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## RCT basic ready-to-go Solution

/// Data Sheet

The RCT basic ready-to-go system solution includes all the components required for precise temperature control of your sample using the RCT basic magnetic stirrer.

### Stand for secure positioning

This complete solution includes a stand with an extension arm and a cross-sleeve. These ensure the correct and secure positioning of the PT 1000 temperature sensor, which is also supplied. This is because the sensor should always be positioned outside the vortex created during stirring and immersed at least 20 mm deep into the medium. Thanks to the stand, the position of the temperature sensor can be precisely adjusted to the reaction vessel and the liquid level in both



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vertical and horizontal directions.

#### Multifunctional silicone cover

The package also includes a universal silicone cover for 600 ml and 1000 ml beakers. It features integrated openings for the temperature sensor. The chemically highly resistant cover fulfils three functions: it acts as a splash guard, minimises energy consumption when used as a lid, and reduces the noise that can be generated by air intake during rapid stirring.

#### Scope of delivery

- RCT basic
- IKAFLON® 30 Magnetic stirring bar
- IKAFLON® 40 Magnetic stirring bar
- BC 1000 Beaker cap
- H 16 V Support rod
- PT 1000.60 Temperature sensor, stainless steel
- H 44 Boss head clamp
- H 38 Holding rod
- Screw driver (use for safety circuit)

## Technical Data

Number of stirring positions	1
Stirring quantity max. per stirring position (H <sub>2</sub> O) [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 - 1500
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]	+12
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 - 310
Heat control	Control knob (Rotating / Pressing)
Display resolution [K]	0.1
Temperature setting range [°C]	0 - 310
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]	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)
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 - 310
PT 1000 deviation;DIN EN 60751 Kl. A [K]	≤ ± (0.15 +0.002x t )
Speed deviation (no load,nominal voltage, at 1500rpm + 25 °C) [%]	±2
Heating rate (1l H <sub>2</sub> O 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 H <sub>2</sub> O in 600ml beaker,40mm stirring bar,600rpm,50°C) [K]	±0.5
Heat control accuracy with ETS-D5 (500ml H <sub>2</sub> O in 600ml beaker,40mm stirring bar,600rpm,50°C) [K]	±0.5
Heat control accuracy with ETS-D7 (500ml H <sub>2</sub> O in 600ml beaker, 40mm stirring bar, 600rpm, 50°C) [K]	±0.2
Heat control accuracy with PT wireless (500ml H <sub>2</sub> O in 600ml beaker, 40mm stirring bar, 600rpm, 50°C) [K]	±0.2
Dimensions (W x H x D) [mm]	160 x 100 x 200
Weight [kg]	2.3



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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	optional (USB WD)
Voltage [V]	220 - 230
Frequency [Hz]	50/60
Power input [W]	820
Power input standby [W]	0.45