

# 5 Tick Multi

**R-32**

MKM50ZVMG  
MKM75ZVMG  
MKM85ZVMG  
MKM100ZVMG



# Table of Contents

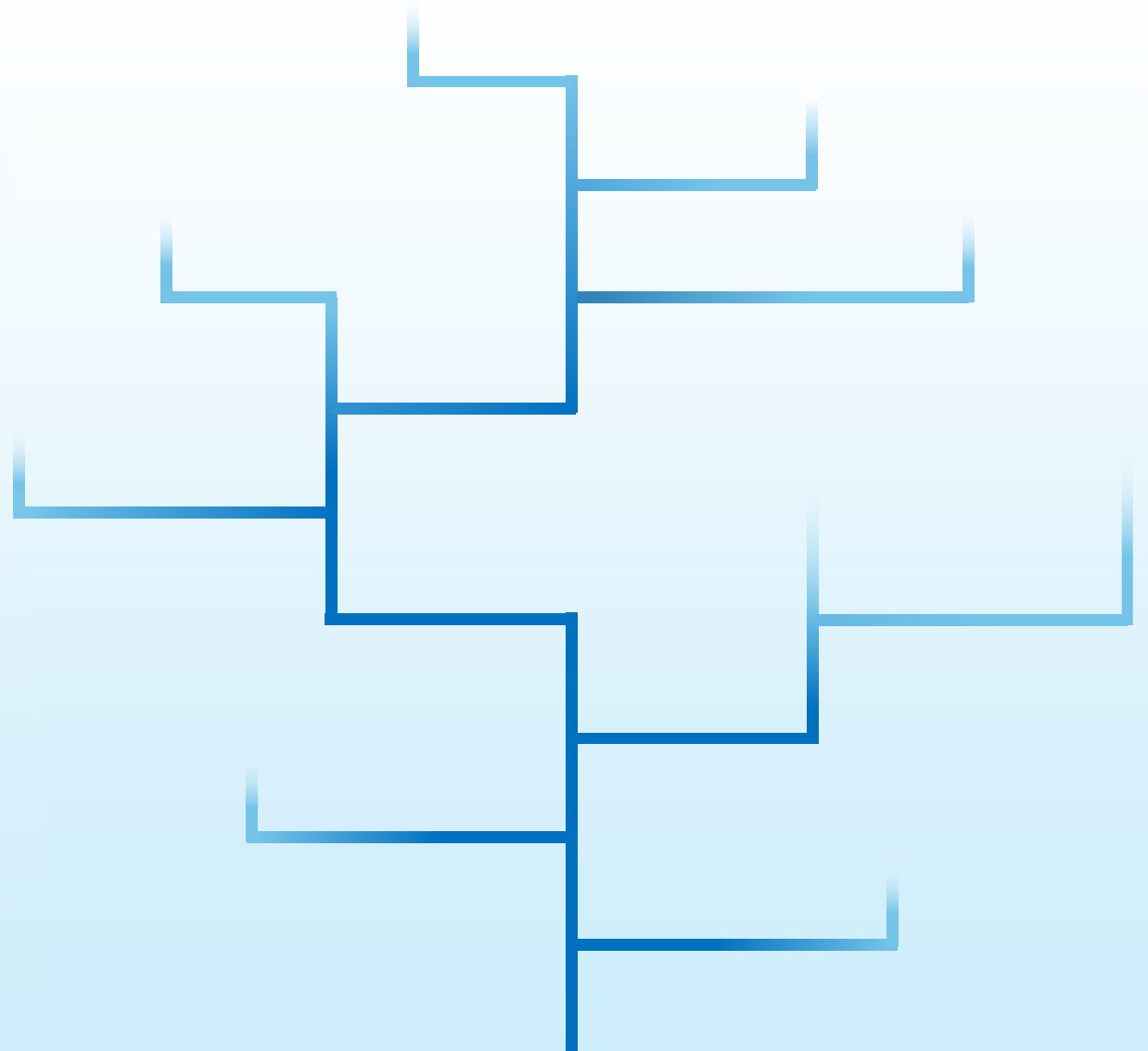
## Product Overview

Product Concepts	P.03
Standard System	P.04
5 Ticks Energy Efficiency Ratio	P.05
Streamer Technology	P.06
Wireless LAN PCB	P.10

## System Details

Lineup	P.13
Outlook	P.16
Specifications	P.19
Functions	P.22
Options	P.26
Combinations	P.29

<u>Benchmarking</u>	P.30
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# Product Concepts

1 Rated 5 ticks

2 Streamer technology

3 Built-in Wifi

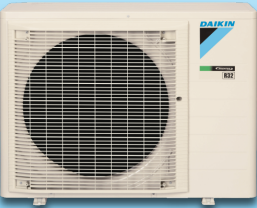




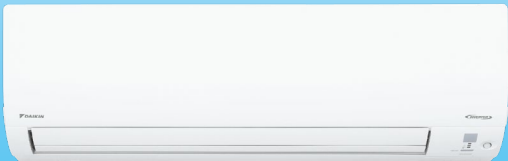
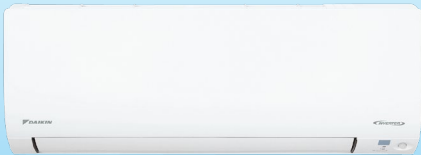
# Standard System

MKM-V → **MKM-Z**

No casing change



CTKM-V → **CTKM-Z**



**New**



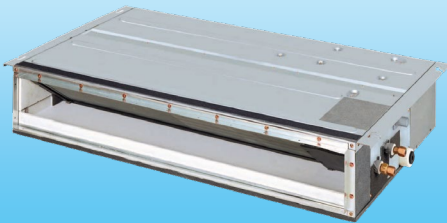
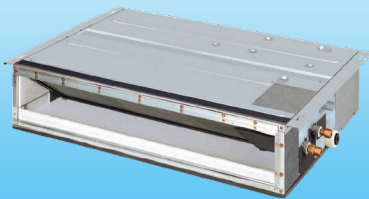
Streamer  
Technology



Wireless  
LAN

CDKM-V

Continued model

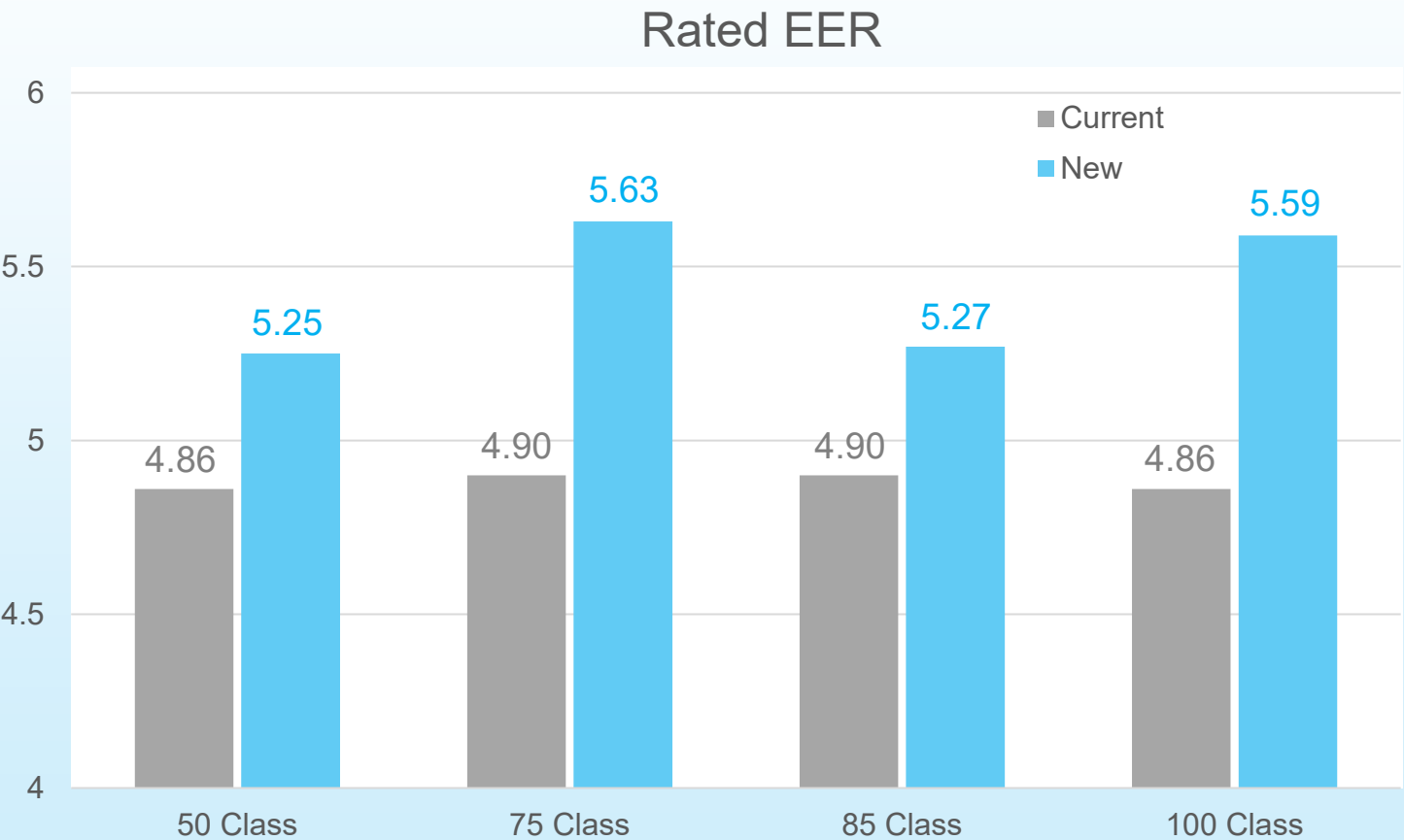


FDMF-V

Continued model



# 5 Ticks Energy Efficiency Ratio



# Streamer Technology

New structure, Filter + Streamer on the front



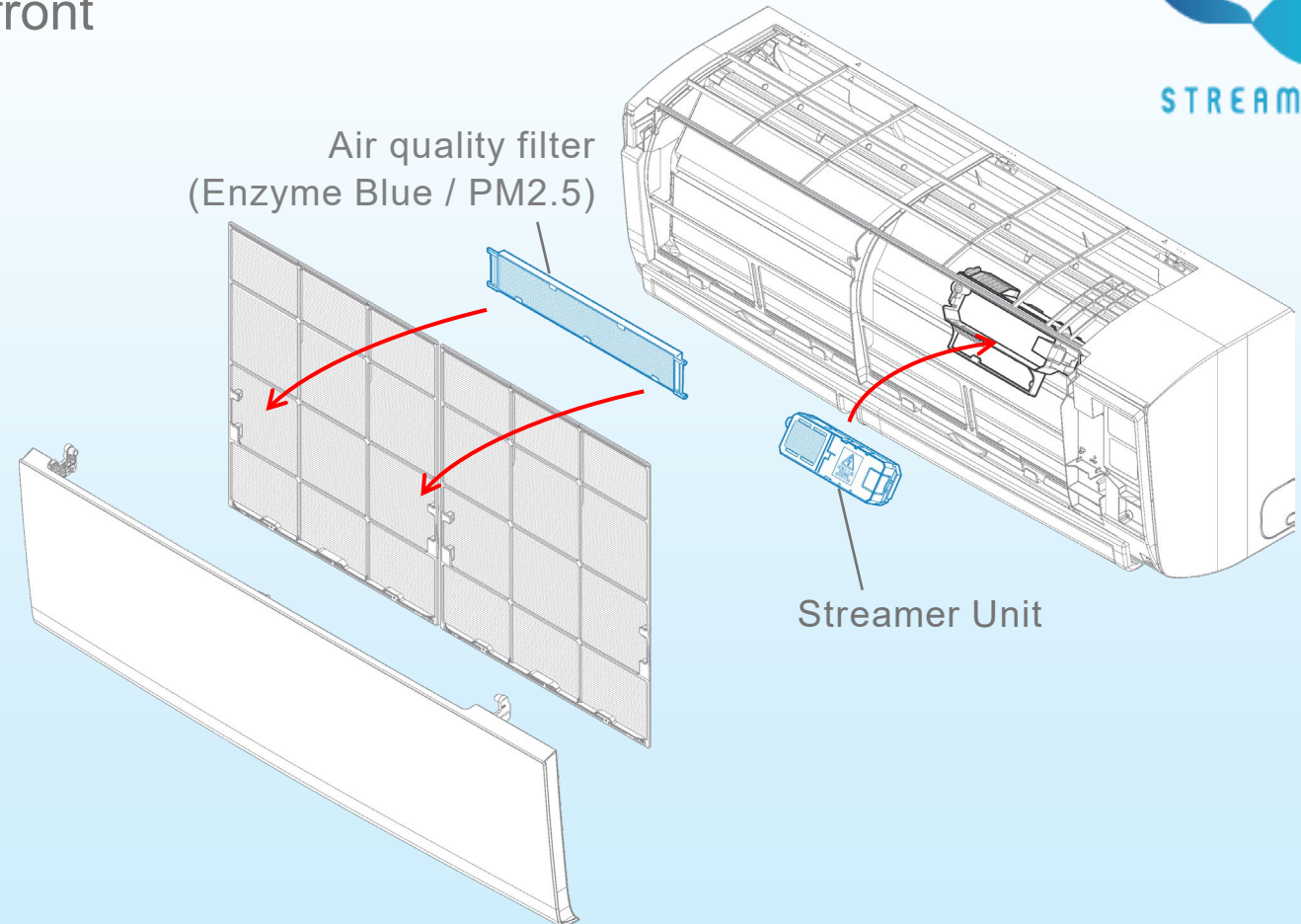
## Air quality filter (Enzyme Blue / PM2.5)

Remove odor causing agents,  
allergens, fungi, bacteria and virus.



## Streamer Unit

High speed electrons are discharged.  
This enables decomposition and  
removal allergens such as bacteria,  
viruses, mold, pollen, dust mites.

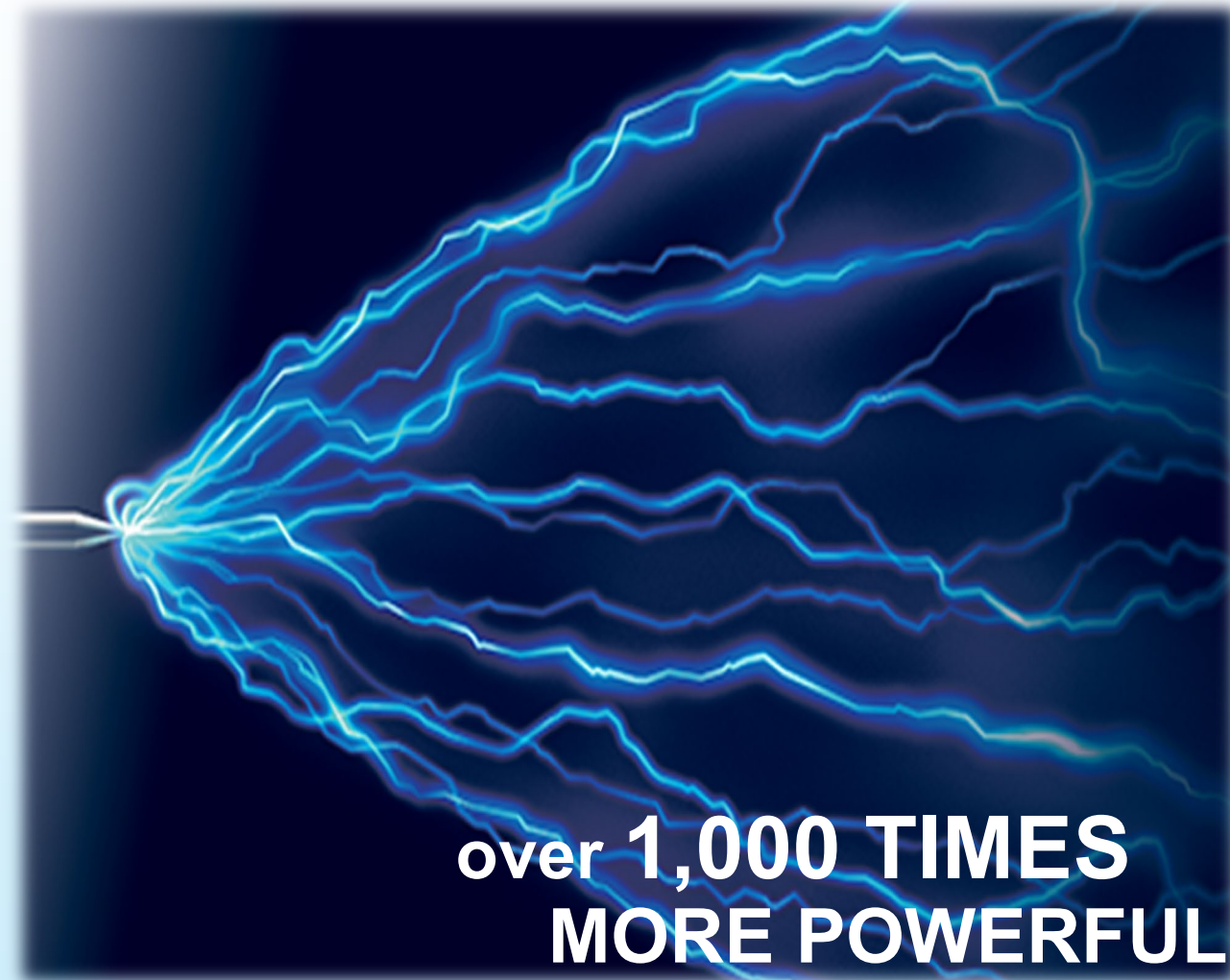


Perfecting the Air

# Streamer Technology

Streamer discharge attacks bacteria, mould and virus captured on the filter by irradiating them with an advanced plasma electric discharge.

It has an oxidative decomposition power of 1,000 times or more compared to ordinary electric plasma discharge (glow discharge).



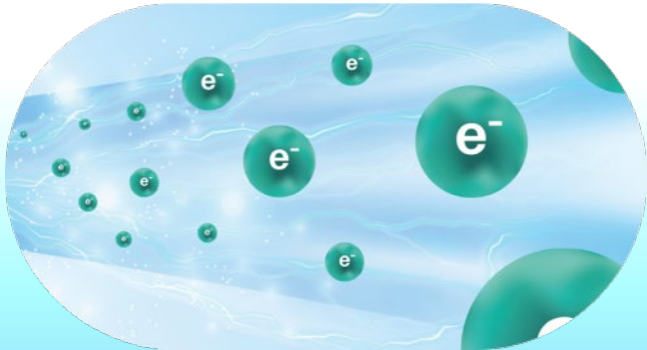


# Streamer Technology

## Mechanism of decomposition by Streamer

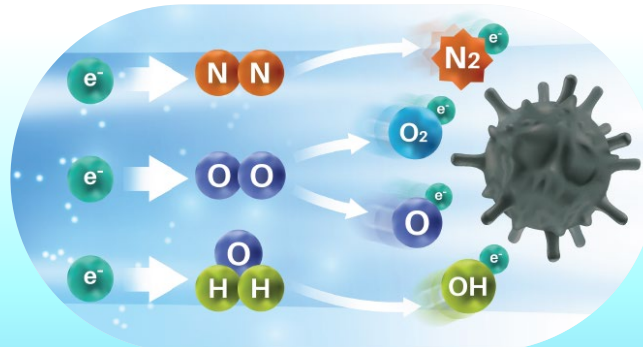
### STEP 1 DISCHARGE

The streamer discharge generates high-speed electrons.



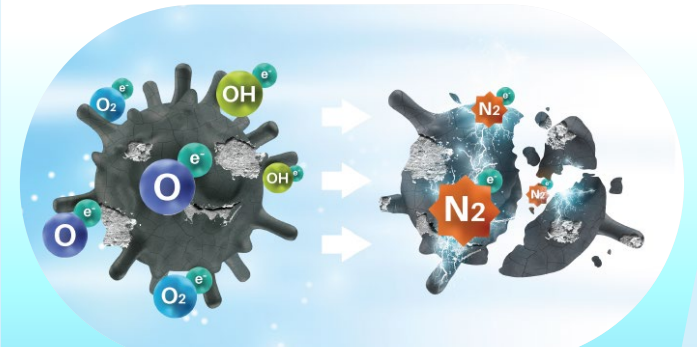
### STEP 2 COMBINATION

The high-speed electrons hit and combine with nitrogen and oxygen in the air. This generates high-strength decomposition elements.



### STEP 3 DECOMPOSING

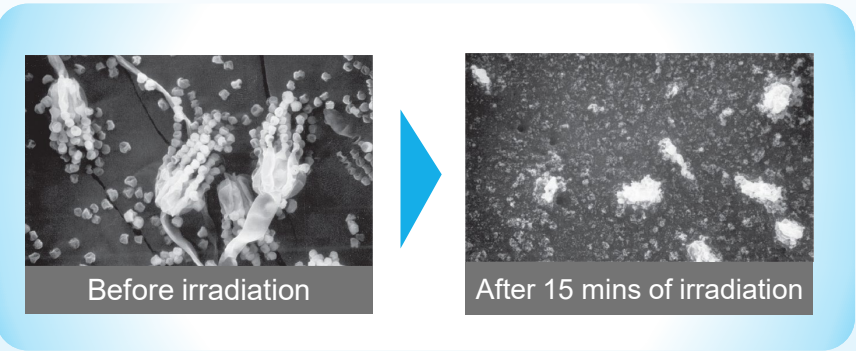
They decompose the surface of harmful proteins, and then destroy the center too.





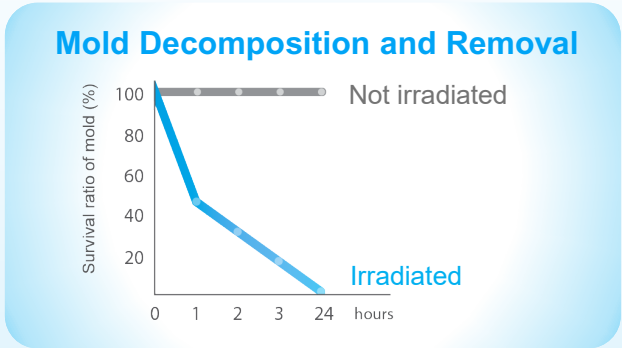
# Streamer Technology

The following are MOLD and VIRUSES removal tests simulations which use Daikin’s streamer device<sup>1</sup>.

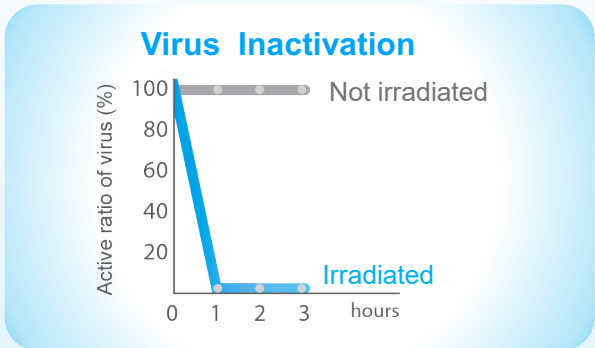


The streamer discharge has a powerful effect on particles captured by the filter.

Cladosporium was placed on an electrode of the streamer discharge unit and a picture was taken using an electron microscope after 15 minutes of discharge.



Test mold: Cladosporium  
Test method: Antibacterial test, mold removal test  
Test organization: Japan Food Research Laboratories  
Result certificate: 204041635-001  
Results: The streamer unit removed 99% of the mold in 24 hours. It has an effect on mold captured by the filter.






Test virus: Influenza virus (type A, H1N1)  
Test method: Virus inactivation test  
Test organization: Japan Food Research Laboratories  
Result certificate: 10029107001-01  
Results: The streamer unit inactivated 99% of the virus in one hour. A single type of virus was used in the test. It has an effect on virus captured by the filter.

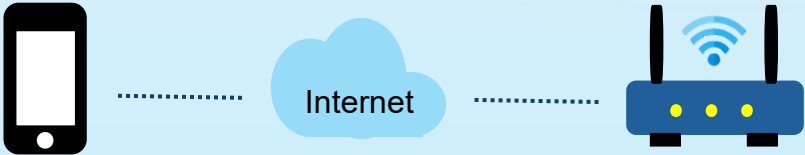
Note: 1. These results may differ slightly from actual results as they are based on simulations using a testing device equipped with a streamer unit. An actual air conditioner was not used when obtaining these results.

# Wireless LAN PCB

Wireless LAN PCB is implemented.

The application on the smartphone allows user to control air conditioner from anywhere via internet.

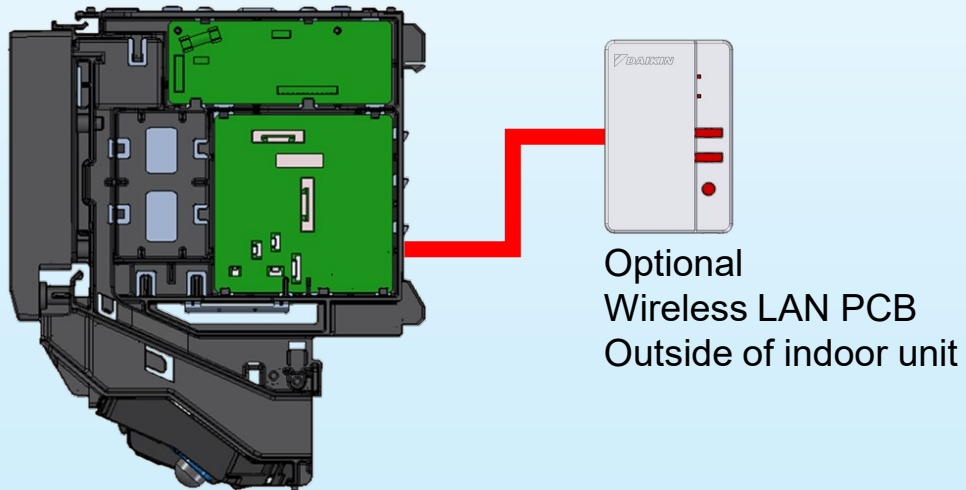
Functions	Smart Phone Control	Voice Control	
		 Google Assistant	 alexa
Start / Stop	●	●	●
Set operation mode	●	●	●
Set room temperature	●	●	●
Set fan speed (Auto, Slient, L1-L5)	●	●	●
Set fan swing (Stop, UD, LR, 3D)	●	●	●
Monitor current room temperature	●	●	●
Monitor current outdoor temperature	●	—	—
Monitor current room humidity	●	●	●
Unit error code indication	●	—	—



# Wireless LAN PCB

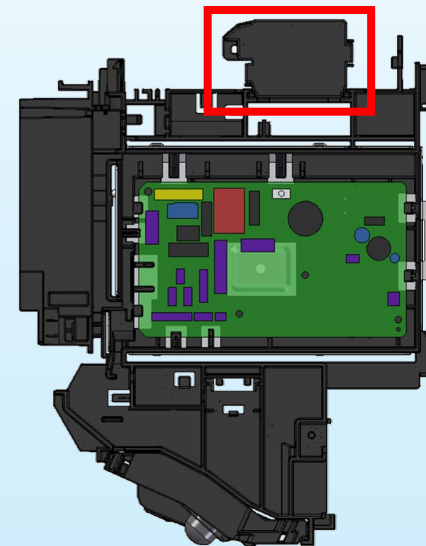
Wireless LAN adapter is installed inside of the e-box.  
Directly connected to Control PCB.

## Conventional model



## New

New



Inside of indoor unit

# System Details

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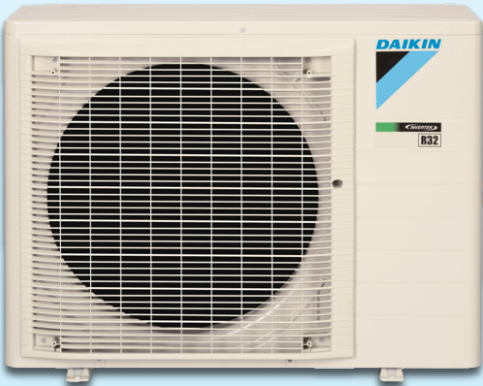
# Lineup | Outdoor unit

Current

MKM50**V**VMG  
MKM75**V**VMG  
MKM85**V**VMG  
MKM100**V**VMG

New

MKM50**Z**VMG  
MKM75**Z**VMG  
MKM85**Z**VMG  
MKM100**Z**VMG



# Lineup | Indoor Wall-mounted type

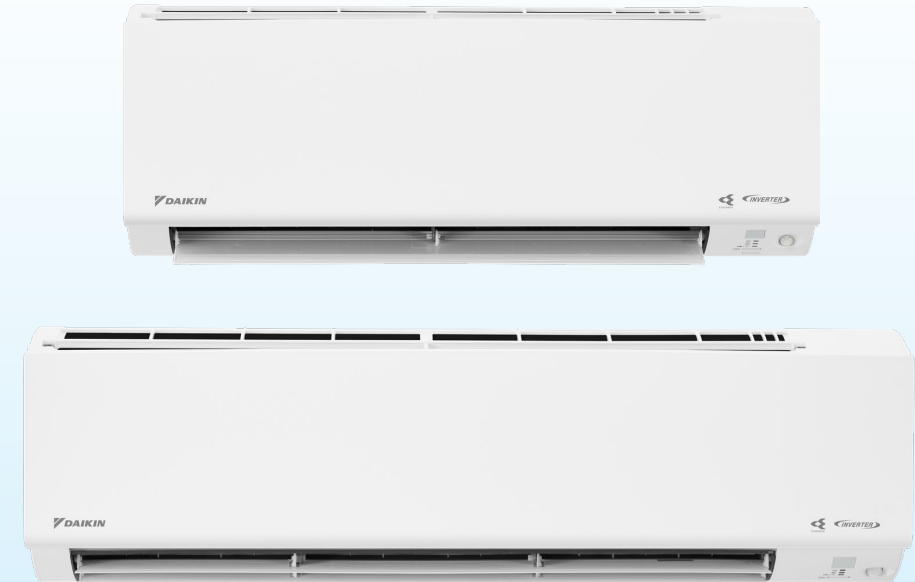
## Current

CTKM25VVMG  
CTKM35VVMG  
CTKM50VVMG  
CTKM60VVMG  
CTKM71VVMG



## New

CTKM25ZVMG  
CTKM35ZVMG  
CTKM50ZVMG  
CTKM60ZVMG  
CTKM71ZVMG



Wireless LAN

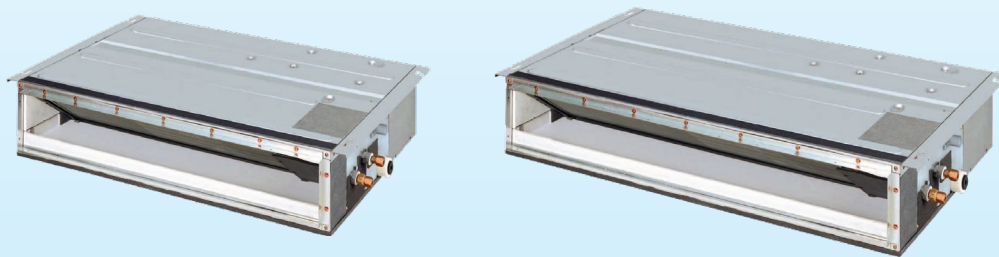


Streamer  
Technology

# Lineup | Indoor Duct-connected Type

## L.S.P. Duct

CDKM25VVMG  
CDKM35VVMG  
CDKM50VVMG  
CDKM60VVMG

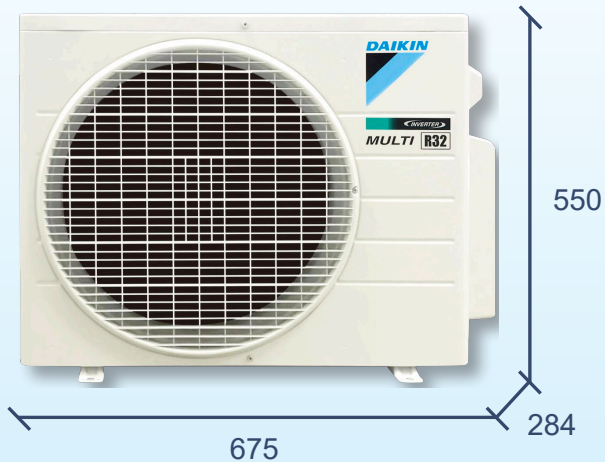


## M.S.P. Duct

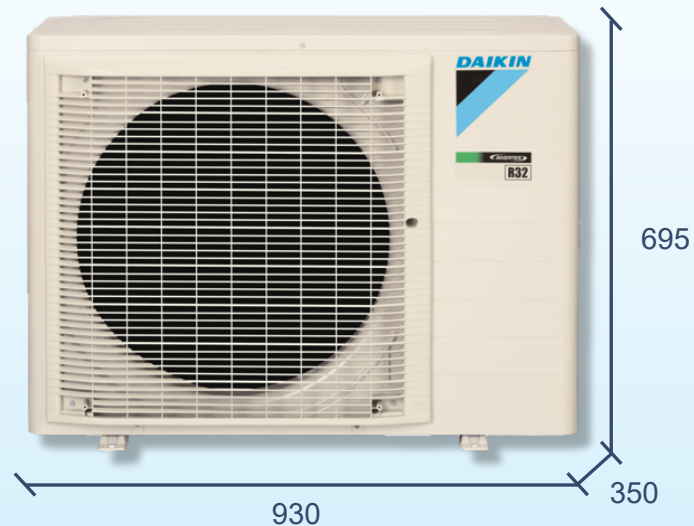
FDMF50VVMG  
FDMF60VVMG  
FDMF71VVMG



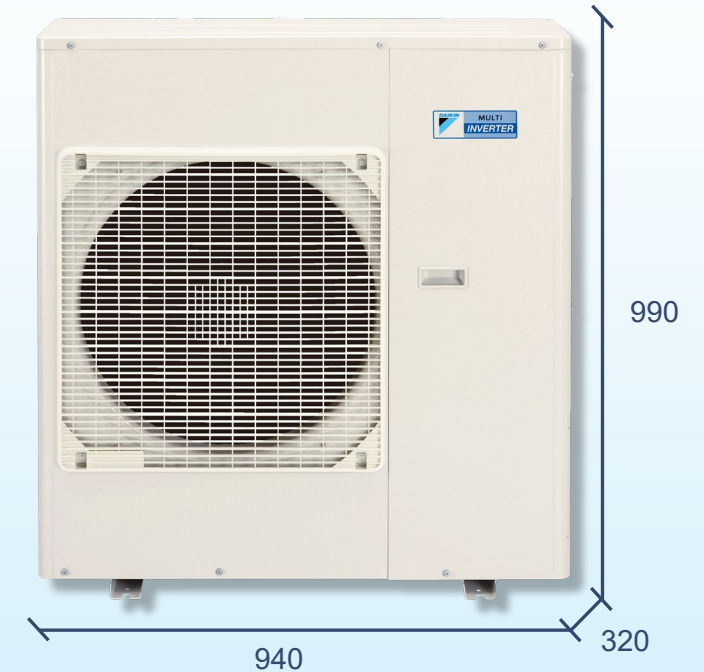
# Outlook | Outdoor Unit



**New** **MKM50ZVMG**  
(H)550×(W)675×(D)284 mm



**New** **MKM75-85ZVMG**  
(H)695×(W)930×(D)350 mm



**New** **MKM100ZVMG**  
(H)990×(W)940×(D)320 mm



# Outlook | Wall Mounted Indoor Unit



**New** **CTKM25-50ZVMG**  
(H)286×(W)770×(D)244 mm



**New** **CTKM60-71ZVMG**  
(H)295×(W)993×(D)281 mm

## New panel design

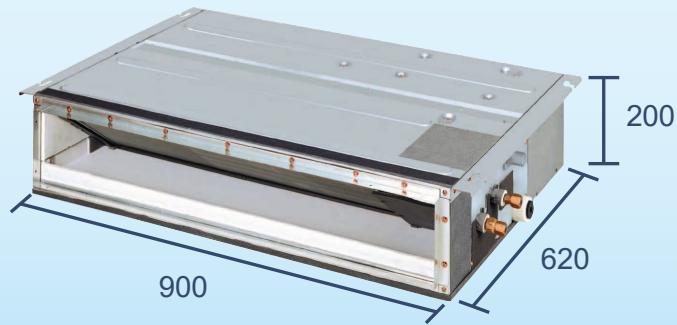
- Minimal
- Modern

No.	Logo type	Color
1	Daikin logo	Pantone silver
2	Streamer logo	Pantone cool gray
3	Inverter logo	Pantone cool gray



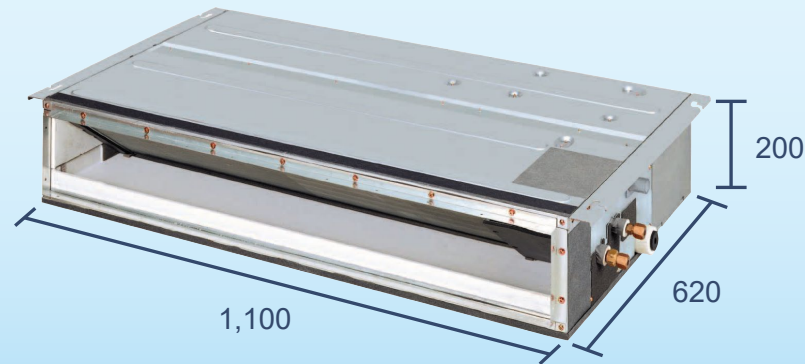
**Wireless Remote Controller ARC466A79**

# Outlook | Duct Connected Type Indoor Unit



**CDKM20-50VVMG**

(H)200×(W)900×(D)620 mm

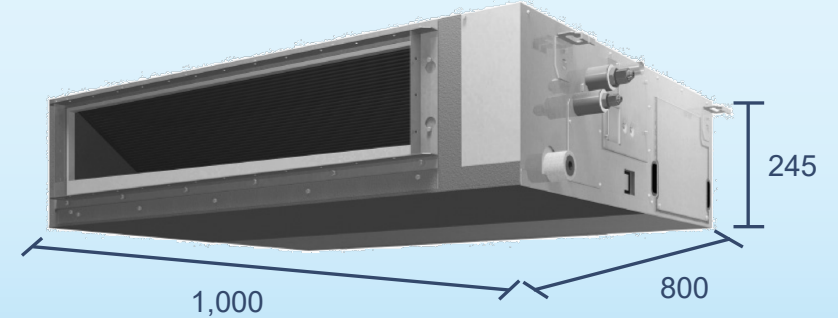


**CDKM60VVMG**

(H)200×(W)1,100×(D)620 mm



**Wireless  
Remote Controller  
ARC433B76**



**FDMF50-71VVMG**

(H)245×(W)1,000×(D)800 mm



**Wireless  
Remote  
Controller  
BRC086A22**



**Wired  
Remote  
Controller  
BRC1E63**

# Specifications | MKM-Z


 = Improved

Capacity Class			50	75	85	100	
Model name		Outdoor unit	MKM50ZVMG	MKM75ZVMG	MKM85ZVMG	MKM100ZVMG	
Refrigerant			R32				
Power supply			1φ 220-240V 50Hz / 220-230V 60Hz				
Rated indoor unit combination			25 + 25 + 25	25 + 25 + 25 + 25	25 + 25 + 35 + 71	25 + 25 + 25 + 25 + 60	
Cooling capacity rated (min. ~ max.)		kW	4.2 (1.20 ~ 6.3)	6.0 (1.60 ~ 9.4)	7.4 (1.60 ~ 10.6)	8.61 (2.0 ~ 12.8)	
		Btu/h	14,300	20,500	25,200	29,400	
Rated EER		W/W	5.25	5.63	5.27	5.59	
Weighted EER		W/W	6.18	6.35	6.24	6.09	
NEA MELS Tick rank			5 Ticks	5 Ticks	5 Ticks	5 Ticks	
Outdoor unit	Dimensions (H × W × D)		mm	550 × 675 × 284	695 × 930 × 350	695 × 930 × 350	990 × 940 × 320
	Weight (Gross weight)		kg	37 (41)	49 (54)	52 (55)	78 (86)
	Sound level (H / SL)	Cooling	dB(A)	49 / 44	53 / 44	54 / 45	54 / 46
	Heat exchanger type			Copper tube	Copper tube	Copper tube	Copper tube
	Compressor	Type		2YC40AXD	2YC40BXD	2YC40BXD	2Y207BKAX1W
		Model		Hermetically sealed swing type			
		Motor output		1,300	1,300	1,300	1,880
	Number of port			3	4	4	5
	Max. connectable indoor unit capacity			8.5	11	15.6	16
Number of minimum connectable indoor unit			1*	1	1	1	
Breaker size		A	10A	20A	20A	20A	
Refrigerant amount		kg	1.10	1.80	1.80	2.65	
Chargeless		m	Chargeless				
Max. piping length		m	50 total / 25 each room	60 total / 30 each room	70 total / 30 each room	80 total / 30 each room	
Max. height difference		m	15 (IU-OU) / 7.5 (IU-IU)	15 (IU-OU) / 7.5 (IU-IU)	15 (IU-OU) / 7.5 (IU-IU)	15 (IU-OU) / 7.5 (IU-IU)	
Piping connection	Gas	mm	φ 9.5 × 3	φ 9.5 × 2, φ 12.7 × 2	φ 9.5 × 1, φ 12.7 × 1, φ 15.9 × 2	φ 9.5 × 2, φ 12.7 × 1, φ 15.9 × 2	
	Liquid	mm	φ 6.4 × 3	φ 6.4 × 4	φ 6.4 × 4	φ 6.4 × 5	
Operation limit		Cooling °CDB	10 ~ 46				

\*For 50 class: 1 room connection of FDMF50VVMG is impossible. FDMF50VVMG connection must be connected to at least 2 rooms with max. capacity of 8.5kw.

# Specifications | CTKM-Z

Capacity Class				25	35	50	60	71
Model name		Indoor unit		CTKM25ZVMG	CTKM35ZVMG	CTKM50ZVMG	CTKM60ZVMG	CTKM71ZVMG
Refrigerant				R32				
Power supply				1φ 220-240V 50Hz / 220-230V 60Hz				
Cooling capacity rated			kW	2.5	3.5	5.0	6.0	7.1
			Btu/h	8,500	11,900	17,100	20,500	24,200
Indoor unit	Dimensions (H × W × D)		mm	286 × 770 × 244			295 × 993 × 281	
	Weight (Gross weight)		kg	9 (12)	9 (12)	9 (12)	14 (18)	14 (18)
	Airflow rate (H / SL)		m³/min	11.8 / 3.7	12.0 / 3.7	13.0 / 6.2	20.8 / 9.6	21.7 / 9.6
	Sound level (H / M / L / SL)	Cooling	dB(A)	43 / 34 / 26 / 19	44 / 36 / 26 / 19	45 / 40 / 35 / 28	48 / 42 / 36 / 29	49 / 45 / 37 / 30
Piping connection		Gas	mm (in)	φ 9.5	φ 9.5	φ 12.7	φ 12.7	φ 15.9
		Liquid	mm (in)	φ 6.4	φ 6.4	φ 6.4	φ 6.4	φ 6.4
Fan speed		Steps		5 Steps, Quiet, Auto				
Air direction control				Right, Left, Horizontal, Downwards				
Air filter				Mould proof air filter / Air quality filter (enzyme blue / PM2.5)				

 = Improved







# Specifications | CDKM-V, FDMF-V

Capacity Class				25	35	50	60
Model name		Indoor unit		CDKM25VVMG	CDKM35VVMG	CDKM50VVMG	CDKM60VVMG
Refrigerant				R32			
Power supply				1φ 220-240V 50Hz / 220-230V 60Hz			
Cooling capacity rated			kW	2.5	3.5	5.0	6.0
			Btu/h	8,500	11,900	17,100	20,500
Indoor unit	Dimensions (H × W × D)		mm	200 × 900 × 620			200 × 1,100 × 620
	Weight (Gross weight)		kg	25 (29)	25 (29)	27 (31)	30 (35)
	Airflow rate (H / SL)		m³/min	9.5 / 6.7	10.0 / 7.0	12.0 / 8.4	16.0 / 11.2
	Sound level (H / M / L / SL)	Cooling	dB(A)	35 / 33 / 31 / 29	35 / 33 / 31 / 29	37 / 35 / 33 / 31	38 / 36 / 34 / 32
External static pressure				40	40	40	40
Piping connection		Gas	mm (in)	φ 9.5	φ 9.5	φ 12.7	φ 12.7
		Liquid	mm (in)	φ 6.4	φ 6.4	φ 6.4	φ 6.4
Fan speed		Steps		5 Steps, Quiet, Auto			

Capacity Class				50	60	71
Model name		Indoor unit		FDMF50VVMG	FDMF60VVMG	FDMF71VVMG
Refrigerant				R32		
Power supply				1φ 220-240V 50Hz / 220-230V 60Hz		
Cooling capacity rated			kW	5.0	6.0	7.1
			Btu/h	17,100	20,500	24,500
Indoor unit	Dimensions (H × W × D)		mm	245 × 1,000 × 800		
	Weight		kg	37	37	37
	Airflow rate (H / SL)		m <sup>3</sup> /min	18 / –	18 / –	23 / –
	Sound level (H / M / L / SL)	Cooling	dB(A)	35 / 33 / 31 / –	35 / 33 / 31 / –	38 / 35 / 33 / –
External static pressure				Rated 50 (50 ~ 150)		
Piping connection		Gas	mm (in)	φ 12.7	φ 12.7	φ 15.9
		Liquid	mm (in)	φ 6.4	φ 6.4	φ 6.4

Perfecting the Air

# Functions | MKM-Z

Functions		50	75	85	100
	Outdoor Unit Quiet Operation	•	•	•	•
	Auto-Restart after Power Failure	•	•	•	•
	Self-Diagnosis with Remote Controller	•	•	•	•
	Anti-Corrosion Treatment of Outdoor Heat Exchanger Fins	•	•	•	•



Perfecting the Air

# Functions | CTKM-Z

Functions	25	35	50	60	71
Power-Airflow Flap	•	•	•	–	–
Power-Airflow Dual Flaps	–	–	–	•	•
Wide-Angle Louvers	•	•	•	•	•
Auto-Swing (Up and Down)	•	•	•	•	•
Auto-Swing (Left and Right)	•	•	•	•	•
3D Airflow	•	•	•	•	•
Comfort Airflow Mode	•	•	•	•	•
<b>Comfort Airflow Mode (Coanda panel: Ceiling)</b>	•	•	•	•	•
Indoor Unit Quiet Operation	•	•	•	•	•
Fan operation	•	•	•	•	•
Auto Fan Speed	•	•	•	•	•
Intelligent Eye (Auto Energy Saving)	•	•	•	•	•
Program Dry Function with Humidity Sensor	•	•	•	•	•
Econo Mode	•	•	•	•	•
Powerful Operation	•	•	•	•	•
Indoor Unit On-Off Switch	•	•	•	•	•
Signal Reception Indicator	•	•	•	•	•

Functions	25	35	50	60	71
Wireless Remote Controller (Backlight)	•	•	•	•	•
Wireless Remote Controller (Luminous Button)	•	•	•	•	•
Daikin Mobile Controller (Install inside indoor unit)	–	–	–	–	–
0.5 Step Room Temperature Setting	•	•	•	•	•
Air Quality Filter (Enzyme Blue / PM2.5)	•	•	•	•	•
Deodorizing Filter (Enzyme Blue)	OP	OP	OP	OP	OP
Titanium Apatite Deodorizing Filter	OP	OP	OP	OP	OP
Dust Collection Filter (PM2.5)	OP	OP	OP	OP	OP
Mold-Proof Air Filter	•	•	•	•	•
<b>Mold-Proof Operation with Streamer</b>	•	•	•	•	•
<b>Flash Streamer</b>	•	•	•	•	•
Odour Removing	•	•	•	•	•
Removable Drain Pan	•	•	•	•	•
Weekly Timer	•	•	•	•	•
24-hour ON/OFF Timer	•	•	•	•	•
Count Up-Down On/Off Timer	•	•	•	•	•
Night Set Mode	•	•	•	•	•
<b>Wireless LAN Connection PCB</b>	•	•	•	•	•

Perfecting the Air

# Functions | CDKM-V














Functions	25	35	50	60
Power-Airflow Flap	–	–	–	–
Power-Airflow Dual Flaps	–	–	–	–
Wide-Angle Louvers	–	–	–	–
Auto-Swing (Up and Down)	–	–	–	–
Auto-Swing (Left and Right)	–	–	–	–
3D Airflow	–	–	–	–
Comfort Airflow Mode	–	–	–	–
Comfort Airflow Mode (Coanda panel: Ceiling)	–	–	–	–
Indoor Unit Quiet Operation	•	•	•	•
Fan operation	•	•	•	•
Auto Fan Speed	•	•	•	•
Selectable Fan Speed	•	•	•	•
Program Dry Function with Humidity Sensor	•	•	•	•
Econo Mode	•	•	•	•
Powerful Operation	•	•	•	•
Indoor Unit On-Off Switch	•	•	•	•
Signal Reception Indicator	•	•	•	•

Functions	25	35	50	60
Wireless Remote Controller (Backlight)	•	•	•	•
Wireless Remote Controller (Luminous Button)	–	–	–	–
HA and DIII-NET application	OP	OP	OP	OP
0.5 Step Room Temperature Setting	•	•	•	•
Air Quality Filter (Enzyme Blue / PM2.5)	–	–	–	–
Deodorizing Filter (Enzyme Blue)	–	–	–	–
Titanium Apatite Deodorizing Filter	–	–	–	–
Dust Collection Filter (PM2.5)	–	–	–	–
Mold-Proof Air Filter	•	•	•	•
Mold-Proof Operation with Streamer	–	–	–	–
Flash Streamer	–	–	–	–
Odour Removing	–	–	–	–
Removable Drain Pan	–	–	–	–
Weekly Timer	–	–	–	–
24-hour ON/OFF Timer	•	•	•	•
Count Up-Down On/Off Timer	•	•	•	•
Night Set Mode	•	•	•	•
Wireless LAN Connection PCB	–	–	–	–



Perfecting the Air

# Functions | FDMF-V

Functions	Wireless remote control			Wired remote control		
	50	60	71	50	60	71
Switchable Fan Speed (3 Steps)	•	•	•	•	•	•
 Indoor Unit Quiet Operation	—	—	—	—	—	—
 Auto Fan Speed	•	•	•	•	•	•
 Program Dry Function	•	•	•	•	•	•
Two Selectable Temperature Sensors	—	—	—	•	•	•
 Econo Mode	—	—	—	—	—	—
 Powerful Operation	—	—	—	—	—	—
 Indoor Unit On-Off Switch	•	•	•	—	—	—
Signal Reception Indicator	•	•	•	—	—	—
 Wireless Remote Controller (Backlight)	•	•	•	•	•	•
 Wireless Remote Controller (Luminous Button)	—	—	—	—	—	—
 HA and DIII-NET application	OP	OP	OP	OP	OP	OP
 0.5 Step Room Temperature Setting	—	—	—	—	—	—
Silver Ion Anti-Bacterial Drain Pan	•	•	•	•	•	•
Longlife Filter	OP	OP	OP	OP	OP	OP
Filter Sign	•	•	•	•	•	•
 Odour Removing	—	—	—	—	—	—
Drain Pump Mechanism	•	•	•	•	•	•
Setpoint Auto Reset	•	•	•	•	•	•
Setpoint Range Set	•	•	•	•	•	•
 Weekly Schedule Timer	—	—	—	•	•	•
24-hour ON/OFF Timer	—	—	—	•	•	•
72-hour ON/OFF Timer	•	•	•	—	—	—
 Count Up-Down On/Off Timer	•	•	•	—	—	—
Off timer (Programmed)	•	•	•	•	•	•

# Options | MKM-Z, CTKM-Z

★ Standard accessory

Outdoor unit	MKM-ZVMG		
	Class 50	Class 75/85	Class 100
Air direction adjustment grille	KPW937F4	KPW5G112	
Drain plug ★	KKP937A4		KKP945A4
Indoor unit	CTKM-ZVMG		
Remote control PC-board set	BRP067A42		
Wiring adaptor for timer clock / remote controller (normal open pulse contact / normal open contact)	KRP413BB1S (Need BRP067A42)		
Interface adaptor for DIII-NET (residential air conditioner)	KRP928BB2S (need BRP067A42)		
Central remote controller	DCS302CA61 (Need KRP928BB2S)		
Unified ON/OFF controller	DCS301BA61 (Need KRP928BB2S)		
Schedule timer	DST301BA61 (Need KRP928BB2S)		
Titanium apatite deodorizing filter (without frame)	KAF970A49		
Dust collection filter (PM2.5 Filter) (without frame)	BAFP046A45		
Deodorizing filter (Enzyme Blue) (without frame)	BAFP094A50		
Air Quality filter (Enzyme Blue / PM2.5) (without frame) ★	BAFP094A49		
Remote controller loss prevention with the chain	KKF910A4		

## Options | CDKM-V




Indoor unit	CDKM-VVMG	
	Class 25/35/50	Class 60
Wireless remote controller	BRC086A12	
Adaptor PCB (normal open pulse contact / normal open contact)	KRP413BB1S	
Interface adaptor for DIII-NET	KRP928BB2S	
Central remote controller	DCS302CA61 (Need KRP928BB2S)	
Unified ON/OFF controller	DCS301BA61 (Need KRP928BB2S)	
Schedule timer	DST301BA61 (Need KRP928BB2S)	
Insulation kit for high humidity	KDT25N50	KDT25N63
Remote controller loss prevention with the chain	KKF910A4	





Perfecting the Air

# Options | FDMF-V

Indoor unit		FDMF-VVMG
Remote controller (required)	Wired type	BRC1E63
	Wireless type	BRC086A22
Wireless receiver kit		BRC086A2R1
High efficiency filter	65%	KAF632C80
	90%	KAF633C80
Longlife filter		KAF631C80
Filter chamber		KDDFP63B80
Central remote controller		DCS302CA61
Unified ON/OFF controller		DCS301BA61
Schedule timer		DST301BA61
Service panel	Fresh white	KTBJ25K80F
Air discharge adaptor		KDAP25A71A
Shield plate for side plate		KDBD63A160
Remote sensor		BRCS01A-4
Remote controller loss prevention with chain		KKF910A4

# Combinations

Wall Mounted Type		New MKM-ZVMG				
						
		kW class	50	75	85	100
R-32	CTKM-ZVMG <span>New</span>		25 ●	●	●	●
		35	●	●	●	●
		50	●	●	●	●
		60	—	●	●	●
		71	—	—	●	●
R-32	CTKM-VVMG <span>Current</span>		25 ●	●	●	●
		35	●	●	●	●
		50	●	●	●	●
		60	—	●	●	●
		71	—	—	●	●

L.S.P Duct Type		New MKM-ZVMG				
						
		kW class	50	75	85	100
R-32	CDKM-VVMG <span>Continued</span> 	25	●	●	●	●
		35	●	●	●	●
		50	●	●	●	●
		60	—	●	●	●
M.S.P Duct Type		New MKM-ZVMG				
						
		kW class	50	75	85	100
R-32	FDMF-VVMG <span>Continued</span> 	50	●*	●	●	●
		60	—	●	●	●
		71	—	—	●	●

● : Official Combination  
\* Single connection is not available.  
FDMF50VVMG must be connected at least 2 rooms with max. capacity 8.5kW