









General applications: Centrifuges universal

# **UNICEN 21**

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Max. capacity: 4 x 100 ml. Max. speed: 2.938 xg / 4.200 RPM

Max. volume: 480ml.

The word that best defines and determines its characteristics is, without doubt, universal. It has multiple rotors with a wide range of reducers, which enables it to work with volumes from 0.2 ml. to 100 ml., with angle fixed and swing out options. This equipment covers all types of needs of the users and offers a range of medium speeds for routine processes. To optimise the performance of the equipment in this range, we have increased its capacity with a swing out rotor for up to 28 x 15 ml. tubes and an angle fixed rotor for 32 to 15 ml./15 ml. conical tubes.

It has a control to define the functions beyond the operation values, thus becoming a piece of equipment perfectly integrated into your processes. Versatile, functional, simple, indispensable in your lab.

#### **Features**

#### LED screen:

- Shows RPM/ RCF and time.
- Speed programming in 50 RPM/ 10 xg steps.
- Timer countdown/up from "0" or at "set RPM/ RCF" for reproducible tests.
- Timer from 1 to 99 min. programmable in 1 min. steps and hold position.
- Acceleration and deceleration control in 3 steps: fast, soft and free.
- Acoustic and visual messages on screen warning the user the equipment status.

#### Easy to use

- Microprocessor controlled.
- Induction motor maintenance free (brushless).
- Rotors list on memory.
- Noise level: below 60 dB.
- Start, stop, open lid and short spin with adjustable speed buttons.
- Option of free/locked adjustment of RPM/ RCF along the run.
- Automatic open lid, programmable.
- · Low heigh for easy access.
- Last values remain in memory.
- Over-speed protection.

### Safety

- Lid provided with security systems:
- Automatic lid lock system, motorized with double lock.
- Emergency lid-lock release.
- Locking and protection against opening along the run.
- Lid dropping protection.
- Port in the lid for calibration and operation checking.
- · Unbalance detection and switch off.
- Protection safety ring between the centrifugation chamber and the housing.
- Chamber of centrifugation in stainless steel (easy cleaning).
- Buckets can be removed with the lid closed. Hermetic lids
- Rotors and adapters autoclavable, easy to install by the user.
- Forced ventilation to reduce temperature increasing
- Automatic disconnection for energy saving, with deactivation option.

EU Directives: 2011/65/EU. 2012/19/EU. 2014/30/EU. 2014/35/EU. 98/79/EC.

Standards: EN 61010-1, EN 61010-2-101, EN 61010-2-020, EN 61326-2-6, EN 61326-1.

#### **Versions**

Dimensions (mm)(w x d x h)				Net weight (Kg)	Voltage (V)	Frecuency (Hz)	Consumption (W)		
CE 126	410	520	320	36	220-230	50-60	280		
CE 127	410	520	320	36	110-120	50-60	280		

## Accessories

# **Centrifuge Unicen 21**

		RT	177	RT	260	RT 1	75	R'	T 173	RT	226	RT	163	
ROTOR		SWING OUT		SWING OUT		SWING OUT		(1) SWING OUT		ANGLE FIXED 30 °		ANGLE FIXED 35 °		
		8 x 15 ml.		28 x 15 ml.		4 x 50 ml.		4 x 100 ml.		8 x 15 ml.		24 x 15 ml.		
Max. capacity				4.200		4 x 50 mi. 4.200			4 x 100 IIII. 4.200					
RPM Max.		4.200 145		4.200		145				4.200 91		4.200		
Radius (mm)		2.860		2.899		2.860		147 2.899		1.795		132/114 2.603/2.248		
RCF Max. (xg)  Dim (mm)		ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS		ADAPTERS		
SAMPLE VOLUME	approx.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	Tubes	Ref.	
100 ml.	ø48 x 100	-	-	-	-	-	-	4	RE 446	-	-	-	-	
80 ml.	ø44 x 100	-	-	-	-	-	-	4	RE 338	-	-	-	-	
50 ml.	ø34 x 100	-	-	-		4	RE 445	4	RE 335	-	-	-	-	
50 ml. conical	ø29 x 117	-	-	-	-	4	RE 342	4	RE 341	-	-	-	-	
30 ml.	ø25 x 98	-	-	-	-	4	RE 333	4	RE 332	-	-	-	-	
25 ml. conical	ø29 x 83	-	-	-	-	4	RE 596	4	RE 597	-	-			
15 ml.	ø16 x 100	8		28			RE 329	16	RE 316	8		24	-	
15 ml. conical	ø17 x 122	8	-	4	-	4	RE 329	4/8	RE 339/579	8	-	12	-	
10 ml.	ø13 x 100	8	RE 371	28	RE 516	12	RE 313	20	RE 320	8	RE 371	24	RE 385	
10 ml. blood sample	ø16 x 107	8	-	28	-	4	RE 329	16	RE 316	8	-	24	-	
7/10 ml. blood sample	ø13 x 107	8	RE 371	28	RE 516	4	RE 337	20	RE 320	8	RE 371	24	RE 385	
5 ml.	ø13 x 75	8	RE 377	28	RE 512	12	RE 313	20	RE 320	8	RE 377	24	RE 306	
5 ml. blood sample	ø13 x 82	8	RE 377	28	RE 512	4	RE 337	20	RE 320	8	RE 377	24	RE 306	
Microtubes 1,5-2 ml.	ø11 x 42	8	RE 513	28	RE 578	12	RE 463	20	RE 408	8	RE 513	24	RE 601	
Microtubes 0,5-0,6 ml.	ø8 x 30	8	RE 514	28	RE 582	12	RE 531	20	RE 519	8	RE 514	24	RE 603	
Microtubes 0,2-0,4 ml.	ø6 x 45	8	RE 515	28	RE 583	12	RE 532	20	RE 473	8	RE 515	24	RE 605	

<sup>(1)</sup> This rotor can be supplied with hermetic lids (RE 355)

		RT 2	256	RT 167		
ROTOR		ANGLE FI	XED 35 °	ANGLE FIXED 45 °		
Max. capacity		32 x 1	5 ml.	6 x 50 ml.		
RPM Max.		4.20	00	4.200		
Radius (mm)		149/	130	132		
RCF Max. (xg)		2.938/2.563		2.6	603	
SAMPLE VOLUME	Dim (mm) approx.	ADAPTERS Tubes Ref.		ADAP Tubes	TERS Ref.	
100 ml.	ø48 x 100	-	-		-	
80 ml.	ø44 x 100	-	-	-	-	
50 ml.	ø34 x 100	-	-	6	RE 447	
50 ml. conical	ø29 x 117	-	-	6	RE 365	
30 ml.	ø25 x 98	-	-	6	RE 387	
25 ml. conical	ø29 x 83	-	-	6	RE 598	
15 ml.	ø16 x 100	32	-	6	RE 361	
15 ml. conical	ø17 x 122	32	-	6	RE 361	
10 ml.	ø13 x 100	32	RE 518	18	RE 360	
10 ml. blood sample	ø16 x 107	32	-	6	RE 361	
7/10 ml. blood sample	ø13 x 107	32	RE 518	6	RE 364	
5 ml.	ø13 x 75	32	RE 517	18	RE 360	
5 ml. blood sample	ø13 x 82	32	RE 517	6	RE 364	
Microtubes 1,5-2 ml.	ø11 x 42	32	RE 602	18	RE 464	
Microtubes 0,5-0,6 ml.	ø8 x 30	32	RE 604	18	RE 533	
Microtubes 0,2-0,4 ml.	ø6 x 45	32	RE 606	18 RE 534		







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