



Streamer technology air purifier

Powerful air purification



MC30YV/YB

- › Air treatment up to 46m²
- › Pure Air thanks to **Catch and Clean** approach
- › No need to change filter for 10 years thanks to high performance electrostatic HEPA filter
- › Whisper quiet operation (19 dB(A))

Eliminates pollutants and allergens



mold spores



dust



fine particles



ultrafine particles



pollen



bacteria



odours



virus



hair



volatile organic compounds (VOC)



No maintenance costs for at least **10 years**



One of the **most silent** air purifier range on the European market

No need to change the filters in the first 10 years after unit purchase, avoiding additional costs for regular filter changes.

Our air purifiers are whisper quiet during **quiet operation** (sound pressure level: 19 dBA), providing you pure air without noticing.



Compact & performing

Small size and perfect for surfaces up to 46m².

About the dust collection and deodorizing capacity of an air purifier:

- Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
- Not all odour components that emanate continuously (from building materials and pets, etc.) can be removed.

The Daikin air purifier is not a medical device and is not meant to be used as a substitute to any medical or pharmaceutical treatment.

HEPA filtration effect claims:

- Removes 99% of particles between 0.1µm and 2.5µm in size; test method: Japan Electrical Manufacturers' Association Standard JEM1467. Criterion: Remove 99% of fine particulate matters of 0.1 to 2.5µm in a closed space of 32m³ within 90 minutes. (Converted to a value in a test space of 32m³).

Deodorization/gas removal effect claims:

- Reduction of gases by oxidation: testing organization: Life Science Research Laboratory. Test method: After operating a gasoline engine for 10 minutes (when particulate concentration reached 60mg/m³), operated the air purifier for 80 minutes to absorb polluting particles emitted from the engine. Operated this air purifier for 24 hours in a closed space of 200L and measured the effect to decompose gases. Test result: Compared with a test without Streamer irradiation, gas components were reduced by 63% in 9 hours. Test number: LSRL-83025-702. Test unit: Tested with MCK100N (Japanese model).
- Adsorption and decomposition of odours: placed the air purifier and an odour component, acetaldehyde, in a box of 21 m³ and operated the air purifier. Examined increase of concentration of product (CO) generated by decomposition of acetaldehyde by Streamer (evaluation by Daikin). Test unit: Tested with MCK555 (Japanese model), a model equivalent to MCK55W series.
- Formaldehyde decomposition: test method: constant generation method. Test room: 22 to 24 m³, temperature: 23 ± 3°C, humidity: 50 ± 20%. Ventilation condition: When concentration of 0.2 ppm is continually emanated, a removal capacity of 0.08 ppm is maintained at 36 m³/h, which is within the guideline of the Ministry of Health, Labour and Welfare in Japan. (This equates to the ventilation capacity of an approximately 65 m² room).

Substance decomposition effect claims:

- Removal of bacteria from dust collection filter: testing organization: Japan Food Research Laboratories. Test number: 15044988001-0201. Test method: Attached a test piece inoculated with bacteria liquid on the upstream side of a dust collection filter installed in an air purifier, and operated it in a test area of 25 m³. Counted the number of live bacteria after five hours. Test result: Reduced by more than 99% in five hours. Test unit: Tested with MCK555 (Japanese model), a model equivalent to MCK55W series (turbo operation).
- Allergen decomposition and removal: various allergens were irradiated by streamer discharge and the breakdown of protein in the allergens was verified using the ELISA method, cataphoresis, or an electron microscope (Joint research with Wakayama Medical University). Test example: Japanese cedar pollen Cryj-1; Test result: 99.6% or more decomposed and removed in 2 hours (ELISA method); 96.9% decomposed and removed in 4 hours (other measurement method). Note: test performed on the flash streamer module.
- Virus removal ref. 1: testing organization: Kitasato Research Center for Environmental Science. Test result certificate 2L_0026 (issued by same organization). Result of experiment: 99.9% removal of A-H1N1 virus after 1 hour. Note: test performed on the flash streamer module.
- Virus removal ref. 2: testing organization: Vietnamese Institute of Hygiene and Epidemiology. Result of experiment: over 99.9% removal of A-H5N1 virus in 3 hours. Note: test performed on the flash streamer module.
- Virus removal ref. 3: testing organization: Graduate School of Kobe University. Result of experiment: over 96% removal of Norovirus in 24 hours. Note: test performed on the flash streamer module.



Daikin unique's Catch & Clean approach 3 steps to decompose harmful substances

1

Powerful suction

Takes in air over a wide area from 3 directions.



2

Effective capturing of pollutants

Efficiently catches dust and pollutants with an electrostatic HEPA filter.



3

Decomposition

Uses Daikin's Streamer technology to decompose, by oxidation, harmful substances caught on the filter.

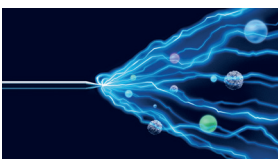


INSIDE

Streamer decomposes hazardous elements

Streamer, a type of plasma discharge, decomposes hazardous chemical substances.

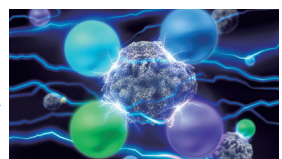
Mechanism of decomposition by Streamer



Streamer emits high-speed electrons.



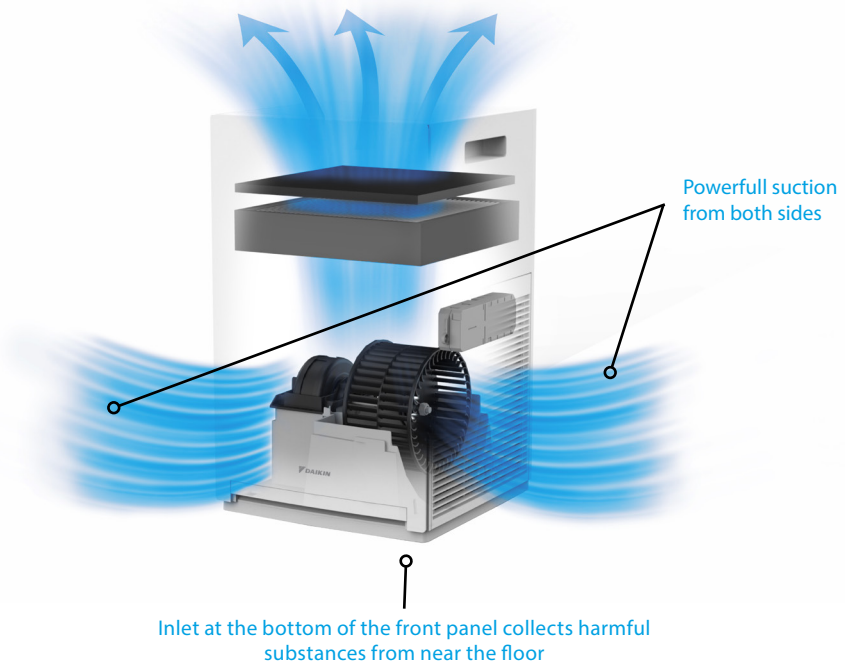
The electrons collide and combine with nitrogen and oxygen in the air to form four kinds of elements.



These elements provide decomposition power.

Tower Type structure

resulting in Cleaner air delivery, lower sound level and effective 3-way air flow



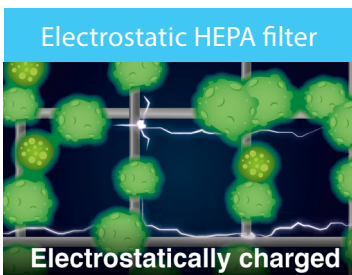
High performance HEPA filter to catch fine particles of dust



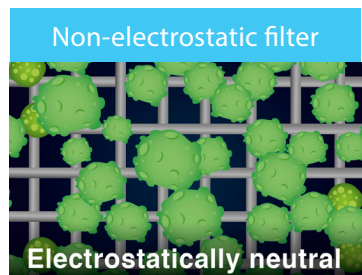
Removes 99% of particles between 0.1µm and 2.5µm in size.

STEP 1	STEP 2	RESULT
<p>The filter collects dust efficiently with electrostatic forces. It is not prone to clogging compared with non-electrostatic HEPA filters which collect particles only by the fineness of the mesh.</p>	<p>Therefore, a larger amount of air can pass through the filter.</p>	<p>The filter can purify a larger amount of air!</p>

Comparison between electrostatic HEPA filter and non-electrostatic filter

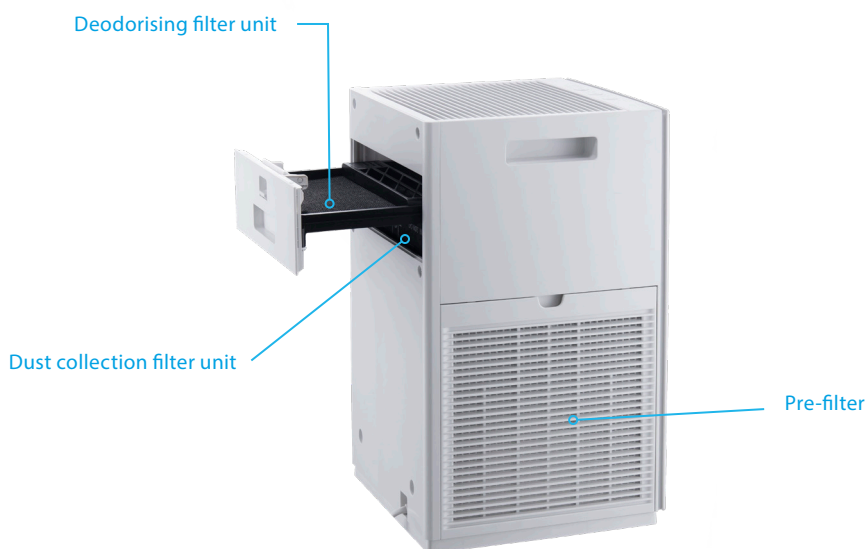


VERSUS



- Removes 99.97% of fine particles of 0.3µm.
- Filter fiber itself is charged with static electricity, and collects particles efficiently.
- Doesn't clog easily, hence causes low pressure loss.

Because it catches particles relying only on mesh size, it is necessary to make mesh finer, making it easy to be clogged and cause high pressure loss.



MC30YV/YB

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- Pure air thanks to **'Catch and Clean'** approach
- No need to change filter for 10 years thanks to high performance electrostatic HEPA filter
- Whisper quiet operation (19 dB(A))

DUST COLLECTION

DEODORISATION

Capacity in turbo operation mode

AIR PURIFICATION

Air purification

Airflow

3.0 m³/min.

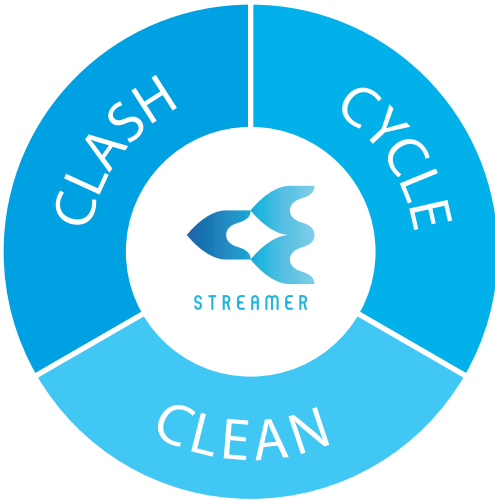
180 m³/hour

Applicable room area

~46 m²*

*Area calculated according to NRCC-54013-2011 standard using CADR value by test method based on Japan Electric Manufacturers' Association Standard JEM 1467.

The Streamer Symbol consists of three C's



CLASH

The dust collection filter catches the floating substances with the attached harmful gases and Streamer decomposes the gases by oxidation.

CYCLE

The deodorising filter absorbs and decomposes odour. Thanks to the regeneration of the adsorbing capacity, the deodorising capacity is maintained. No need to change the deodorising filter.

CLEAN

Removes bacteria from dust collection filter



Specifications

Technical specifications				MC	MC30YV/YB
Application					Floor Standing Type
Applicable room area					23 (1) / 46 (2)
CADR				m ³ /h	180
Weight	Unit			kg	5.8
Dimensions				mm	565/350/345
Casing	Colour				White
Fan	Type				Multi Blade Fan (Sirocco fan)
	Air flow rate	Air purifying operation	Silent Medium Turbo	m ³ /h m ³ /h m ² /h	60 120 180
Sound pressure level	Air purifying operation	Silent		dBA	19
		Medium		dBA	27
		Turbo		dBA	37
Air purifying operation	Power input	Silent		kW	0.008
		Medium		kW	0.015
		Turbo		kW	0.025
Deodorizing method					Flash streamer + Deodorizing catalyst
Dust collecting method					Electrostatic HEPA filter
Air filter	Type				Polyethylene terephthalate net
Sign	Item	01			Child proof lock lamp/ ON/OFF lamp Streamer lamp/ Sleep mode
Power supply	Phase		Hz		1~
	Frequency		Hz		50/60
	Voltage		V		220-240/220-30
Type					Air Purifier

Standard accessories: Electrostatic HEPA filter; Quantity : 1;

Standard accessories: Deodorising filter; Quantity : 1;

Standard accessories: Operation manual; Quantity : 1;

Note

(1) The applicable room area is appropriate for operating the unit of maximum fan speed (HH). Applicable room area indicates the space where a certain amount of dust particles can be removed in 30 minutes. (JEM 1467) | (2) The applicable room area is appropriate for operating the unit of maximum fan speed (HH). Applicable room area was calculated in accordance with NRCC-54013 standard using cigarette smoke CADR that was tested according to JEM1467. | Converted to CADR standards from test values in accordance with JEM1467. | Operating sound levels are the average of values measured at 1m away from the front, left, right and top of the unit. (These are equal to the values in an anechoic chamber) | Electrostatic HEPA filter is attached in the unit. | Other function : Auto-restart function.



Buy your
air purifier now or
contact your installer!

www.daikin.eu

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FSC

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