



CENTRIFUGATION / REFRIGERATED

# REFRIGERATED HIGH-SPEED CENTRIFUGE

High centrifugal force with controlled temperature.

A proposed refrigerated high-speed centrifuge for temperature-controlled separation of nucleic acids, proteins, cells and other temperature-sensitive laboratory samples.



MAXIMUM SPEED

Approx. 16,000 rpm

MAXIMUM RCF

Approx. 21,000 x g

TEMPERATURE

-10 C to +40 C

PROPOSED MODEL

ALC-RC16K

CATALOGUE NUMBER

ALC-CF-RC-16000

PROPOSED SPECIFICATION SET

Final values, accessories, warranty and compliance require approval against the selected OEM datasheet.



## PRODUCT OVERVIEW

## High centrifugal force with controlled temperature.

The ALC-RC16K is designed for high-speed centrifugation where chamber temperature must be controlled during sample processing. Programmable speed, RCF, time, temperature and braking functions support molecular-biology, biotechnology and clinical-research preparation. Final performance must be matched to the approved rotor and OEM datasheet.



## MAXIMUM SPEED

Approx. 16,000 rpm

## MAXIMUM RCF

Approx. 21,000 x g

## TEMPERATURE

-10 C to +40 C

### Key Features

- High-speed refrigerated operation
- Brushless maintenance-free motor
- Microprocessor control with RPM and RCF display
- Programmable temperature and timer settings
- Multiple acceleration and deceleration profiles
- Lid locking and imbalance protection
- Over-speed and over-temperature protection
- Stainless-steel centrifuge chamber

### Working Principle

The rotor spins samples around a fixed axis to generate relative centrifugal force. Components sediment at different rates according to density, size and rotor geometry. Refrigeration controls chamber temperature to reduce heat-related changes in sensitive samples.

#### TYPICAL APPLICATIONS

DNA and RNA extraction / Protein precipitation / Cell and organelle separation / Temperature-sensitive processing / Clinical-research preparation / Biotechnology research



## PROPOSED TECHNICAL DATA

## Model-specific values require OEM confirmation.

PARAMETER	PROPOSED SPECIFICATION
Maximum speed	Approximately 16,000 rpm
Maximum RCF	Approximately 21,000 x g
Standard rotor	24 x 1.5/2.0 mL fixed-angle rotor
Optional rotors	PCR-strip, 5 mL, 10 mL or OEM-supported
Temperature range	Approximately -10 C to +40 C
Temperature resolution	1 C
Speed resolution	10 rpm
Timer	1 second to 99 minutes or continuous
Acceleration profiles	Up to 10
Deceleration profiles	Up to 10
Drive motor	Brushless induction motor
Chamber	Stainless steel
Display	LCD or colour touchscreen
Safety	Lid lock, imbalance, over-speed and over-temperature
Power supply	220-240 V AC, 50 Hz

## STANDARD SUPPLY

- Refrigerated centrifuge
- 24-place microtube rotor
- Rotor lid and key
- Power cable
- Operation manual

## OPTIONAL / MODEL-DEPENDENT

- Additional fixed-angle rotors
- PCR-strip rotor
- Tube adapters
- Aerosol-tight rotor lid
- Stabilizer or online UPS

## TO BE CONFIRMED

- Exact speed and RCF with selected rotor
- Temperature pull-down and accuracy
- Noise level, dimensions and weight
- Warranty and compliance documents



## LABORATORY APPLICATIONS

# A practical platform for professional laboratory workflows.

## Applications

- DNA and RNA extraction
- Protein precipitation
- Cell and organelle separation
- Temperature-sensitive processing
- Clinical-research preparation
- Biotechnology research

## Product Advantages

- Temperature-controlled high-speed separation
- Rotor and profile flexibility
- Integrated safety protections
- Programmable repeatable workflows
- OEM configuration support

## INDUSTRIES SERVED

Biotechnology laboratories / Pharmaceutical research / Clinical-research laboratories / Academic and institutional laboratories

## SCAN TO VIEW PRODUCT



## Request a model-specific quotation.

Share your application, required capacity or range, quantity, installation city and documentation needs. Final performance values and accessories are issued with the approved datasheet and quotation.

## ALC-SCIENTIFIC LABORATORY SYSTEMS

OEM / PRIVATE LABEL AVAILABLE

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Product images are for reference and may vary by configuration. Specifications, dimensions, accessories and designs are subject to change. Final specifications are those in the approved technical datasheet and commercial quotation. Standard warranty: To be confirmed according to the selected product and approved commercial quotation.