

A close-up photograph of the Orto Alresa UNICEN 21 centrifuge. The image shows several black cylindrical rotor tubes with white caps, arranged in a row. The tubes are labeled with 'ortoalresa' and 'Ns 220759/05'. In the background, a red rotor assembly is visible. The image is overlaid with a dark semi-transparent rectangle containing the company logo and tagline.

**orto  
alresa**  
About centrifugation

General applications | UNICEN 21



# UNICEN 21



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 that defines the functions beyond the operation values, thus becoming a piece of equipment perfectly integrated into your processes. Versatile, functional, simple and indispensable in your lab.

## Features

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

## Easy to use

- Microprocessor controlled.
- Induction motor maintenance free (brushless).
- Rotors list in memory.
- Noise level: below 60 dB.
- Start, stop, open lid and short spin with adjustable speed buttons.
- Possibility to block or modify the speed during the cycle.
- Automatic lid opening, programmable.
- Low height for easy access.
- Last values remain in memory.
- Over-speed protection.

3 YEAR WARRANTY



Max. Capacity  
4 x 100 ml



Screen Type  
LED



Max. volume  
480 ml



Max. Speed  
2.938 xg / 4.200 RPM



Version  
Ventilated



EU Directives: 2011/65/EU, 2012/19/EU, 2014/30/EU, 2014/35/EU, 2017/746/EU.  
Standards: EN 61010-1, EN 61010-2-101, EN 61010-2-020, EN 61326-2-6, EN 61326-1.

## 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.

## Versions

|        | Dimensions<br>(mm) (w x d x h) |     |     | Net Weight<br>(Kg) | Voltage<br>(V) | Frequency<br>(Hz) | Consumption<br>(W) |
|--------|--------------------------------|-----|-----|--------------------|----------------|-------------------|--------------------|
| CE 126 | 410                            | 520 | 320 | 35                 | 220-230        | 50-60             | 250                |
| CE 127 | 410                            | 520 | 320 | 35                 | 110-120        | 50-60             | 250                |

\*IVD version available, please indicate it in your request





Accessories centrifuge Unicen 21

- Rolling table (pag. 78)
- Rotors & adapters

|                        |                     | RT 177                                                                              |        | RT 260                                                                              |        | RT 175                                                                              |        | RT 173                                                                              |            | RT 226                                                                              |        | RT 163                                                                              |        | RT 256                                                                              |        | RT 167                                                                              |        |
|------------------------|---------------------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|------------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|--------|
|                        |                     |  |        |  |        |  |        |  |            |  |        |  |        |  |        |  |        |
|                        |                     | (1)                                                                                 |        |                                                                                     |        |                                                                                     |        |                                                                                     |            |                                                                                     |        |                                                                                     |        |                                                                                     |        |                                                                                     |        |
| ROTOR                  |                     | SWING OUT                                                                           |        | SWING OUT                                                                           |        | SWING OUT                                                                           |        | SWING OUT                                                                           |            | ANGLE FIXED 30 °                                                                    |        | ANGLE FIXED 35 °                                                                    |        | ANGLE FIXED 35 °                                                                    |        | ANGLE FIXED 45 °                                                                    |        |
| Max. capacity          |                     | 8 x 15 ml.                                                                          |        | 28 x 15 ml.                                                                         |        | 4 x 50 ml.                                                                          |        | 4 x 100 ml.                                                                         |            | 8 x 15 ml.                                                                          |        | 24 x 15 ml.                                                                         |        | 32 x 15 ml.                                                                         |        | 6 x 50 ml.                                                                          |        |
| RPM Max.               |                     | 4.200                                                                               |        | 4.200                                                                               |        | 4.200                                                                               |        | 4.200                                                                               |            | 4.200                                                                               |        | 4.200                                                                               |        | 4.200                                                                               |        | 4.200                                                                               |        |
| Radius (mm)            |                     | 145                                                                                 |        | 147                                                                                 |        | 145                                                                                 |        | 147                                                                                 |            | 91                                                                                  |        | 132/114                                                                             |        | 149/130                                                                             |        | 132                                                                                 |        |
| RCF Max. (xg)          |                     | 2.860                                                                               |        | 2.899                                                                               |        | 2.860                                                                               |        | 2.899                                                                               |            | 1.795                                                                               |        | 2.603/2.248                                                                         |        | 2.938/2.563                                                                         |        | 2.603                                                                               |        |
| SAMPLE VOLUME          | Dim (mm)<br>approx. | ADAPTERS                                                                            |        | ADAPTERS                                                                            |        | ADAPTERS                                                                            |        | ADAPTERS                                                                            |            | ADAPTERS                                                                            |        | ADAPTERS                                                                            |        | ADAPTERS                                                                            |        | ADAPTERS                                                                            |        |
|                        |                     | Tubes                                                                               | Ref.   | Tubes                                                                               | Ref.   | 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     | -                                                                                   | -      | -                                                                                   | -      | -                                                                                   | -      | 6                                                                                   | RE 447 |
| 50 ml. conical         | ø29 x 117           | -                                                                                   | -      | -                                                                                   | -      | 4                                                                                   | RE 342 | 4                                                                                   | RE 341     | -                                                                                   | -      | -                                                                                   | -      | -                                                                                   | -      | 6                                                                                   | RE 365 |
| 30 ml.                 | ø25 x 98            | -                                                                                   | -      | -                                                                                   | -      | 4                                                                                   | RE 333 | 4                                                                                   | RE 332     | -                                                                                   | -      | -                                                                                   | -      | -                                                                                   | -      | 6                                                                                   | RE 387 |
| 25 ml. conical         | ø29 x 83            | -                                                                                   | -      | -                                                                                   | -      | 4                                                                                   | RE 596 | 4                                                                                   | RE 597     | -                                                                                   | -      | -                                                                                   | -      | -                                                                                   | -      | 6                                                                                   | RE 598 |
| 15 ml.                 | ø16 x 100           | 8                                                                                   | -      | 28                                                                                  | -      | 4                                                                                   | RE 329 | 16                                                                                  | RE 316     | 8                                                                                   | -      | 24                                                                                  | -      | 32                                                                                  | -      | 6                                                                                   | RE 361 |
| 15 ml. conical         | ø17 x 122           | 8                                                                                   | -      | 4                                                                                   | -      | 4                                                                                   | RE 329 | 4/8                                                                                 | RE 339/579 | 8                                                                                   | -      | 12                                                                                  | -      | 32                                                                                  | -      | 6                                                                                   | RE 361 |
| 10 ml.                 | ø13 x 100           | 8                                                                                   | RE 371 | 28                                                                                  | RE 516 | 12                                                                                  | RE 313 | 20                                                                                  | RE 320     | 8                                                                                   | RE 371 | 24                                                                                  | RE 385 | 32                                                                                  | RE 518 | 18                                                                                  | RE 360 |
| 10 ml. blood sample    | ø16 x 107           | 8                                                                                   | -      | 28                                                                                  | -      | 4                                                                                   | RE 329 | 16                                                                                  | RE 316     | 8                                                                                   | -      | 24                                                                                  | -      | 32                                                                                  | -      | 6                                                                                   | RE 361 |
| 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 | 32                                                                                  | RE 518 | 6                                                                                   | RE 364 |
| 5 ml.                  | ø13 x 75            | 8                                                                                   | RE 377 | 28                                                                                  | RE 512 | 12                                                                                  | RE 313 | 20                                                                                  | RE 320     | 8                                                                                   | RE 377 | 24                                                                                  | RE 306 | 32                                                                                  | RE 517 | 18                                                                                  | RE 360 |
| 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 | 32                                                                                  | RE 517 | 6                                                                                   | RE 364 |
| 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 | 32                                                                                  | RE 602 | 18                                                                                  | RE 464 |
| 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 | 32                                                                                  | RE 604 | 18                                                                                  | RE 533 |
| 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 | 32                                                                                  | RE 606 | 18                                                                                  | RE 534 |

(1) This rotor can be supplied with hermetic lids (RE 355)

# ROLLING TABLE

Centrifuges accessories

With the aim of offering an alternative to those laboratories that need to increase their equipment, but do not have enough space, we have designed these rolling tables for our centrifuges.

This accessory allows the equipment to be positioned and moved easily thanks to its four 360° rotating wheels. Once the rolling table is located, and before starting to work with the centrifuge, the wheels can be fixed with the brake system that will prevent involuntary displacement during the centrifugation process. The robust design supports the weight of the equipment and prevents vibration transfer.

We offer two types of tables, one with height to locate the equipment at the same height as if they were on the laboratory table and another, that enables you to place your centrifuge under the table of your laboratory, saving even more space.

A solution for each type of need.

### References

|        | Dimensions<br>(mm) (w x d x h) |     |     | Net weight (kg) | Centrifuge model                                                   |
|--------|--------------------------------|-----|-----|-----------------|--------------------------------------------------------------------|
| CP 007 | 560                            | 590 | 580 | 65              | Biocen 22 R, Bioprocen 22 R, Digicen 22 R, Consul 22 and Digtor 22 |
| CP 008 | 440                            | 500 | 690 | 65              | Unicen 21 and Digicen 22                                           |
| CP 009 | 750                            | 730 | 350 | 70              | Consul 22 R, Digtor 22 R and Dilitcen 22 R - to place under table  |
| CP 010 | 750                            | 730 | 580 | 90              | Consul 22 R, Digtor 22 R and Dilitcen 22 R                         |





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About centrifugation

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