

Why choose Daikin?



Institut Pasteur de Lille evaluated the effectiveness of Daikin's air purifiers against respiratory viruses.

According to tests performed in the laboratories of the Institut Pasteur de Lille, Daikin Air Purifiers MC55W/ MC55VB remove 99.98% of **the human coronavirus HCoV-229E in 2.5 minutes***. This virus is of the same family as SARS-CoV-2, the coronavirus behind the COVID-19 pandemic. The units have also been evaluated as 99.93% effective against the H1N1 virus in 2.5 minutes*. H1N1 is the virus causing common flu.

This means Daikin's air purifiers are an additional measure in the fight against respiratory diseases. Our compact plug-and-play purifiers, whose effectiveness is achieved through a combination of the high performance electrostatic HEPA filter, which traps the virus, followed by an intense exposure to Daikin's patented **Flash Streamer technology**, which removes the virus, can strongly contribute to reducing the risk of respiratory virus transmission.

*Daikin device MC55WVM (commercial names MC55W/VB), tested by Institut Pasteur de Lille, removes 99.98 % of Human Coronavirus HCoV-229E in 2.5 minutes running time at 'turbo' speed in laboratory conditions (air-tight chamber with inner volume 1.4 m³, no air renewal). Human Coronavirus HCoV-229E is different from the virus responsible for COVID-19, SARS-CoV-2, but belongs to the same family of coronaviruses. | Daikin device MC55WVM (commercial names MC55W/VB), tested by Institut Pasteur de Lille, removes 99.93 % of Influenza A virus subtype H1N1 in 2.5 minutes running time at 'turbo' speed in laboratory conditions (air-tight chamber with inner volume 0.47 m³, no air renewal).

The Allergy UK Seal of Approval reassures that the product is efficient at reducing small particulates which may include allergens, bacteria and viruses.



MC55W / MC55VB

- › Pure air thanks to air purification technologies
- › Catches fine particles of dust
- › Powerful suction and whisper quiet
- › New stylish and compact design



Single Unit		MC		55W / 55VB	
Application				Floor standing type	
Applicable room area		m ²		41 (1) / 82 (2)	
Dimensions	Unit	Height x Width x Depth	mm	500 x 270 x 270	
Weight	Unit		kg	6.8	
Casing	Colour			White	
	Type			Multi Blade Fan (Sirocco fan)	
Fan	Air flow rate	Air purifying operation	Silent/ Low/ Medium/ Turbo	m ³ /h	66 / 120 / 192 / 330
Sound pressure level	Air purifying operation	Silent/ Low/ Medium/ Turbo		dB(A)	19 / 29 / 39 / 53
Air purifying operation	Power input	Silent/ Low/ Medium/ Turbo		kW	0.008 / 0.010 / 0.015 / 0.037
Deodorizing method				Flash streamer + Deodorizing catalyst	
Dust collecting method				Electrostatic HEPA filter	
Air filter	Type			Polyethylene terephthalate net	
Sign	Item	01		Dust Sign: 3 stages / Odour: 3 stages / Anti-pollen mode / Child proof lock lamp / PM _{2.5} sensor lamp: 6 stages / Airflow rate: Quiet/Low/Standard/Turbo / AUTO FAN mode / Econo mode / ON/OFF lamp / Streamer lamp	
Power supply	Phase/Frequency/Voltage		Hz/V	1~ / 50 / 60 / 220-240 / 220-230	
Power plug				W: C type / VB: G type (UK)	
Type				Air Purifier	

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.

((1) in accordance with JEM (2) in accordance with CADR (JEM) & NRCC-54013-2011 standard) | 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: Active plasmatron function. Auto-restart function.

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.



CEPEN21-704 09/21



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Streamer technology air purifier

MC55W / MC55VB



Buy your
air purifier now
or contact your
installer!
www.daikin.eu

- › Effectiveness against respiratory viruses evaluated by Institut Pasteur de Lille
- › Pure air thanks to active plasma ion discharge and flash streamer technology
- › High performance HEPA filter with no need to change for 10 years
- › Whisper quiet

Daikin's unique double method

1. The Streamer unit, a high power plasma discharge technology, decomposes harmful substances* inside the unit. These substances are either trapped on the HEPA filter or adsorbed to the deodorizing filter element.
2. The Active Plasma Ion generation unit provides further purification to the space, by adding purifying elements to the cleaned air. These could for example assist to deodorize smelling curtains and carpets.

* Substances including: viruses¹, bacteria², pollen³, mould spores⁴



Plasma discharge 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.

Note:

- 1 Testing organization: Kitasato Research Center for Environmental Science; Test result certificate 21_0026 (issued by same organization); Result of experiment: 99.9% removal of A-H1N1 virus after 1 hour.
- 2 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).
- 3 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-1³; Test result: 99.6% or more decomposed and removed in 2 hours.
- 4 Testing organization: Japan Food Research Laboratories. Test number: 204041635-001. Test result: 99.9% or more of mould (Cladosporium) spores decomposed and removed in 24 hours.

Three 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.

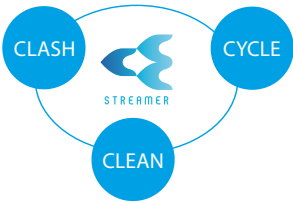


3 Decomposition

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



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 adsorbs and decomposes odour. Thanks to the regeneration of the adsorbing capacity, the deodorising capacity is maintained. No need to change the deodorising filter, unlike air purifiers with activated carbon filters.

CLEAN: Removes bacteria from dust collection filter.

High performance HEPA filter to catch fine particles of dust

Removes 99% of particles between $0.1\mu\text{m}$ and $2.5\mu\text{m}$ in size

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.

Therefore, a larger amount of air can pass through the filter.

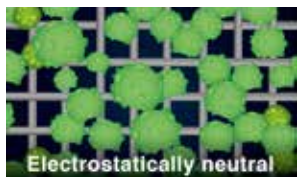
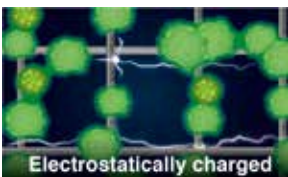
The filter can purify a larger amount of air!

Electrostatic HEPA filter

versus

Non-electrostatic filter

- › Removes 99,97% of fine particles of $0,3\mu\text{m}$
- › Filter fiber itself is charged with static electricity, and collects particles efficiently
- › Doesn't clog easily, hence less pressure loss

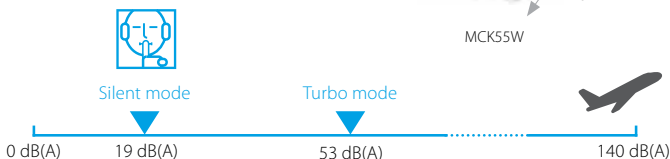


Compact, effective and quiet thanks to the new, innovative structure

Small footprint



Very quiet



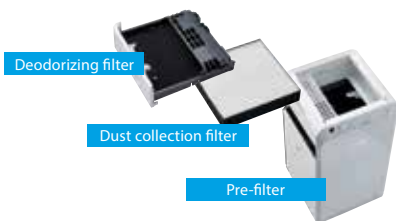
Model debut in a compact and stylish design

* UK plug

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

MC55W / MC55VB*	
Dust collection	Deodorisation
Capacity in turbo operation mode	
Air purification	
Air purification only	
Airflow 5.5 m ³ /min. 330 m ³ /hour	
Applicable room area ~82 m ² **	

Different filters for the best indoor air



Triple Detection sensor to quickly detect air pollution

Equipped with a high sensitivity dust sensor that distinguishes small particles such as PM_{2.5} and larger particles of dust and reacts accordingly. Triple detection of dust, PM_{2.5} and odour is provided.

