

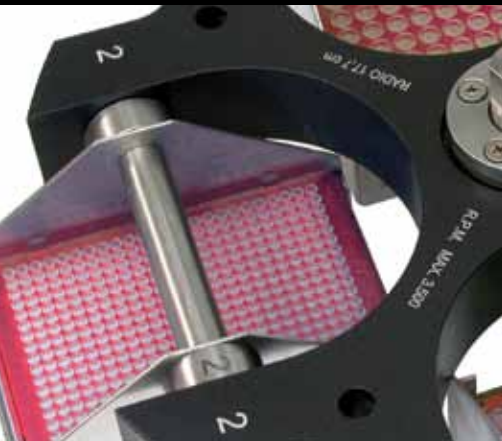
# orto alresa

Centrifuges and laboratory products

[info@ortoalresa.com](mailto:info@ortoalresa.com)

[www.ortoalresa.com](http://www.ortoalresa.com)

Tel.: +34 91 884 40 16



General applications: Centrifuges: Universal

## Series DIGICEN 21

# DIGICEN 21



Centrifuges: Universal: Series Digicen 21

IVD CE

The centrifuge **Digicen 21** highlights for its versatility among the universal centrifuges and it's provided of:

- Swing out rotors for max 4 x 100 ml for tubes , microplates as well as microtubes.
- Angle fixed low speed up to 24 tubes of 15ml.
- Angle fixed high speed for microtubes up to 50 ml conical.

It's controlled through LCD screen showing centrifugation values as time, RPM/RCF, as well as braking time, graphic for open lid, progress bar , messages and acoustic signals for error or end of program , which provides the user the process monitoring.

**Thinking on centrifugation.**

## User friendliness

- LCD screen shown RPM/RCF (on steps 100 RPM/10xg),time, temperature (1°C steps) and acceleration/deceleration (1 second steps).
- Intuitive handling through start, stop, short spin and lid keys.
- Rotor list on memory.
- Timer count up/down, from 0 or at "set RPM/RCF" for test reproducibility.
- Short spin key with speed adjustable.
- Automatic rotor recognition.
- Progressive acceleration and braking selectable by operator up to 175 ramps.
- 16 memories.
- Automatic open lid (non-refrigerated)
- Lid latch lock.
- Microprocessor controlled.
- Option: free or locked adjustment of RPM/RCF along the run.

## Features

- Induction motor maintenance free
- Max. capacity. 4 x 100 ml.
- Speed, up to 26.480 xg/16.500 RPM
- Quiet: noise level < 60 dB.

## Safety

- Lid locking and holding.
- 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.
- Lid dropping protection.

**EU Directives:** 98/79/EC, 2006/95/EC, 2004/108/EC, 2011/65/EU, 2012/19/EU

**Standards:** EN 61010-1, EN 61010-2-020, EN 61326-1.

## Versions

Code	Dimensions (mm)(w x d x h)			Net weight (Kg)	Voltage (V)	Frecuency (Hz)	Consumption (W)
CE 110	410	530	320	36	220-240	50-60	280
CE 116	410	530	320	36	110-120	50-60	280

# DIGICEN 21R



Centrifuges: Universal: Series Digicen 21

IVD CE

The centrifuge refrigerated **Digicen 21 R** can reach up to 24.959 xg with a wide range of rotors:

- Swing out rotors, with a max volume of 4 x 100 ml which can fit several set of adapters for tubes with or without caps, microtubes, microplates.
- Angle fixed low speed for routine purposes.
- Angle fixed high speed from microtubes to 50 ml conical tubes.

On LCD screen shown the selectable values as time, RPM, RCF, temperature and braking time as well as graphics for lid open, progress bar, and acoustic signals for a better control about the process by operator.

The powerful refrigeration system, enhanced by the pre-cooling program, keep the samples at stable and controlled temperature, avoiding sample's temperature fluctuations at introducing into the device.

#### Stabilizing sample preparation.

### User friendliness

- LCD screen shown RPM/RCF (on steps 100 RPM/10xg), time, temperature (1°C steps) and acceleration/deceleration (1 second steps).
- Intuitive handling through start, stop, short spin and lid keys.
- Rotor list on memory.
- Timer count up/down, from 0 or at "set RPM/RCF" for test reproducibility.
- Short spin key with speed adjustable.
- Automatic rotor recognition.
- Acceleration and braking selectable by operator.
- 15 memories and pre-cooling program.
- Lid latch lock.
- Microprocessor controlled.
- Option: free or locked adjustment of RPM/RCF along the run.

### Features

- Induction motor maintenance free
- Max. capacity 4 x 100 ml.
- Speed, up to 26.480 xg/16.500 RPM.
- Quiet: noise level < 60 dB.

### Safety

- Lid locking and holding.
- 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.
- Lid dropping protection.

### Cooling

- Precooling program with rotor spinning and temperature selectable by operator.
- 4°C at Max speed as higher.
- Temperature range -20°C (-4 °F) to 40°C (104 °F)
- Temperature sensor inside the chamber, gas R 404A HFC.

**EU Directives:** 98/79/EC, 2006/95/EC, 2004/108/EC, 2011/65/EU, 2012/19/EU

**Regulation:** 1005/2009 & 842/2006.

**Standards:** EN 61010-1, EN 61010-2-020, EN 61326-1.

### Versions

Code	Dimensions (mm)(w x d x h)			Net weight (Kg)	Voltage (V)	Frecuency (Hz)	Consumption (W)	Z max Advisable(Hz)
CE 113	590	680	320	67	220-240	50-60	700	<  0.446
CE 119	590	680	320	67	110-120	50-60	700	<  0.446

## Accessories

### Centrifuges Series Digicen 21

RT 143



RT 138 (1)



RT 150 (4)



RT 128



RT 183



RT 151 (2)





RT 253



ROTOR		SWING OUT		SWING OUT		SWING OUT		HORIZONTAL		ANGLE FIXED 45 °		ANGLE FIXED 45 °		ANGLE FIXED 45 °	
Max. capacity		4 x 50 ml.		4 x 100 ml.		6/4/2 Microplates		24 x 1,5x 75 mm.		32 x 0,2 ml.		24 x 1,5-2 ml.		12 x 5 ml	
RPM		5.300		5.000		4.000		13.000		16.500		16.500		16.500	
Radius(mm)		145		147		122 (3)		87		55 (3)		82		87	
RCF Max. (xg)		4.554		4.109		2.182		16.438		16.741		24.959		26.480	
Min. temp. max speed (°C)		-4		-4		0		1		2		2		5	
SAMPLE VOLUME	Dim (mm) approx.	ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS	
		Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.
100 ml.	ø48 x 95	-	-	4	RE 446	-	-	-	-	-	-	-	-	-	-
80 ml. hs	ø38 x 112	-	-	4	RE 380	-	-	-	-	-	-	-	-	-	-
80 ml.	ø44 x 100	-	-	4	RE 338	-	-	-	-	-	-	-	-	-	-
50 ml. hs	ø29 x 108	4	RE 378	4	RE 381	-	-	-	-	-	-	-	-	-	-
50 ml.	ø35 x 100	4	RE 445	4	RE 335	-	-	-	-	-	-	-	-	-	-
50 ml. conical	ø29 x 117	4	RE 342	4	RE 341	-	-	-	-	-	-	-	-	-	-
30 ml. hs	ø25 x 98	4	RE 379	4	RE 382	-	-	-	-	-	-	-	-	-	-
30 ml.	ø25 x 96	4	RE 333	4	RE 332	-	-	-	-	-	-	-	-	-	-
15 ml.	ø16 x 100	4	RE 329	16	RE 316	-	-	-	-	-	-	-	-	-	-
15 ml. conical	ø17 x 122	4	RE 329	4	RE 339	-	-	-	-	-	-	-	-	-	-
10 ml. hs	ø16 x 80	4	RE 329	16	RE 316	-	-	-	-	-	-	-	-	-	-
10 ml.	ø13 x 100	12	RE 313	20	RE 320	-	-	-	-	-	-	-	-	-	-
10 ml. blood sample	ø16 x 107	4	RE 329	16	RE 316	-	-	-	-	-	-	-	-	-	-
7/10 ml. blood sample	ø13 x 107	4	RE 337	20	RE 320	-	-	-	-	-	-	-	-	-	-
5 ml.	ø13 x 75	12	RE 313	20	RE 320	-	-	-	-	-	-	-	-	-	-
5 ml. conical	ø13 x 82	-	-	-	-	-	-	-	-	-	-	-	-	-	12
5 ml. blood sample	ø13 x 82	4	RE 337	20	RE 320	-	-	-	-	-	-	-	-	-	-
1,5 x 75 mm. capillaries	ø1,5x75	-	-	-	-	-	-	24	-	-	-	-	-	-	-
Microtubes 1,5-2 ml.	ø11x39	12	RE 463	20	RE 408	72	RE 401	-	-	-	-	24	-	12	RE 506
Microtubes 0,5-0,6 ml.	ø8x30	-	-	-	-	-	-	-	-	-	-	24	RE 305	12	RE 507
Microtubes 0,2-0,4 ml.	ø6x45	-	-	-	-	-	-	-	-	32 x 0,2 ml.	-	24	RE 304	12	RE 508
Microplates (4)	128x86x15/21/45	-	-	-	-	6/4/2	-	-	-	-	-	-	-	-	-
Cell culture	128x86x22	-	-	-	-	4	-	-	-	-	-	-	-	-	-

(1) This rotor includes hermetic lids. | (2) Please, check tubes feature. | (3) Medium radio on bucket. | (4) Allows different configurations depending of the microplates height.

															
<b>ROTOR</b>		ANGLE FIXED 35 °	ANGLE FIXED 35 °	ANGLE FIXED 35 °	ANGLE FIXED 45 °	ANGLE FIXED 30 °	ANGLE FIXED 30 °	ANGLE FIXED 28 °							
Max. capacity		24 x 5 ml.	18 x 15 ml.	24 x 15 ml.	6 x 50 ml.	12 x 10ml. Hermet	8 x 30 ml. Hermet	6 x 50 ml. Hermet							
RPM		6.500	5.000	5.000	6.000	15.000	13.500	9.000							
Radius(mm)		113	132	132/114	132	78	92	101							
RCF Max. (xg)		5.338	3.689	3.689/3.186	5.313	19.621	18.746	9.146							
Min. temp. max speed (°C)		1	0	-1	1	4	4	1							
<b>SAMPLE VOLUME</b>	<b>Dim (mm) approx.</b>	<b>ADAPTERS</b>		<b>ADAPTERS</b>		<b>ADAPTERS</b>		<b>ADAPTERS</b>		<b>ADAPTERS</b>		<b>ADAPTERS</b>		<b>ADAPTERS</b>	
		Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.
100 ml.	ø48 x 95	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80 ml. hs	ø38 x 112	-	-	-	-	-	-	-	-	-	-	-	-	-	-
80 ml.	ø44 x 100	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50 ml. hs	ø29 x 108	-	-	-	-	-	-	6	RE 386	-	-	-	-	6	-
50 ml.	ø35 x 100	-	-	-	-	-	-	6	RE 447	-	-	-	-	-	-
50 ml. conical	ø29 x 117	-	-	-	-	-	-	6	RE 365	-	-	-	-	6	-
30 ml. hs	ø25 x 98	-	-	-	-	-	-	6	RE 387	-	-	8	-	6	RE 392
30 ml.	ø25 x 95	-	-	-	-	-	-	6	RE 362	-	-	8	-	6	RE 393
15 ml.	ø16 x 100	-	-	18	-	24	-	6	RE 361	-	-	8	RE 406	6	RE 394
15 ml. conical	ø17 x 122	-	-	18	-	12	-	6	RE 361	-	-	-	-	6	RE 394 (5)
10 ml. hs	ø16 x 80	-	-	18	RE 383	24	RE 384	6	RE 361	12	-	8	RE 391	6	RE 395
10 ml.	ø13 x 100	-	-	18	RE 359	24	RE 385	18	RE 360	-	-	8	RE 407	6	RE 396
10 ml. blood sample	ø16 x 107	-	-	18	-	24	-	6	RE 361	-	-	-	-	6	RE 394
7/10 ml. blood sample	ø13 x 107	-	-	18	RE 359	24	RE 385	6	RE 364	-	-	-	-	6	RE 396
5 ml.	ø13 x 75	24	-	18	RE 303	24	RE 306	18	RE 360	12	RE 389	8	RE 390	6	RE 397
5 ml. conical	ø13 x 82	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 ml. blood sample	ø13 x 82	24	-	18	RE 303	24	RE 306	6	RE 364	12	RE 389	8	RE 390	6	RE 397
1,5 x 75 mm. capillaries	ø1,5 x 75	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtubes 1,5-2 ml.	ø11 x 39	-	-	-	-	-	-	18	RE 464	-	-	-	-	18	RE 433
Microtubes 0,5-0,6 ml.	ø8 x 30	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microtubes 0,2-0,4 ml.	ø6x45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Microplates	128x86x45	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cell culture	128x86x22	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(5) Fitting this tubes rotor lid can not be closed.

**orto**  
alresa  
About centrifugation

[info@ortoalresa.com](mailto:info@ortoalresa.com)

[www.ortoalresa.com](http://www.ortoalresa.com)

Tel.: +34 91 884 40 16

**Álvarez Redondo S.A.**  
C/ Misericordia, 23.  
Fax: + 34 91 884 44 23  
28864 AJALVIR Madrid (Spain)  
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