



# AstroPure Commercial Air Purifiers



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



Bringing clean air to life:

# 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
- › Combines HEPA filters and optional UV germicidal irradiation (UVGI)
- › Designed with internal variable speed fan (electronically commutated) and filter combinations to meet specific application requirements
- › Insulated double-wall construction provides whisper-quiet operation
- › 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



## Technical data

Unit dimensions		AstroPure 2000	
Design air flow rate	m <sup>3</sup> /h	2000	
Dimensions	Height x Width x Depth	mm	
Air inlet / outlet*	mm	OD250 / 300x200	
Weight*	kg	150*	

\*depending on execution

Filter configuration			
Pre-filter dimensions	mm	592x592x45	
Nominal flow rate	m <sup>3</sup> /h	3400	
HEPA filter dimensions	mm	610x610x292	
Nominal flow rate	m <sup>3</sup> /h	3400	
UV-C lamp Details	mm	450xOD26 G13	

Power consumption and performance details			
Fan	KW	0,5	
	PH	1	
	V	230	
	Hz	50 / 60	
Sound pressure level	dB	35-52	
UV-Irradiation unit	W	25	

\*\* Provided price is only for the standard unit without UV & LCD.  
For information about additional options, please contact your local Daikin sales team.

# 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

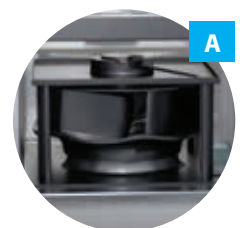
## Unit control options

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 m<sup>3</sup>/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	MEGAcel I H14 HEPA membrane filter, metal frame (EN 1822) 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.



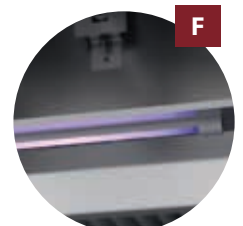
## Easy filter installation and maintenance

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.



# Filter Recommendations

## 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

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



#### RedPleat Carb

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

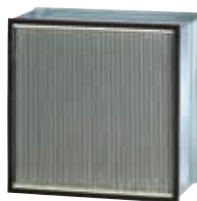


### Main filters

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.

#### MEGAcel® I eFRM

- › H14 filtration efficiency according EN 1822
- › eFRM media combines ultra-high efficiency with the lowest possible pressure drop
- › Highly resistant to corrosive environments (acids, alkalis, and organic substances)
- › No boron outgassing
- › Compatible with Discrete Particle Counter (DPC) test methods



#### AstroCel® III

- › 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

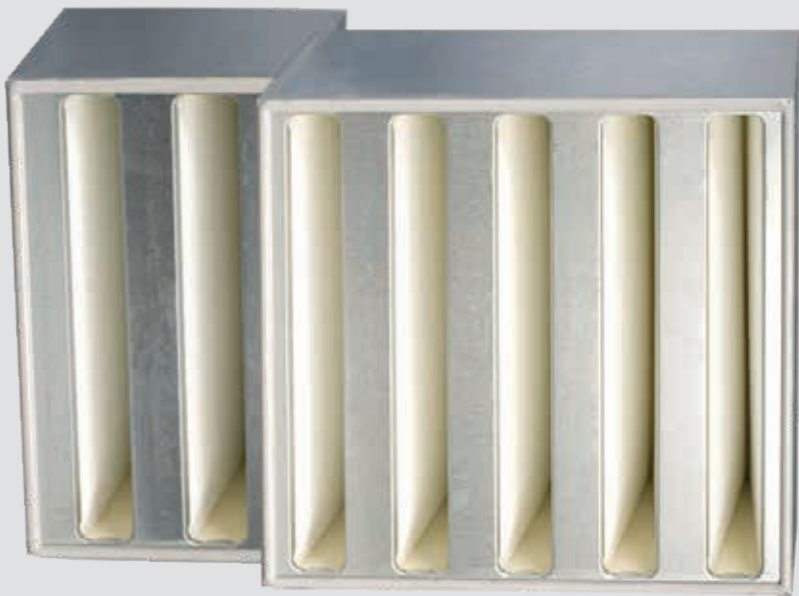


Filter
RedPleat Carb (CE.AAF_redpleatf1)
RedPleat (CE.AAF_redpleatf2)
AstroCel III (CE.AAF_astrocelf1)
MEGAcel I eFRM (CE.AAF_megacelf1)

Note: Definite recommendation on prefilter and main filter needs to be done case by case depending on local conditions. As a standard the unit is delivered with RedPleat (70%) Prefilter & AstroCel III main filter



RedPleat Carb



AstroCel® III 5000



# 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) & Humidifying streamer technology air purifier (MCK55W)

- › Pure air thanks to active plasma ion flow out and flash streamer technology
- › High performance HEPA filter to catch fine particles of dust
- › Humidification and purification in one (MCK55W only)
- › Powerful suction and whisper quiet
- › New stylish and compact design

### 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 m<sup>3</sup>/h
- › For commercial areas up to 200 m<sup>2</sup>

[www.daikin-ce.com/iaq](http://www.daikin-ce.com/iaq)



Clean the air from

Viruses and bacteria



Fine particles of dust



Odors and allergens



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