

ortoalresa

Centrifuges and laboratory products

CONSUL 21 / CONSUL 21R V.2

CONSUL 21



WORK **PROGRAM SETUP** **MENU**

Progr: 01 Name:
Rotor: RT 205 Adap: RE 410
Spin time: 0h15m00s
RPM: 3.700 RCF: 2.587
Accel: 74s Decel: 75s

Status: Open

↑ **ortoalresa** ↓

consul 21

High capacity on a bench top offering several advantages to the operator, until now exclusively available on devices for research.

The **TFT touch screen** made easy the value selection, including in only one screen timer, RPM, RCF, acceleration and braking.

The user menú, allows the customization of several values as open lid, RPM/RCF locking along centrifugation, countdown, etc.

Along centrifugation a graphic shown the operator the current status as well as time to end of program.

The devices included on Serie **Consul 21** are highly functionals they can spin up to 4 x 400 ml, 48 tubes of 15 ml, 50 ml and 15 ml conical, microtubes, microplates , as well as a wide set of adapters for each one.

Innovating about centrifugation.

Use friendlinessly

- TFT touch screen easy to read and values selection.
- Informative Wheel about the progress of stages of centrifugation
- Rotor list on memory.
- Real values on screen of RCF based on accessories configuration.
- Timer count up/down, from 0 or at “set RPM/RCF” for test reproducibility.
- Short spin key with speed adjustable.
- Up to 175 acceleration ramps and up to 175 braking ramps.
- Automatic open lid (only non-refrigerated) .
- Automatic rotor recognition.
- Lid latch lock.
- Microprocessor controlled.
- Option: free or locked adjustment of RPM/RCF along the run.

Features

- Induction motor maintenance free
- High capacity: Max. Volume 4 x 400 ml.
- High Speed, up to 20.804x g./14.300 RPM.
- Quiet: noise level < 60 dB.
- 16 memories for programs.

Safety

- Lid locking and holding as well as lid dropping protection.
- Imbalance switch off.
- Manual overriding.
- Chamber of centrifugation in stainless Steel.
- Viewing and calibration prot in the lid.
- Several messages keep the operator informed about the device situation.
- Guard ring between the chamber of centrifugation and the housing.
- Forced ventilation which reduces the temperature increase (only non-refrigerated).

EC Directives: 98/79/EC, 2006/95/EC, 2004/108/EC; 2002/95/EC, 2002/96/EC, 2003/108/EC.

Standards: 61010-1:2002, 61010-2-020:2006,61326-1:2006

Versions

Ref	Dimensions (mm)(w x d x h)			Net weight (Kg)	Voltage (V)	Frecuency (Hz)	Power (W)
CE 111	490	620	390	47	220-240	50-60	600
CE 117	490	620	390	47	110-120	50-60	600

CONSUL 21 R



High capacity on a bench top centrifuge which offer to their users several advantages, up to now only available on devices dedicated to research. The TFT touch screen simplifies the parameter selection; main values appear only in one screen as time, RPM, RCF, acceleration and braking.

The operator menu allows other values adjustment as open lid once the rotor stops, locking RPM / RCF along the run, selection of time from 0 or at set RPM/RCF.

Along centrifugation it showed on screen a graphic indicating its status as well as the stage of centrifugation, time to end of process.

The devices included on Serie **Consul 21** are highly functional they can spin up to 4 x 400 ml, 48 tubes of 15 ml, 50 ml and 15 ml conical, microtubes, microplates, as well as a wide set of adapters for each one.

Innovating about centrifugation.

Use friendliness

- TFT touch screen easy to read and values selection.
- Informative Wheel about the progress of stages of centrifugation
- Rotor list on memory.
- Real values on screen of RCF based on accessories configuration.
- Timer count up/down, from 0 or at "set RPM/RCF" for test reproducibility.
- Short spin key with speed adjustable.
- Up to 175 acceleration ramps and up to 175 braking ramps.
- Automatic open lid (only non-refrigerated).
- Automatic rotor recognition.
- Lid latch lock.
- Microprocessor controlled.
- Option: free or locked adjustment of RPM/RCF along the run.

Features

- Induction motor maintenance free
- High capacity: Max. Volume 4 x 400 ml.
- High Speed, up to 20.804x g./14.300 RPM.
- Quiet: noise level < 60 dB.
- 15 memories + pre-cooling program.

Safety

- Lid locking and holding as well as lid dropping protection.
- Imbalance switch off.
- Manual overriding.
- Chamber of centrifugation in stainless Steel.
- Viewing and calibration port in the lid.
- Several messages keep the operator informed about the device situation.
- Guard ring between the chamber of centrifugation and the housing.
- Forced ventilation which reduces the temperature increase (only non-refrigerated).

Cooling

- Precooling program with rotor spinning and temperature selectable by operator.
- 4 °C at least at max speed with any rotor.
- Range of temperature -20 °C (-4 °F) a 40°C (104 °F)
- Scale Celsius or Fahrenheit.
- Temperature sensor inside the chamber.
- Gas R 404A HFC.

EC Directives: 98/79/EC, 2006/95/EC, 2004/108/EC; 2002/95/EC, 2002/96/EC, 2003/108/EC.

Regulation: 1005/2009 & 842/2006.








Standards: 61010-1:2002, 61010-2-020:2006, 61326-1:2006

Versions

Ref	Dimensions (mm) (w x d x h)			Net weight (Kg)	Voltage (V)	Frecuency (Hz)	Power (W)	z Max. advisable
CE 114	670	770	390	72	220-240	50-60	1200	< 0,446
CE 120	670	770	390	72	110-120	50-60	1200	< 0,446



Accesories for centrifuges Consul 21 Series

								
ROTOR		ANGLE FIXED 45 °	ANGLE FIXED 45 °	ANGLE FIXED 30 °	ANGLE FIXED 45 °	SWING OUT	SWING OUT	SWING OUT
Capacity		8 x 50 ml.	4 x 100 ml.	4 x 250 ml.	30 x 1,5-2 ml.	4 x 250 ml.	4 x 400 ml.	12 microplacas
R.P.M.		6.000	5.600	4.700	14.300	4.200	4.000	3.500
Radius mm		149	138	153	96	183	180	149
R.C.F.		5.997	4.838	3.779	20.204	3.609	3.220	2.041
Min Temperature at max speed °C		-4	-4	-4	-4	-2	-4	-4
	Dim (mm)	ADAPTERS Tubes REF.	ADAPTERS Tubes REF.	ADAPTERS Tubes REF.	ADAPTERS Tubes REF.	ADAPTERS Tubes REF.	ADAPTERS Tubes REF.	ADAPTERS Tubes REF.
400ml.	ø 80 x 118	- -	- -	- -	- -	- -	4 RE 450	- -
350 ml.	ø76 x 120	- -	- -	- -	- -	- -	4 RE 423	- -
250ml.	ø 62 x 120	- -	- -	4 RE 449	- -	4 RE 449	4 RE 457	- -
200 ml.	ø 60 x 120	- -	- -	4 RE 449	- -	4 RE 449	4 RE 430	- -
100 ml.	ø 48 x 95	- -	4 RE 446	4 RE 327	- -	4 RE 327	4 RE 412	- -
80 ml.	ø 44 x 100	- -	4 RE 338	4 RE 422	- -	4 RE 422	4 RE 421	- -
50 ml.	ø 35 x 100	8 RE 448	4 RE 335	4 RE 334	- -	4 RE 334	8 RE 414	- -
50 ml. conical	ø 29 x 117	8 RE 375	4 RE 341	4 RE 340	- -	4 RE 340	12 RE 413	- -
30 ml.	ø 25 x 96	8 RE 370	4 RE 332	12 RE 312	- -	12 RE 312	20 RE 415	- -
15 ml.	ø 16 x 100	8 RE 369	16 RE 316	28 RE 376	- -	28 RE 376	48 RE 417	- -
15 ml. conical	ø 17 x 122	8 RE 369	4 RE 339	20 RE 321	- -	20 RE 321	28 RE 416	- -
15 ml. blood tubes	ø 16 x 132	8 RE 369	- -	28 RE 376	- -	- -	- -	- -
10 ml.	ø 13 x 100	24 RE 366	20 RE 320	40 RE 343	- -	40 RE 343	72 RE 418	- -
10 ml. blood tubes	ø 16 x 107	8 RE 369	16 RE 316	28 RE 376	- -	28 RE 376	48 RE 417	- -
7/10 ml. blood tubes	ø 13 x 107	8 RE 373	20 RE 320	28 RE 324	- -	28 RE 324	48 RE 419	- -
5 ml.	ø 13 x 75	24 RE 366	20 RE 320	40 RE 343	- -	40 RE 343	72 RE 418	- -
5 ml. blood tubes	ø 13 x 82	8 RE 373	20 RE 320	28 RE 324	- -	28 RE 324	48 RE 419	- -
10 x 10 mm.	ø 10 x 100	24 RE 367	36 RE 326	52 RE 346	- -	52 RE 346	76 RE 420	- -
microtubes 1,5-2 ml.	ø 11 x 39	24 RE 465	20 RE 408	24 RE 440	30 -	24 RE 440	48 RE 431	144 RE 460
microtubos 0,5-0,6 ml.	ø 8 x 30	- -	- -	- -	30 RE 428	- -	- -	- -
microtubos 0,2-0,4 ml.	ø 6 x 45	- -	- -	- -	30 RE 427	- -	- -	- -
microplates	128x86x15	- -	- -	- -	- -	- -	- -	12 -

(1) This rotor can be supplied with hermetic lids (RE 405)