

AstroPure Commercial Air Purifiers



AstroPure - High purity filtration solutions for areas where additional, extra high, filtration performance is needed.

AstroPure

Air purification system

Product description

AstroPure is a totally self-contained stand-alone Recirculation Unit for areas where additional, extra high, filtration performance is needed against any type of contamination including viruses.

AstroPure, which can also be used as a Negative Pressure Unit, combines state-of-the-art HEPA filtration with optionally available UV germicidal irradiation (UVGI) to create total clean air solutions fulfilling all relevant guidelines such as the VDI 6022. Thanks to the insulated double-wall constructions leading to whisper-quiet operation, it is ideally suitable for indoor use in for example offices, schools, health care facilities or hotel lobbies, just to name a few. When properly sheltered outdoor use with duct connection is also possible.

Together with the ability to take various filter combinations and variance of optional features, AstroPure provides herewith highest flexibility to meet all customer-specific requirements at point of use.

The unit contains a high performance encapsulated AAF optimized direct driven backward curved EC fan/motor combination with variable speed and control options with CE compliance.

Plug & Play Design

To allow economical and easy installation AstroPure is designed as a Plug & Play unit hence no modifications required at your premises. Simply install the selected air filters and dispose it when no longer effective.

Maintaining the unit is as easy as the installation itself. The sliding tray design provides easy access to and servicing of the fan. The easy to access instrument panel provides easy access and servicing of gauges and speed control.

Features & Benefits

- › Suitable for in-room use or sheltered outdoor installation
- › Airflow rate up to 2,000 m³/h
- › HEPA H14 filter in accordance with EN1822
- › Pre-filter options up to ISO Coarse 70%
- › Optional UV germicidal irradiation (UVGI)
- › Insulated double-wall construction provides whisper-quiet operation down to 35 dB(A)
- › Designed with internal variable speed fan (electronically commutated) and filter combinations to meet specific application requirements
- › Easy installation, operation, and maintenance in a totally self-contained system
- › Sliding tray design provides easy access and servicing of filters
- › CE-compliance, VDI 6022 guided design



Applications



Schools and Universities



Commercial Buildings



Healthcare



Hospitality



Shops and Shopping malls



Models

| Model | BR00000554 | BR00000749 | BR00000676 | BR00000751 | BR00000678 | BR00000752 |
|--------------------------------------|------------|------------|------------|------------|------------|------------|
| Plug type | EU | UK | EU | UK | EU | UK |
| HEPA Filter (H14) | | ✓ | | ✓ | | ✓ |
| LCD Screen | | | | ✓ | | ✓ |
| Activ. Carbon (Gas phase) pre-filter | | | | ✓ | | ✓ |
| UV light | | | | | | ✓ |

Technical data

| | BR00000554 | BR00000749 | BR00000676 | BR00000751 | BR00000678 | BR00000752 |
|-------------------------|-----------------------------------|----------------|--|--|------------|------------|
| Design air flow rate | m ³ /h | | 2,000 | | | |
| Application | Floor standing type | | | | | |
| Casing | Colour | | Painted galvanized steel finish | | | |
| Dimensions | Unit | HxWxD | mm | | | |
| Weight | Unit | | kg | | | |
| Pre-filter | Dust collecting method | | Prefilter RedPleat, ISO Coarse 70% | Prefilter RedPleat Carb, ISO Coarse 65% gas phase filter | | |
| HEPA filter | Bacteria filtering method | | Astrocel III HEPA H14 | | | |
| Air purifying operation | Power input | High fan speed | kW | | | |
| UV-irradiation unit | Power input | | kW | | | |
| Sound pressure level | Air purifying operation | High fan speed | dBA | | | |
| Fan Motor | Stepless adjustable | | | | | |
| Safety devices | Item | | Safety switch (operation stops when the back door is open) | | | |
| Standard Accessories | Prefilter | | 1 | | | |
| | HEPA filter | | 1 | | | |
| | Quick Start and Maintenance Guide | | 1 | | | |
| | Installation and Operation Manual | | 1 (download) | | | |
| Power cord | m | | 3 | | | |
| Power supply | Phase | | 1~ | | | |
| | Frequency | | Hz | | | |
| | Voltage | | V | | | |
| Running current | Air purifying operation | High fan speed | A | | | |

Highly Adaptable

Available as recirculation or negative pressure unit

Clean Air supply options

AstroPure is used to draw out the indoor contaminated air in a room, the contaminated air passes the HEPA filter before releasing it to the outside environment.

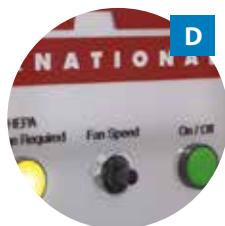
Negative pressure from a room prevents the spread of virus to other rooms, areas and environment. Highly recommended to improve IAQ by recirculating indoor air and providing occupants with better health and comfort.



- A** Fan / Motor Unit
- B** HEPA Filter
- C** Prefilter
- D** Control panel providing indication for filter change, speed control and on/off switch
- E** Air outlet grill
- F** UV lamp
- G** 4-Wheel foundation

Unit control options

On the front side AstroPure is as a standard equipped with control lights to indicate necessary changes of the pre- or the HEPA filter. Switching the unit on and off as well as the speed control is done via integrated knobs. As an option AstroPure can be delivered with a fully digital LCD Display, which then replaces indicator lights and control knobs.



Fan/motor combination

AstroPure contains a high performance encapsulated, direct driven, backward curved fan/ motor combination. Motor options are available to create air flows up to 2000 m³/h. The specialized electronic commutation motor design permits variable speed control via Potentiometer. The complete section is mounted on a sliding tray providing easy access to service the fan.



Standard Configurations

| | |
|---------------------------------|--|
| Construction | Insulated double-wall construction |
| Power supply | Single-phase 200-277 VAC, 50/60 Hz |
| Recommended operational airflow | 2.000 |
| Fan type | EC centrifugal fan, backward-curved, single-intake |
| Prefilter | RedPleat, ISO coarse 70%, card board frame (ISO16890) |
| Main filter | AstroCel III H14 HEPA filter, metal frame (EN1822) |
| Air inlet | Inlet grilles or inlet duct |
| Air outlet | Outlet grilles or outlet duct (circular / rectangular) |
| Deployment | 4x castor rolls for easy maneuverability |
| Allowed operating conditions | 0 – 50° C, H0 dry environment, ambient air ≤ 95% rH |

Note: Definite recommendation on prefilter and main filter needs to be done case by case depending on local conditions.

Prefilter options

In its standard configuration AstroPure is equipped with an RedPleat ISO coarse 70% prefilter. As an option the unit can also be equipped with RedPleat Carb, an ISO coarse 65% Prefilter including active carbon media able to additionally control unpleasant odors in the room.



Air supply options

When operated as a Recirculation Unit, AstroPure releases the cleaned air via a perforated outlet grill on the top side of the unit into the room. Optionally, the air outlet can be designed so that the AstroPure unit can be connected to ventilation ducts.



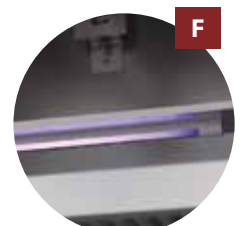
Easy filter installation and maintenance

The unique design of the clamping system is designed to take various AAF pre and main filters and hereby ensures easy installations and filter maintenance and dispose when no longer effective. The complete servicing is done from the back-side.



Optional UV lamp

Intelligently engineered to kill pathogens while maintaining higher filtration performance. The optional available fluorescent UV-C irradiation unit radiates 255 nm germicidal wavelength which prevents the Ozon production that is responsible for faster degradation of filters while keeping the appropriate range to kill bacteria and viruses. Installing UV lamp will provide wider germicidal coverage without affecting the filtration efficiency.



Providing high-efficiency 2-stage filtration

Prefilters

The Standard installation includes an ISO Coarse 70% pre-filter providing the lowest possible total cost of ownership with lower resistance, longer filter life and protection of the installed HEPA filter.

RedPleat - 4531002424

- › ISO 16890: ISO coarse 70%
- › Low pressure drop
- › High dustholding capacity (DHC)
- › Available with Antimicrobial treated media (RedPleat ULTRA)



RedPleat Carb - 4139002424

- › ISO 16890: ISO coarse 65%
- › Low pressure drop
- › High dustholding capacity (DHC)
- › Effectively removes offensive odors



Main filter

The HEPA filter features eFRM filtration media which combines ultra-high efficiency and particulate loading to remove 99.99% of dust, pollen, mold, bacteria, viruses, and any airborne particle with a size of 0.3 microns or greater.

AstroCel® III - 1493299990

- › H14 filtration efficiency according EN 1822
- › V-shaped filter configuration, combined with microglass media, delivers higher flow and the lowest possible pressure drop vs traditional box style HEPA filters
- › Utilizes high performance microglass media to provide high efficiency particulate removal
- › Compatible with Discrete Particle Counter (DPC) and photometric test methods as access and instrumentation allow





RedPleat Carb



AstroCel® III



Daikin Air Purification Solutions

For your home & for your business

Improve your Indoor Air Quality with air purifying technology from Daikin. For clean and healthy air no matter where you are.

Daikin streamer technology air purifier (MC55W/VB) & Humidifying streamer technology air purifier (MCK55W)

99,9%

According to tests performed in the Institut Pasteur de Lille, Daikin's residential air purifiers eliminate more than 99,93% of the human coronavirus HCoV-229E and the H1N1 (common flu) virus in 2.5 minutes*

- > Effective against respiratory viruses evaluated by Institut Pasteur de Lille
- > Pure air thanks to active plasma ion flow out and flash streamer technology
- > High performance HEPA filter with no need to change for 10 years
- > Humidification and purification in one (MCK55W only)
- > Whisper quiet

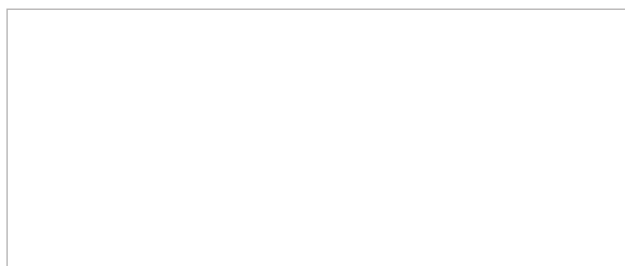
AAF AstroPure 2000

- > Self-contained stand-alone recirculation unit (1628mm height)
- > Standard high efficiency HEPA H14 filters
- > Optional UV germicidal irradiation
- > Plug & Play
- > Air flow rate 2000 m³/h
- > For commercial areas up to 200 m²

https://www.daikin.eu/en_us/about/daikin-innovations/indoor-air-quality.html



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