



RFC SERIES

RECIRCULATING FUME CABINET



DESCRIPTION

The RFC Series has been developed to protect laboratory personnel and the environment from toxic vapours, gases, and fumes. Engineered for precision and safety, these advanced cabinets provide a controlled environment that effectively contains and filters hazardous substances.

Manufactured in full compliance with AS 2243.9 – Recirculating Fume Cabinets, the RFC Series reflects the highest standards of safety and performance. Whether handling volatile chemicals or hazardous fumes, the RFC Series from AES Environmental delivers dependable protection and peace of mind.



FEATURES

STANDARD FEATURES

- Low voltage touch controls
- Glare-free fluorescent lighting
- Comprehensive operation manual
- Quiet, low vibration operation

OPTIONAL EXTRAS

- Stainless steel work zone
- Floor stand
- Trolley mounted
- Plastic lining
- Carbon filter for specific contaminants
- 'Wheel-in' configuration for endoscope trolleys

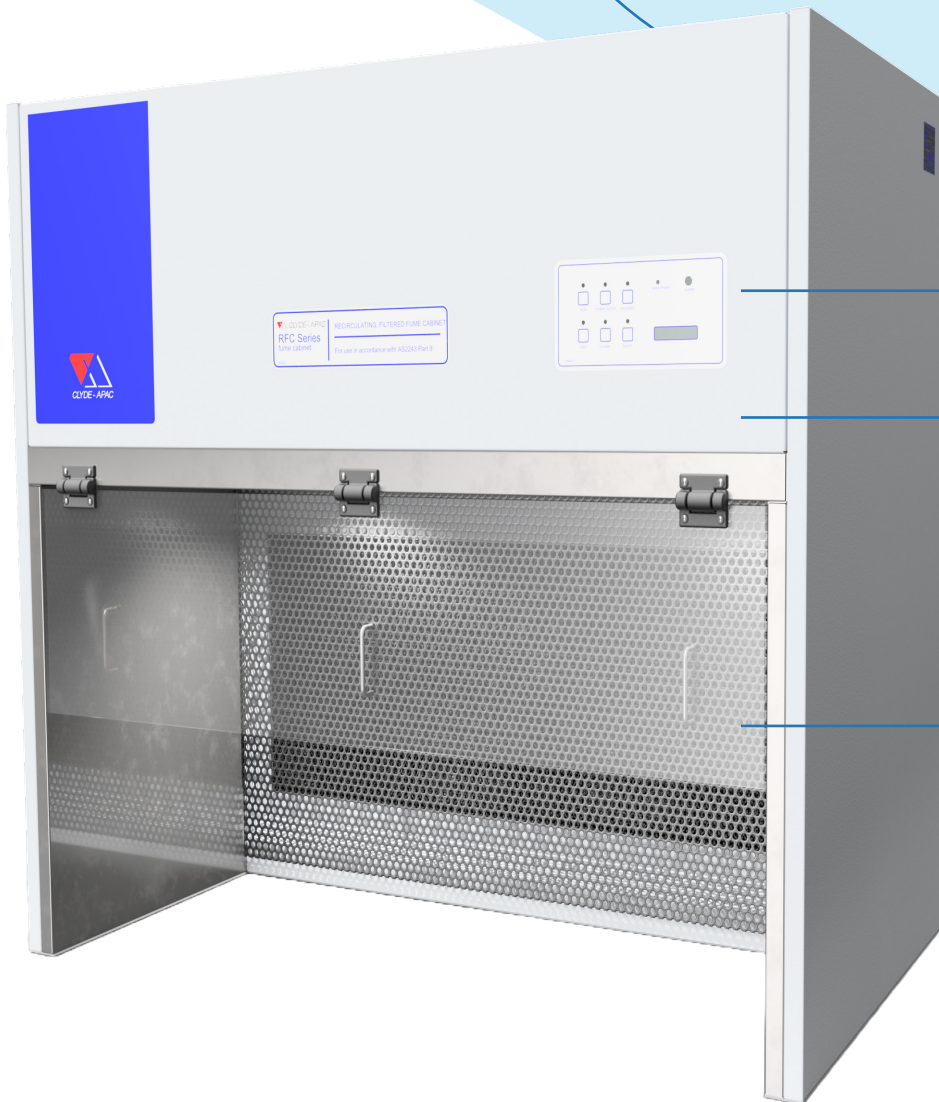
APPLICATION

RFC Series cabinets are ideal for healthcare and laboratory environments where hazardous vapours are handled at the point of use. Common applications include endoscope sterilisation with glutaraldehyde, sample preparation, and decentralised chemical handling in research facilities.

Each cabinet uses high-performance activated carbon filters selected for specific chemical vapours, ensuring safe recirculation of air back into the room.

Their compact design supports benchtop use or installation over sinks or equipment. For added flexibility, trolley-mounted options allow safe handling across multiple locations — a key advantage in hospitals and large institutions.

FEATURES



Low-Voltage Touch
Control Panel

Durable Steel Casing
Built to Withstand High-
Performance Use

Spacious Nominal Work Zone
Width (900/1200/1500/1800mm)
for Safe Handling and Efficient
Operation

BASE SYSTEMS

RFC Cabinets can also be supplied with a range of base system options including:

- Floor stand, semi-adjustable (height to order)
- Electronically-controlled, height adjustable floor stand
- Trolley with Braked and Lockable Wheels



CONSTRUCTION



CABINET

RFC cabinets are available in four standard sizes, with nominal work zone widths of 900 mm, 1200 mm, 1500 mm, and 1800 mm. Custom sized widths are also available on request to suit specialised applications.

The outer casing is constructed from galvanised steel and finished in a durable, corrosion-resistant powder coat. 304 Grade Stainless Steel is used throughout the work zone.

ELECTRICAL

Cabinets operate on single-phase 240V, 50 Hz power via a 10A outlet. A low voltage touch control panel with function status indicated by LEDs is located on the front of the cabinet. Glare-free fluorescent lamps provide a minimum lighting intensity of 800 lux at the work surface.

FANS

A direct drive motor/blower is regulated by a variable speed controller to enable airflows to be maintained through filter life.

PRE FILTERS

A high-efficiency polyester prefilter captures larger particles before they reach the carbon filter, extending service life and maintaining performance.

AIR FILTRATION

Air is exhausted through a two-stage filtration system. A high-efficiency prefilter captures particulates greater than 5 µm, protecting the final stage and extending filter life. The final activated carbon filter contains chemically impregnated carbon granules, selected to optimise adsorption of specific vapours.

Filter impregnations are available for a wide range of contaminants, including formaldehyde, glutaraldehyde, ammonia, amines, inorganic acids, alkaline odours, hydrogen sulphide (H₂S), mercaptans, and hydrogen cyanide (HCN). Specialised adsorption filters can be configured to suit diverse applications.

The chemical impregnation facilitates a reaction — similar to catalytic oxidation — upon adsorption, preventing surface saturation and extending filter longevity. These filters operate effectively in environments up to 70°C and 80% relative humidity.

CARBON MEDIA



RFC cabinets utilise high-performance carbon media, tailored to suit the specific contaminants generated during use. Available in activated carbon, alumina, or blended formulations, these filters are selected based on the chemical profile of each application.

At the core of our standard offering is coconut shell activated carbon — prized for its high microporosity, hardness, and low ash content. This material delivers exceptional adsorption of VOCs, solvents, alcohols, and formaldehyde, while maintaining long filter life and consistent airflow performance.

Filter replacement is simple and quick, requiring only basic tools and minimal downtime. The lightweight design supports energy-efficient operation and is ideal for compact, benchtop, and mobile units.

SPECIFICATIONS

CABINET MODEL	OVERALL			WORK ZONE			WEIGHT (KG)
	DIMENSIONS (mm)			DIMENSIONS(mm)			
	W	D	H	W	D	H	
RFC 90 Benchtop	975	750	1130	880	465	580	115
RFC 90 Trolley Mounted	975	750	2100	880	465	580	115
RFC 120 Benchtop	1280	750	1130	1180	465	580	155
RFC 120 Trolley Mounted	1280	750	2100	1180	465	580	155
RFC 150 Benchtop	1580	750	1130	1480	465	580	138
RFC 150 Trolley Mounted	1580	750	2100	1480	465	580	138
RFC 180 Benchtop	1880	750	1130	1780	465	580	185
RFC 180 Trolley Mounted	1880	750	2100	1780	465	580	185

PERFORMANCE

PERSONNEL PROTECTION

RFC cabinets provide protection for products or experiments, but do not protect personnel from aerosols of hazardous materials that may be handled in the cabinet. For applications where personnel and environmental protection is required, Clyde-Apac Class I, II or III biological safety cabinets, or cytotoxic drug safety cabinets (as applicable) should be considered.

Specifiers and intending users should see AS2243.9, Clause 1.2 which sets out the intended applications and limitations of these cabinets.

RFC-P

For applications involving volatile or flammable compounds, AES Environmental offers the RFC-P Series — a specialised variant equipped with an explosion-proof fan and dual-stage carbon or alumina filtration. Available in 1200 mm and 1700 mm widths, the P Series is designed for higher contaminant loads and broader chemical compatibility. Contact us or see the RFC-P Series brochure for more details.

CERTIFICATION & TESTING

RFC Series cabinets are factory tested and certified by a NATA-Accredited laboratory. Additional testing and certification is recommended as follows:

- On site prior to use
- After maintenance
- After filter replacement
- After re-location
- At least annually
- In special circumstances, e.g. if faulty operation is suspected.



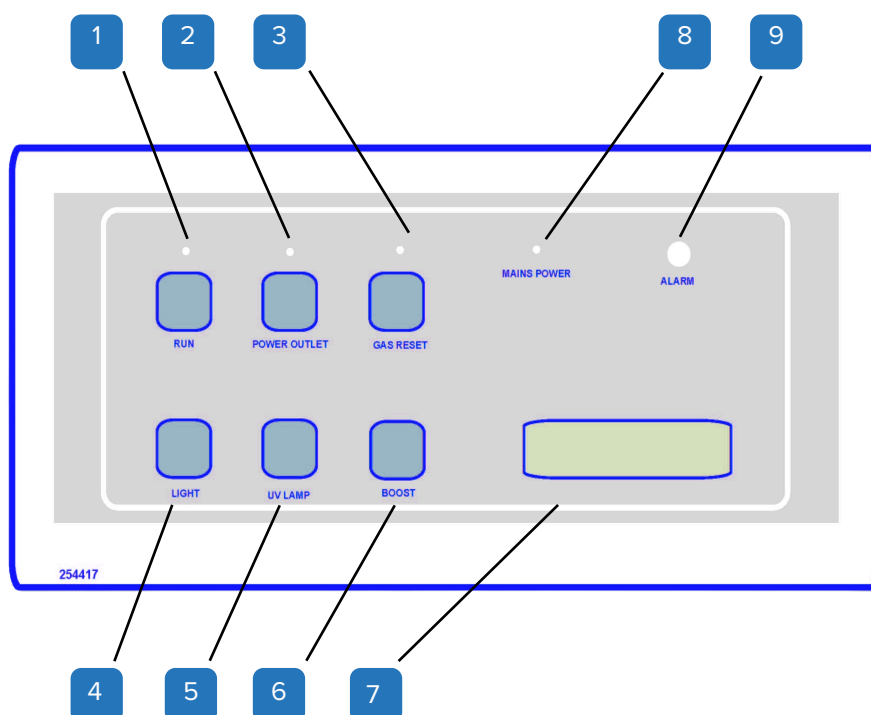
AES Environmental maintains an ISO 9001:2015 quality management system to ensure process and product conformance.

OPERATION

Control Panel

1. Fan/post-use over-run switch
2. Power outlet switch
3. Gas reset switch*
4. Fluorescent light switch
5. UV lamp switch*
6. Boost mode switch
7. Display panel
8. Mains power indicator
9. Alarm indicator

*optional function



GENERAL SPECIFICATIONS FOR RFC CABINETS

Model		RFC 90	RFC 120	RFC 150	RFC 180
Part No.		2015018	2015000	2015010	2017205
Nominal Size		0.9m	1.2m	1.5m	1.8m
External Dimensions	Width	975	1280 mm	1580 mm	1880 mm
	Depth	750 mm	750 mm	750 mm	750 mm
	Height	1130 mm	1130 mm	1130 mm	1130 mm
Internal Work Zone Dimensions	Width	880 mm	1180 mm	1480 mm	1780 mm
	Depth	500 mm	465 mm	465 mm	465 mm
	Height	580 mm	580 mm	580 mm	580 mm
Fans: 240V single phase direct drive		2	2	3	3
Average Airflow Velocity Laminar flow		0.4 - 0.45m per second			
Sound Emission		< 58.8 dB (A)	< 60.2 dB (A)	< 62 dB (A)	< 62 dB (A)
Fluorescent Lamp Intensity		Minimum average of 650 Lux			
Certification to Australian Standards		AS2243.9 Appendix A & B			
Cabinet Construction AS2243.9	Main Body	1.2mm 18 gauge powder coated steel			
	Work Surface	1.2mm 18 gauge type 304 stainless steel with B2 finish			
	Side Walls and Sump	1.2mm 18 gauge type 304 stainless steel with B2 finish			
Electrical 220-240V AC 50Hz	Cabinet Power/ Amp	1300 Watts - 10 Amps			
	Outlet Amp Fuse	10 Amps	10 Amps	10 Amps	10 Amps
	Full Load Amps	4.5 Amps	4.5 Amps	6.75 Amps	6.75 Amps
	Power Consumption	0.7 Kw	0.7 Kw	0.9 Kw	0.9 Kw
Cabinet Net Weight (kg)		115	155	138	185



AES Environmental is a family owned, engineering and manufacturing business. The company comprises of major brands situated in the Air Filtration, Pollution Control and Life Sciences markets. Those brands and products are market-leading names within their fields ensuring that AES Environmental is capable of fulfilling its goal of providing the market with a single, integrated source for air filtration, clean room and pollution control needs.

Whatever business area you operate in, effective air filtration and pollution control is vital for your products, processes and people. All our products are manufactured in Australia and along with that, we offer installation and service Australia wide, that you can always rely on.

GET TO KNOW US

AES Environmental consists of an Australian head office and manufacturing location in Sydney, NSW, manufacturing and service operations in Perth, WA, Adelaide, S.A. and service operations in Melbourne, Vic. Internationally the business operates manufacturing facilities in Bangkok, Thailand and Newcastle Upon-Tyne, UK.


However large or small the need, with expertise in just about every area of industrial and process filtration and separation, we're ready to help to deliver the products and 'hands-on' support to help you build a better future.


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In keeping with our policy of continuing product improvement, we reserve the right to alter specifications without notice.


GET IN TOUCH!

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