

TOP
SPIN



ROTANTA 460/460 R
Benchtop, Underbench and Floorstanding Centrifuges
classic/cooled

Efficient, results-oriented working processes are top priority in both research and routine laboratories. Advanced laboratory technology makes a significant contribution to shortening processing times.

For decades, ROTANTA centrifuges from Hettich have been distinguished by the highest quality. Excellent performance and an extensive range of accessories guarantee fast, trouble-free operation in daily laboratory use.

With a maximum capacity of 3 litres per run, they are proving themselves in clinics and laboratory centres, as well as in Life Science R & D departments.

For sample processing in clinical chemistry, a wide selection of adapters are available to accommodate the most varied types of tubes. Biotechnology, molecular biology and the pharmaceutical industry value the ROTANTA 460 especially for its autoclavable and aerosoltight accessories.

These versatile benchtop centrifuges feature a filter plate rotor with an RCF of 6,446 for purifying DNA/RNA.

Model variants of the refrigerated ROTANTA 460 R

- with connection for nitrogen flushing (Cat. No. **5660-20**),
- as heating/cooling version up to 90 °C (Cat. No. **5660-50**), or as
- heating/cooling version with connection for nitrogen flushing (Cat. No. **5660-70**), on request.

PERFORMANCE



- High speed with angle rotors:
 - 24,400 RCF with a max. capacity of 30 x 1.5/2.0 ml
 - 18,038 RCF with a max. capacity of 6 x 94 ml
 - 14,025 RCF with a max. capacity of 6 x 250 ml
- High capacity with swing-out rotors:
 - 4 x 750 ml at max. 4,779 RCF
 - 24 microtitre plates / 4 filter plates at max. 4,211 RCF or
 - 12 microtitre plates / 2 filter plates at max. 6,446 RCF
 - 196 blood collection tubes at max. 2,906 RCF

USER-FRIENDLINESS

- Powered lid locking
- Ergonomic control and information panel
- Easy rotor changing
- 98 program storage spaces
- Protection against unauthorized operation / modification of stored programs
- Switch of centrifuge run time from "at start" (commencement at start) to "at speed" (start when nominal speed is attained)
- Special braking ramps for centrifuging blood bags in the refrigerated models
- Program interlocking to combine several centrifugation runs (**optional**)

COOLING (ROTANTA 460 R, 460 RC and 460 RF)

- Infinitely variable adjustment from -20 °C to +40 °C (or -4 °F to +104 °F)
- Stand-by cooling

SAFETY

- Imbalance switch-off
- Automatic rotor recognition
- Emergency lid lock release
- Lid dropping protection
- Lid locking and holding during rotor run
- Motor overheating protection
- Chamber overheating protection with (ROTANTA 460 R, 460 RC und 460 RF) centrifuges



ROTANTA 460 R
benchtop centrifuge,
cooled,

Cat. No. 5660



ROTANTA 460
benchtop centrifuge

Cat. No. 5650

OPERATION AND CONTROL


With the convenient C control panel, even the most challenging centrifugation programs can easily be keyed in, stored and accessed as required.




ROTANTA 460 R, 460 RC and 460 RF control panel (C control panel)

DIGITAL DISPLAY AND CONTROL PANEL

KEYBOARD

START	Start centrifugation run / short centrifuging runs / save entries and changes
	Start pre-cooling program PREC
STOP / OPEN	Manually end centrifugation run / Open lid

PARAMETER INPUT

PROG	Input / recall program number 98 programs can be stored
T/°C	Input temperature in increments of 1 from - 20 °C to + 40 °C or - 4 °F to + 104 °F (ROTANTA 460 R, 460 RC and 460 RF)
	Input of acceleration levels 1 – 9 Input of braking levels 1 – 9 Input brake force cut-off
RCF	Input relative centrifugal force (RCF) in increments of 1 Enter centrifuging radius (RAD) in mm
RPM	Input speed in increments of 10
TIME	Input length of centrifugation (max. 99 h : 59 min : 59 sec) or continuous operation



ROTANTA 460 RC
underbench centrifuge,
cooled

Cat. No. 5670



ROTANTA 460 RF
floorstanding centrifuge,
cooled

Cat. No. 5675

ROTORS AND ACCESSORIES

Swing-out rotor, 4-place, for ASTM tubes



±90°

n = 2,000 min⁻¹
max. RCF 984

Cat. No. (without carriers) **4474**

Swing-out rotor, 6-place, for chrome bath tubes



±90°

n = 2,000 min⁻¹
max. RCF 917

Cat. No. **4619**¹⁶⁾



capacity in ml	50	100	100	100
Ø x L in mm	45 x 130	58 x 161	44 x 168	37 x 200
Cat. No.	- ²⁾	0528 ²⁾	- ²⁾	0531 ²⁾
carrier Cat. No. 4275				
rotor Cat. No. 4474				
Cat. No.	4278-A	0771	4277	4276
boring Ø x L in mm	-			
tubes per rotor	4			
max. RCF ²⁾	984	961		
radius in mm	220	215		
run-up in sec	17			
run-down in sec, braked	20			
temperature in °C ¹⁾	-8			

capacity in ml	30
Ø x L in mm	24 x 151
Cat. No.	0529/0508 ¹³⁾
rotor Cat. No. 4619 ¹⁶⁾	
Cat. No.	-
boring Ø x L in mm	-
tubes per rotor	6
max. RCF	917
radius in mm	205
run-up in sec	17
run-down in sec, braked	21
temperature in °C ¹⁾	-11

¹³⁾ The tube may not be centrifuged with the stopper. The stopper only serves to close the tube for agitating or mixing.

¹⁶⁾ In the heatable models 5660-50, 5660-51, 5660-70, 5670-50 and 5675-50, rotors 4619 and 5616 may only be used up to a maximum of + 40 °C.

ROTANTA 460/460 R

TECHNOLOGY	ROTANTA 460		ROTANTA 460 R ^{*)}		
Benchtop centrifuge, without rotor	classic		cooled		
Power supply ^{*)}	200 – 240 V 1 ~	100 – 127 V 1 ~	200 – 240 V 1 ~	100 – 127 V 1 ~	100 V 1 ~
Frequency	50 – 60 Hz		50 Hz	60 Hz	50 Hz
Consumption	1,000 VA	1,100 VA	1,800 VA	2,000 VA	
Emission, Immunity	EN / IEC 61326-1, class B	FCC class B	EN / IEC 61326-1, class B	FCC class B	
 Max. capacity	4 x 750 ml				
 Max. RPM (speed)	15,000 min ⁻¹				
Max. RCF	24,400				
Running time	1 sec - 99 h : 59 min : 59 sec, ∞ continuous run, short cycle mode				
Dimensions (HxWxD)	456 x 554 x 706 mm	456 x 554 x 715 mm	456 x 770 x 706 mm	456 x 770 x 715 mm	
Weight	approx. 101 kg	approx. 111 kg	approx. 141 kg	approx. 151 kg	
Refrigeration					
Temperature control, infinitely variable	-		from -20 to +40 °C		
Cat. No.	5650	5650-01	5660	5660-01	

TECHNOLOGY	ROTANTA 460 RC ^{*)}	ROTANTA 460 RF ^{*)}
	Underbench centrifuge, cooled, without rotor	Floorstanding centrifuge, cooled, without rotor
Power supply ^{*)}	200 – 240 V 1 ~	
Frequency	50 Hz	
Consumption	1,800 VA	
Emission, Immunity	EN / IEC 61326-1, class B	
Dimensions (HxWxD)	683 x 554 x 697 mm	961 x 554 x 697 mm
Weight	approx. 140 kg	approx. 164 kg
Temperature control, infinitely variable	from -20 to +40 °C	
The other values are identical with those of the ROTANTA 460 R		
Cat. No.	5670	5675

^{*)} Other voltages on request.
^{*)} Additional model variants on request.



Hettich centrifuges comply with all relevant EU standards in effect and conform to the European level of quality and safety for medical devices. Evidence is provided by national and international test marks such as IEC 61010 or the CE conformity. The ISO 9001, ISO 13485 and ISO 14001 certificates accredited to the company bear witness to the extreme care and responsibility Hettich puts into the manufacturing of centrifuges and their accessories.



LAB TECHNOLOGY

Andreas Hettich GmbH & Co. KG

Föhrenstr. 12
 D - 78532 Tuttlingen
 Germany
www.hettichlab.com
info@hettichlab.com
service@hettichlab.com

Phone +49 (0)7461 / 705 -0
 Fax +49 (0)7461 / 705 -1122
National Sales: -12 00
International Sales: -12 01
National Service: -12 02
International Service: -12 03