

IKА

designed for scientists



RCT basic

/// Fiche technique

For almost half a century, RCT basic has not only been our bestseller, but also the standard and reference device in laboratories and research facilities worldwide. The RCT basic magnetic stirrer stands for reliability, exceptionally long product lifetimes and the highest safety standards.

RCT basic is suitable for stirring tasks up to 20 l (H₂O) and reaches a hotplate temperature of up to 310°C. With the connection option for an external temperature sensor (PT 1000.60 included in delivery), the temperature can be measured and controlled directly in the reaction medium.

Thanks to perfect insulation of the aluminum heating plate, maintenance-free EC motor and electronic switching power

supply, RCT basic features excellent energy efficiency as well as reduced self-heating of the heating plate during stirring operation, thus contributing to a more sustainable laboratory.

In the latest generation, RCT basic presents itself in proven quality and with numerous new features:

- Tempered shatterproof glass surface for optimal chemical resistance and easy cleaning
- Largest display in its class with easy-to-read LED display
- Illuminated symbols for displaying important status information (set and actual temperature, heating status, temperature sensor)
- USB and RS232 interface for control or documentation of the test parameters via a PC
- Compatible with labworldsoft® laboratory software
- QR code for quick access to device information, accessories, downloads and extended warranty
- Easily accessible main switch on the front of the device

Safe, robust and compliant with standards

RCT basic contains the proven safety features for IKA magnetic stirrers. In accordance with the DIN EN 61010-2-010 standard, it meets all safety requirements for laboratory equipment for heating substances and is therefore also suitable for unattended operation.

- Tested and certified by TÜV SÜD according to standard IEC 61010-1 (cTÜVus)
- Adjustable hotplate temperature safety circuit (with tool)
- Confirmation mode (operating mode D) prevents the unintentional change of the set setpoints. At restart, the confirmation of the safety temperature is necessary.
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- Automatic switch-off of the temperature control function if the connected external temperature sensor is not immersed in the medium or is defective. Function selectable, timeout time adjustable (Error 5).
- Enclosed design (protection class IP42) guarantees long service life, even under extreme conditions in the laboratory
- Reliable operation even with cold media. Extended temperature display down to -20°C (with external sensor).
- Protected electronic connections on the back of the device
- Fireproof die-cast aluminum housing with high quality and durable powder coating
- DIN socket 12878 for connecting an electronic contact thermometer, e.g. ETS-D5 for high-presence temperature control. In this combination, the experimental setup is extended by a further independent safety circuit for the reaction medium.

Proven technology

- Heating plate made of aluminum for optimal and homogeneous heat transfer
- Excellent magnetic coupling
- Soft start prevents magnetic stir bars from breaking off during the start phase



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- Two optimized temperature control modes ensure fast heating or precise temperature control without overshooting
- Push and turn buttons for independent adjustment of the setpoints and starting / stopping of temperature and speed

DOMINIQUE DUTSCHER SAS

Données techniques

Nombre de postes	1
Capacité d'agitation max. (H ₂ O) [l]	20
Puissance du moteur débitée [W]	9
Sens de rotation du moteur	À droite
Affichage de la vitesse de rotation valeur de consigne	LED
Affichage de la vitesse de rotation valeur réelle	LED
Possibilité de réglage de la vitesse	Bouton rotatif
Plage de vitesse [rpm]	50 - 1500
Précision de réglage de la vitesse [rpm]	10
longueur du barreau aimanté [mm]	20 - 80
auto-chauffage de la plaque (RT:22°C pour une durée 1h) [K]	+13
Puissance de chauffage [W]	600
Affichage de la température valeur de consigne	LED
Affichage de la température valeur réelle	LED
Unité de température	°C
Plage de température [°C]	Température ambiante + Auto-échauffement de l'appareil
Possibilité de réglage de la température de chauffage	Bouton rotatif
Temperature setting range [°C]	0 - 310
Précision du réglage de la température de la plaque de chauffage [K]	1
Connexion pour une sonde de température externe	PT1000, ETS-D5, ETS-D6
Vitesse de chauffe du milieu [K/min]	6.5
Précision de réglage de la température du milieu [K]	1
Circuit de sécurité réglable [°C]	50 - 360
Matériaux de la plaque	alliage d'aluminium
Dimensions de la plaque [mm]	Ø 135
Capteur dans milieu détection (Error 5)	oui
Temperature measure range PT1000 [°C]	-20 - 310
Écart de vitesse (aucune charge, tension nominale, à 1500 tr/min + 25 °C) [%]	±2
Vitesse de chauffage (1l H ₂ O dans H1500) [K/min]	6.5
Précision de régulation de la température de la plaque de chauffage (à 100 °C) [K]	±5
Précision de régulation de la température avec PT1000 ext. (H ₂ O 500 ml, agitateur magnétique 40 mm, 600 tr/min, 50 °C) [K]	160 x 85 x 270
Précision de régulation de la température avec ETS-D5 (H ₂ O 500ml, agitateur magnétique 40 mm, 600 tr/min, 50°:5) [K]	2.4
Précision de régulation de la température avec ETS-D6 (H ₂ O 500ml, agitateur magnétique 40 mm, 600 tr/min, 50°:2) [K]	5 - 40
Dimensions (L x H x P) [mm]	80
Poids [kg]	IP 42
Plage de température du milieu admise [°C]	oui
Humidité relative admissible [%]	oui
Protection selon DIN EN 60529	220 - 230
Interface numérique RS 232	50/60
Interface numérique USB	650
Tension [V]	1.6
Fréquence [Hz]	
Puissance absorbée de l'appareil [W]	
Puissance absorbée de l'appareil Standby [W]	