKA HUB)
Viscosity trend measurement	optional (with IKA HUB)
Break detection stirring bar	optional (with IKA HUB)
Timer	yes
Timer display	LED
Time setting min. [s]	1
Time setting max. [min]	5999
pH measurement	optional (with ETS-D7, PT wireless)
Programs	optional (with IKA HUB)
Sensor in medium detection	yes
Temperature measure range PT1000 [°C]	-20 - 340
PT 1000 deviation;DIN EN 60751 Kl. A [K]	$\leq \pm (0.15 + 0.002 \times T)$
Speed deviation (no load,nominal voltage, at 1500rpm + 25 °C) [%]	± 2
Heating rate (1l H2O in H1500) [K/min]	9
Heat control accuracy of heating plate centre without vessel (at 100°C) [K]	± 5
Heat control accuracy with ext. PT1000 (500ml H2O in 600ml beaker,40mm stirring bar,600rpm,50°C) [K]	± 0.5
Heat control accuracy with ETS-D5 (500ml H2O in 600ml beaker,40mm stirring bar,600rpm,50°C) [K]	± 0.5
Heat control accuracy with ETS-D7 (500ml H2O in 600ml beaker, 40mm stirring bar, 600rpm, 50°C) [K]	± 0.2
Heat control accuracy with PT wireless (500ml H2O in 600ml beaker, 40mm stirring bar, 600rpm, 50°C) [K]	± 0.2



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Dimensions (W x H x D) [mm]	160 x 100 x 200
Weight [kg]	2.3
Permissible ambient temperature [°C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 54
RS 232 interface	yes
USB interface	USB-C
WPAN interface	yes
WiFi Interface	yes
Ethernet interface	yes
Voltage [V]	220 - 230
Frequency [Hz]	50/60
Power input [W]	820
Power input standby [W]	0.45