

# TripleAir RADICAL EC FAN FILTER Units

## TripleAir RADICAL Fan Filter Unit (EC)

is a high efficiency self-contained ceiling fan filter module c/w an EC centrifugal fan and a PP Plastic backward curved single inlet impeller offering high efficiency and low noise characteristics. Designed for use in turbulent mixing and laminar airflow within cleanroom areas. The unit is designed for use in walk on panels, 55mm T-bar ceiling grid and other modular ceiling grid systems. The lightweight unit is easy to install, and has options for filter change from either top side or room side as required. Can be installed into panel ceiling systems using adapter frames.

The FFU module features Electronically Commutated DC motor (external rotor motor type) and Electronic Commutation unit.

### Typical applications include:-

Semiconductor and Micro-electronic production

Hight Tech and Battery Manufacturing

Nanotechnology

Pharmaceutical

Support industries for above

The TripleAir RADICAL Fan Filter Unit (EC) is manufactured in bright aluminium, which is easy to de-contaminate and resistant to disinfectants. The housing seals by resting the 14mm flat flange on the gasket seal within the knife-edge of the HEPA filter for top (plenum) side change, or via adaptor frame and fluid seal filter for room side change.

The grounded motor features a sealed for life ball bearing c/w a lubricant life expectancy up to 70000 hours.



## Clean Room Filtration and Lighting Technology

TripleAir Technology are suppliers of high quality HEPA and ULPA filtration, ceiling grid systems and luminaires for the clean room industry. We offer fully integrated ceiling solutions for projects and cleanroom facilities.

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[tripleairtechnology.co.uk](http://tripleairtechnology.co.uk)

# TripleAir RADICAL EC FAN FILTER Units

Unit Reference	66ECR	69ECR	612ECR	99ECR	912ECR	1212ECR
Size (mm)	532x532	532x832	532x1132	832x832	832x1132	1132x1132
Height-Top change*	310	310	310	310	310	310
Air volume @ 0.45m/s	540m <sup>3</sup> /hr	875m <sup>3</sup> /hr	1080m <sup>3</sup> /hr	1224m <sup>3</sup> /hr	1656m <sup>3</sup> /hr	2232m <sup>3</sup> /hr
Running Power W**	63	65	70	95	120	135
Running current (A)	0.26	0.28	0.3	0.4	0.58	0.62
Total Static @ 0.45m/s***	220Pa	220Pa	220Pa	220Pa	220Pa	220Pa
Sound Pressure (dBA)	45	46	46.8	47	48	45
Weight - incl filter (Kg)	19	25	32	32	44	54

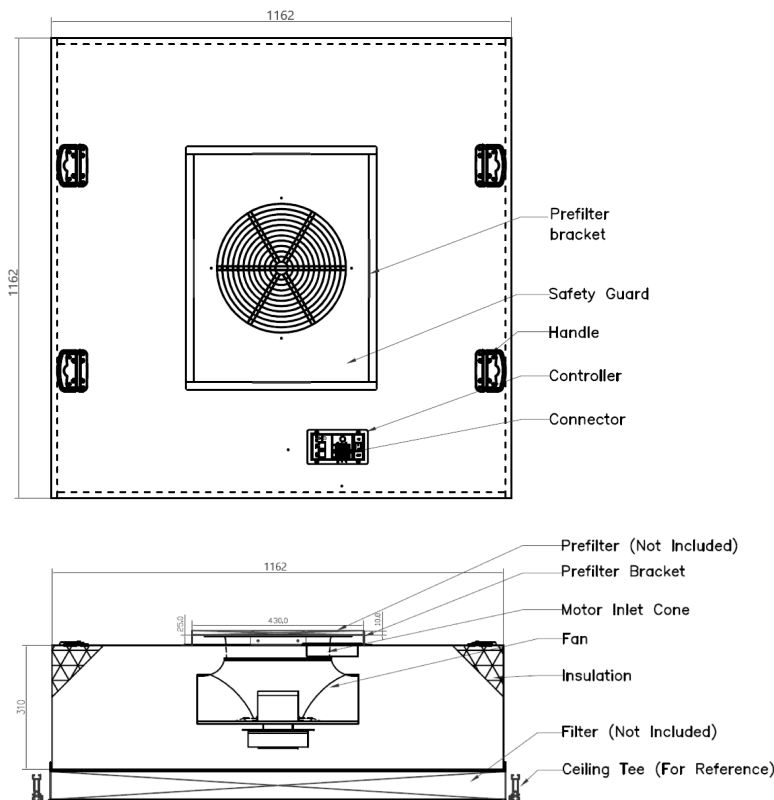
\* Depth of filter or adapter frame to be added  
 \*\* Running power at total static condition  
 \*\*\* Allowing for Hepa filter

Notes:

Upstream Test Port as Standard

Optional pre-filter section adds 105mm to overall height

Noise level indicative only – based on 1mtr, single unit & clean filter in free field condition



## TripleAir FAN/FILTER UNIT (EC motor)

### STANDARD FEATURES:-

- Manufactured from bright aluminium
- Top side or Room side filter change
- High efficiency backward curved blade fan
- Grounded motor ball bearing seal for life
- Bearing lubricant life up to 70000hrs
- Static to ISO1940
- 200-277v/1ph/50-60Hz
- CE Marking
- 110mm deep Hepa Filter as standard adds 90mm to overall height
- EBM Motor
- Motor protection to DIN40050
- Insulation Class B
- Control software RS232/485 Bus

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Visit our website to view our full range of HEPA and ULPA filters, safe change units, fan filter units, ceiling grid systems and cleanroom luminaires.

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# TripleAir RADICAL EC FAN FILTER Units For Room side change grid

Unit Reference	66ECR	69ECR	612ECR	99ECR	912ECR	1212ECR
Size (mm)	532x532	532x832	532x1132	832x832	832x1132	1132x1132
Height-Top change*	310	310	310	310	310	310
Air volume @ 0.45m/s	540m <sup>3</sup> /hr	875m <sup>3</sup> /hr	1080m <sup>3</sup> /hr	1224m <sup>3</sup> /hr	1656m <sup>3</sup> /hr	2232m <sup>3</sup> /hr
Running Power W**	63	65	70	95	120	135
Running current (A)	0.26	0.28	0.3	0.4	0.58	0.62
Total Static @ 0.45m/s***	220Pa	220Pa	220Pa	220Pa	220Pa	220Pa
Sound Pressure (dBA)	45	46	46.8	47	48	45
Weight - incl filter (kg)	19	25	32	32	44	54

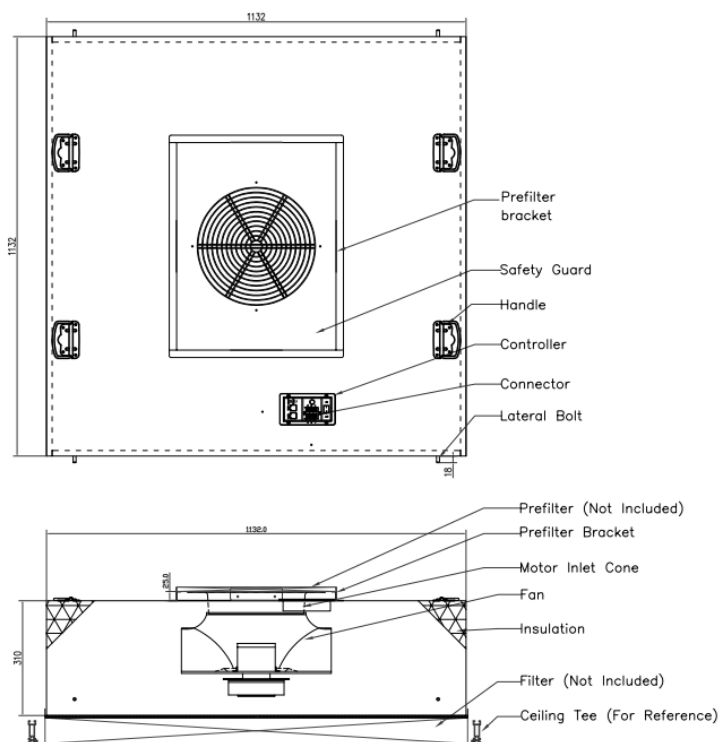
\* Depth of filter or adapter frame to be added  
 \*\* Running power at total static condition  
 \*\*\* Allowing for Hepa filter

Notes:

Upstream Test Port as Standard

Optional pre-filter section adds 105mm to overall height

Noise level indicative only – based on 1mtr, single unit & clean filter in free field condition



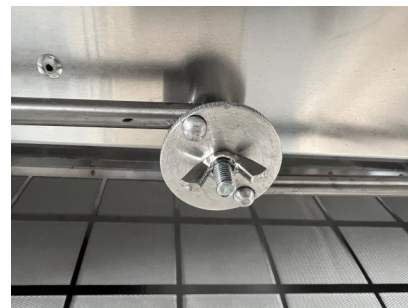
Lateral Bolt Ready for FFU Install



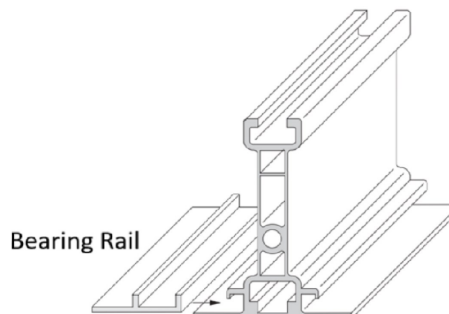
Lateral Bolt rests on Tee Grid during filter change



Lateral Bolt



HD55-70-2 Room Side C change Grid



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# TripleAir RADICAL EC FAN FILTER Units

Fan Filter Units installed into a panel ceiling using adapter frames supported from the roof structure



1200x1200 Fan Filter Units installed into a TripleAir HD 55-70 non walk on ceiling grid system



## OPTIONS:-

- Pre-filter section
- Duct connection
- Diffuser support frame
- Auxiliary contact
- Paint finish
- Support frames for plank ceilings and non-standard grid centres
- Slimline Fan Unit
- Low Noise Fan Unit
- Software control options:-
  - Touch Screen controller
  - PC (Windows based)
- Individual FFU control options
- CAT5 cables
- On-site commissioning/start-up
- Heating & cooling coils

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