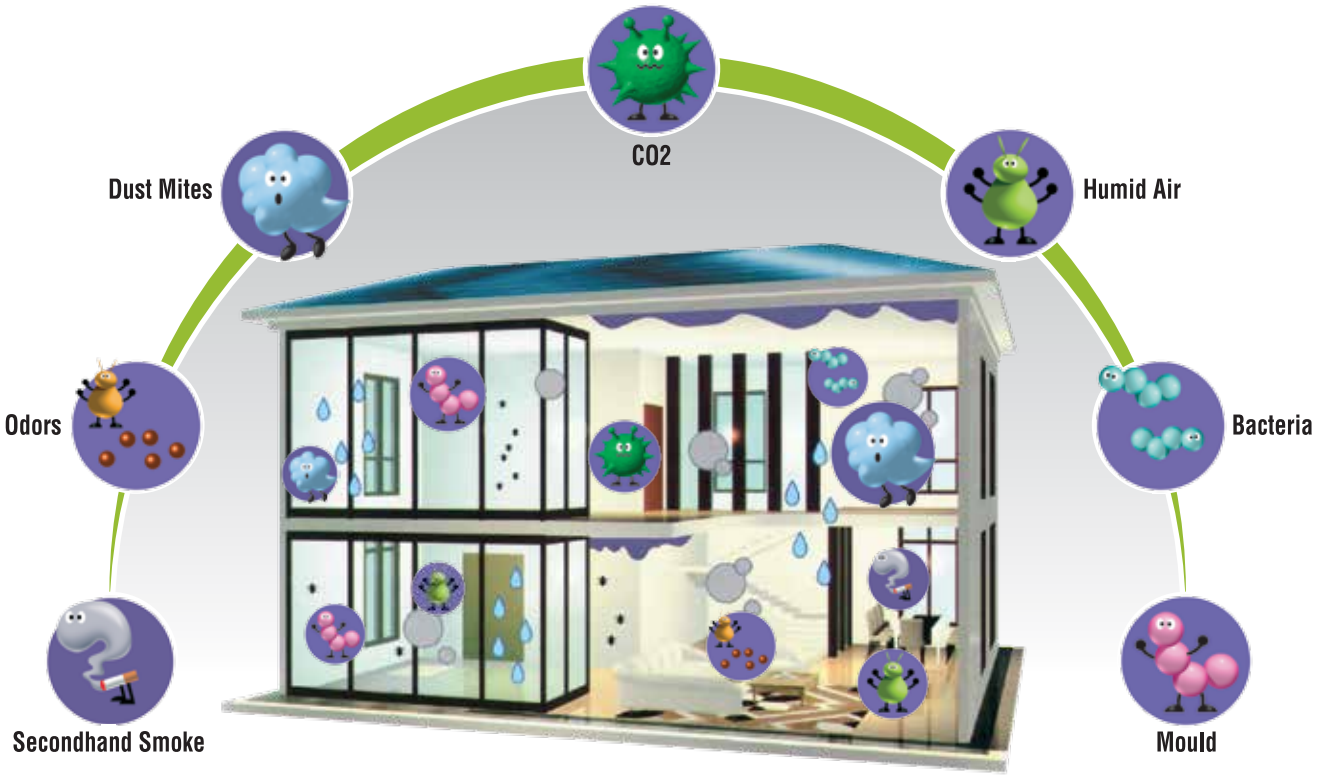
KDK

SINCE 1909
JAPAN

Ceiling Mount Type Ventilating Fans

Ventilation and Indoor Air Quality

Buildings nowadays, especially homes are tightly built with aluminum casing windows and rubber lining door in order to retain energy efficiency. Most homes and commercial buildings have windows and doorways that are sealed to limit heating or cooling loss. these, however, it comes at the cost of poor indoor air quality (IAQ). That means, staying indoors will not give us clear and fresh air because the concentration of indoor pollutants, such as odors, dust, pet dander and bacteria, can reach up to five times higher than found outsides. These biological pollutants can be hazardous to occupants and structural integrity.



Volatile organic compounds (VOCs) are carbon-based compounds that easily evaporate. These types of gases are released from building materials, carpets and furniture naming “outgassing”. Other household items emit VOC include hair sprays, paints, lacquers, finishes, cleaning solvents, pesticides, etc. VOC can ultimately solvents, pesticides, etc. VOC can ultimately sensitize certain people to react to them.

Hazardous indoor chemicals can be categorized into 3 groups

Chemical Substance	Origin
Formaldehyde (HCHO)	• Plywood Board • Flooring • Furniture • Wall Paper
Volatile Organic Componds	
1) Toluene, Xylene, Trimethyl Benzen	
2) Phosphoric acid triester (TCEP)	Non-flammable vinyl cloth
Organic Phosphoric	Pesticides

In a word, the absence of ventilation leads to improper airflow and coupled with the presence of pollutants, eventually results in oxygen deficiency which is definitely important and necessary for humans.

Because of the above reasons, people are increasingly aware of the importance of ventilation and indoor air quality. They believe that proper and effective ventilation is essential for removing excessive moisture that promotes pollutants, which can deteriorate building’s structure and cause health problems. Here, KDK Ventilating Fans play an important role by removing volatile organic compounds (VOCs), to ensure proper indoor air circulation and conducts proper exchange between the air indoors and outdoors.

Recommended Application of Ceiling Mount Ventilating Fans

Spot (Intermittent) Ventilation

Aside from 24-hour ventilation to keep continuous air movement at low airflow for the houses, there is a need of larger ventilation rate in response to specific pollutant sources such as cooking, smell or excess moisture, etc.

A relatively larger air volume quickly removes occasional bad smells or gases. After the ventilation for specific purpose is completed, this operation should be stopped.

Ventilation Rate (Air Change per Hour)	
Toilet	5 - 15
Kitchen	15
Bathroom	5

24-hour Whole House Ventilation

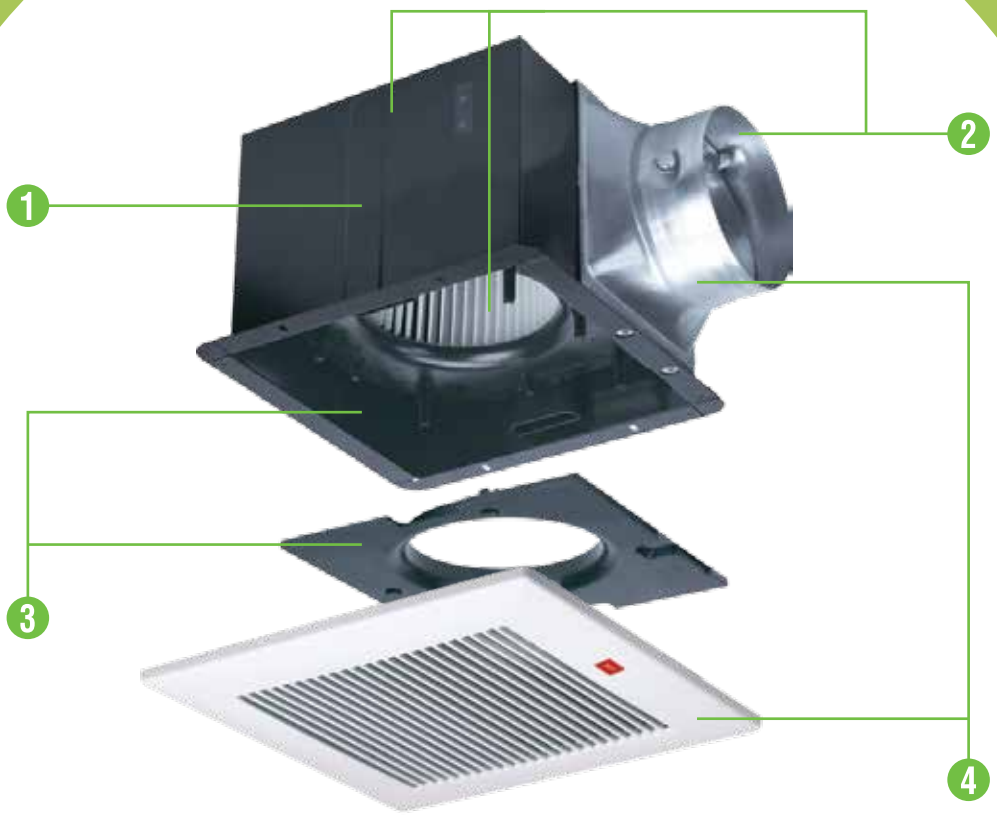
"24-hour ventilation" targets to the whole residence, focusing on general living area such as living room, dining room, bedroom, study room and guest room. It would run continuously with gentle extraction over 24-hour period.

Sources, interval and amount of those unpleasant pollutants are often unclear, thus 24-hour ventilation is necessary, and 0.5 air change per hour is recommended.

** Local regulations concerning the installation of ventilating fans should be fulfilled.
** Installation methods please refer to the operation instruction.

General Feature

For DC Motor Series, Super Quiet Series and Standard Series



1 Long Life

- HP (Half Pitch) motor incorporated with well lubricated ball bearings, temperature rise is reduced that prolong motor lifetime and product durability

  * Except DC Motor Series

2 High Efficient

- Taper blade design effectively controls the turbulence surrounding the blade. Strong and smooth ventilation performance is achieved and noise level is reduced, by whole of the blade
- Seam-processed frame ensures strength and hermetic sealing of the product
- Reverse flow prevention shutter results in further improvement of air tightness

3 Super Low Noise

- Distinctive structure of “Double Orifice” minimizes the transmission of noise from the fan and motor to exterior. This technology further reduces the operation noise to incredibly low level by “Resonance-Noise-Absorption” operation, which creates a tranquility and silent environment for your life

  * Except Standard Series

4 Easy Installation

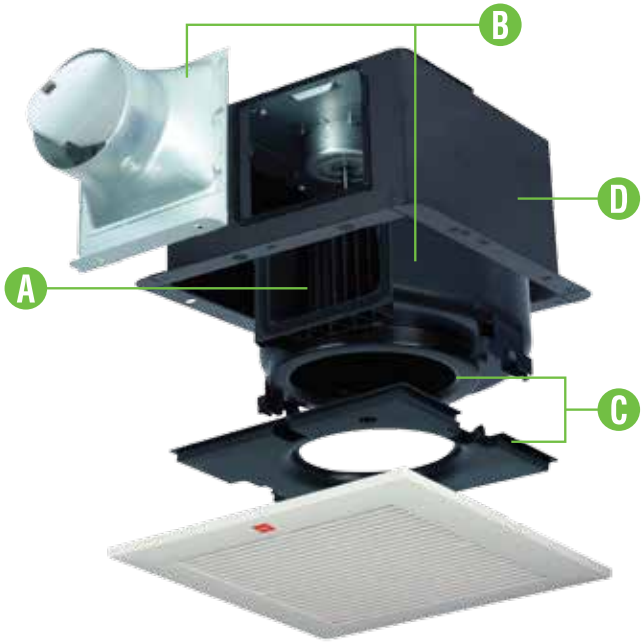
- Wiring of power cord to product is pre-installed, just connect the cord to power supply for operation

  * Except Standard Series

- Cassette type discharge adaptor facilitating installation of the product, as well as duct connecting work
- Spring-clip louver allows convenient installation and removal of louver

New Feature of 17 and 24 Model

The new 17 and 24 models of ceiling mount ventilating fan achieve reduction of power consumption and noise by the optimized product structure.



A Fan Efficiency Improvement

The height and diameter of fan blade are increased to improve fan efficiency

	F	øG
Previous	99	150
New	106	151

Example : 24 model / Unit : mm

B Airflow Performance Maximization

- Duct adaptor is re-located to minimize turbulence within the air passage
- The casing space is enlarged by 4% that improves the airflow inside the casing. Also, packing lining is added at the bottom to reduce vibration and noise significantly

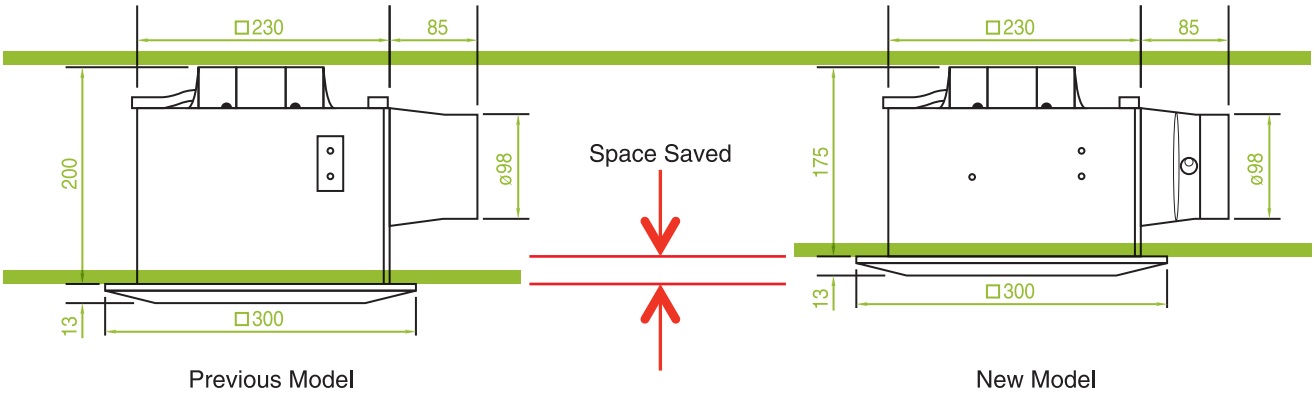
C Noise Minimization

The shape of double orifice is re-designed to minimize the transmission of noise to exterior while product height is reduced also

Previous Model | New Model

D Product Height Reduction

Compact body design allows easy installation at narrow ceiling space



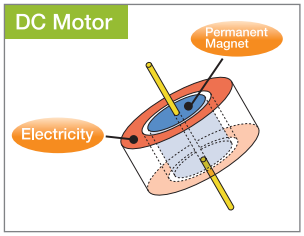
Previous Model | New Model

Feature of DC Motor Series

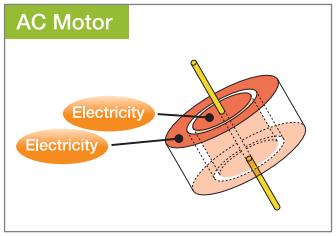
Energy Saving - DC Motor

Consumption Reduction

These fans are adopted with Direct Current (DC) Motor to reduce power consumption in order to save energy.
Temperature rise of DC motor is comparatively lower than AC motor that lifetime of DC motor is longer than AC motor accordingly.



Stator uses electrical magnet while rotor uses permanent magnet



Both stator & rotor uses electrical magnet

	24JRB	24CHF
Motor Type	**DC**	**AC**
Static Pressure [Pa]	51	51
Air Volume [CMH]	160	129
Consumption at 51 pa [W]	15	24
Energy Efficiency [CMH/Watt]	10.6	5.4

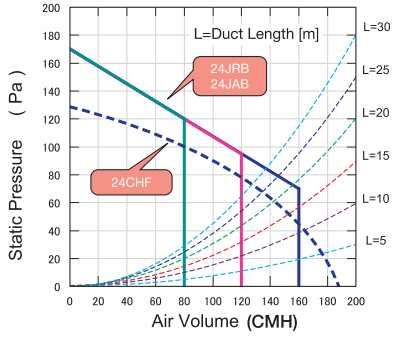
Save up 37%

Note : Values in table is at 220V 60Hz.

Air Flow - Constant Output

Intelligent Technology

These fans are equipped an intelligent technology, by which the fans perform at a constant airflow regardless of elbows and factors that affect the performance. Basically, when the fan faces static pressure, its speed is automatically increased to ensure the desired air flow and allows the fan to perform as rated.



Note : Values at 220V 60Hz. Data for reference only.

Delay Timer - 15 minutes

Convenience

These fans are equipped with a Delay Timer which is preset at 15 minutes. As the fan is switched off or without any motion detected after the preset time, it will return to the preset low air volume level.

Air Volume - 4 Variables

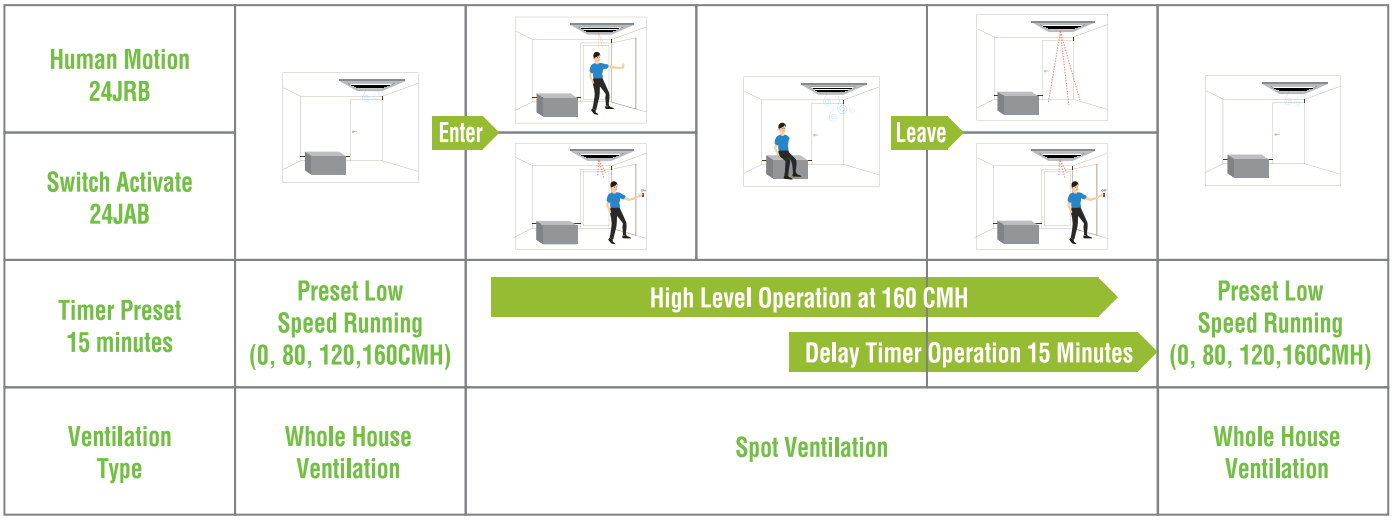
High Flexibility

These fans are equipped with Variable Speed Control that allows the fans to run at a preset lower level of 0, 80, 120, 160CMH, then be elevated to a maximum of 160 CMH when the switch is turned on, or activated via the Motion Sensor.

Note: CMH = m3/h (cubic meter per hour)

Air Volume Adjustment Switch

Range [CMH] - 0 / 80 / 120 / 160



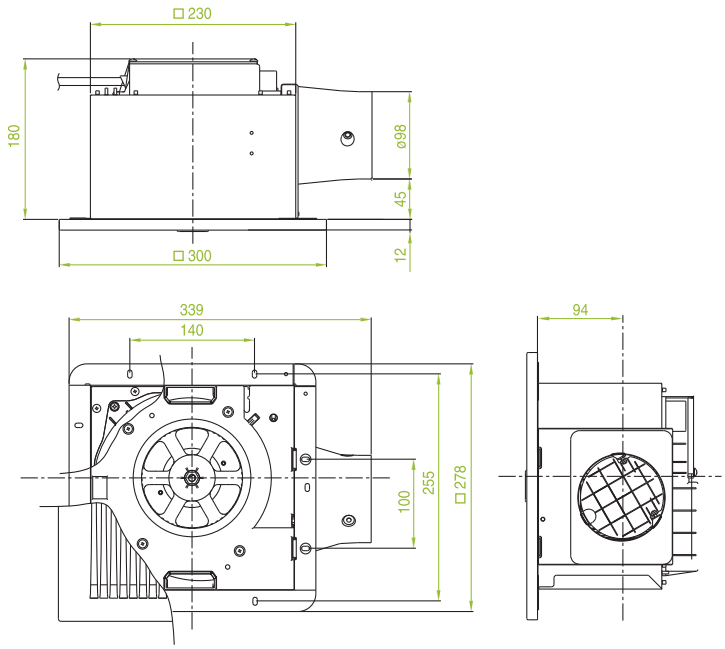
DC Motor Series

24JRB

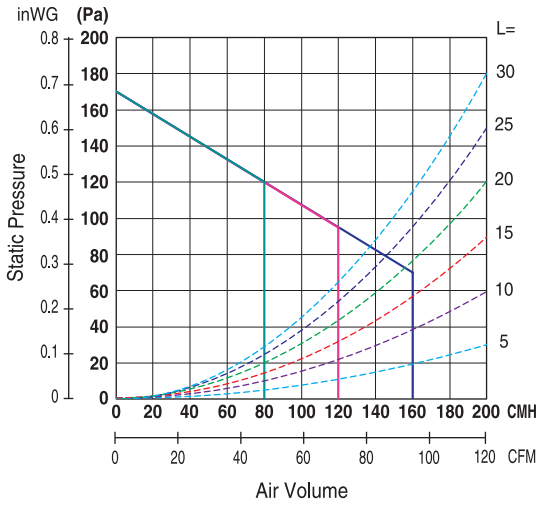
- Direct current (DC) motor
- Constant airflow
- Variable air volume
- 15-minute delay timer
- Auto operation by motion sensor
- Resonance-Noise-Absorption Stucture
- Taper blade sirocco fan
- Pre-installed power cord

  * Subject to different markets

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
24JRB	220-240	50/60	160	94	160	94	8	8	742	742	31	31
					120	71		5.2		556		26
					80	47		3.6		441		20

Weight [kg]	2.9	Installation Space [mm]	240 x 240	Duct Size [mm]	ø100

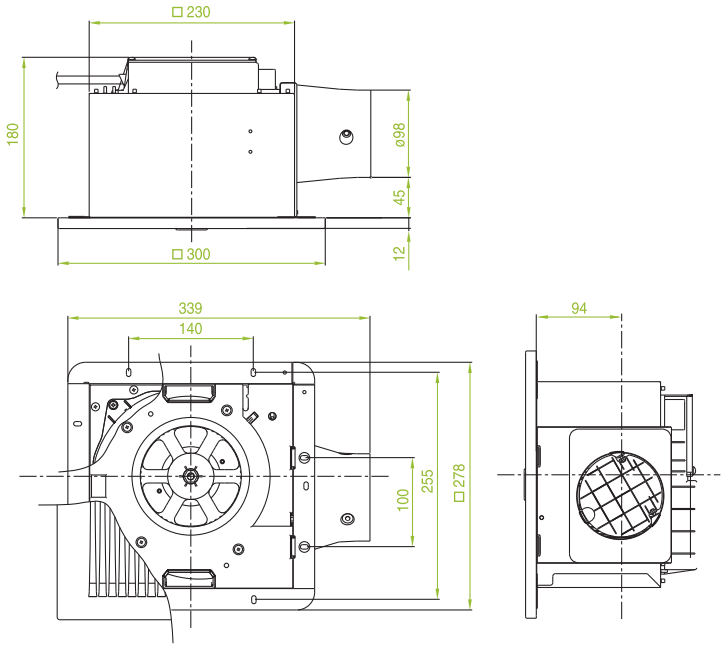
Note : Values in Consumption and Noise are Specified ay Static Pressure of 0 Pa
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

DC Motor Series

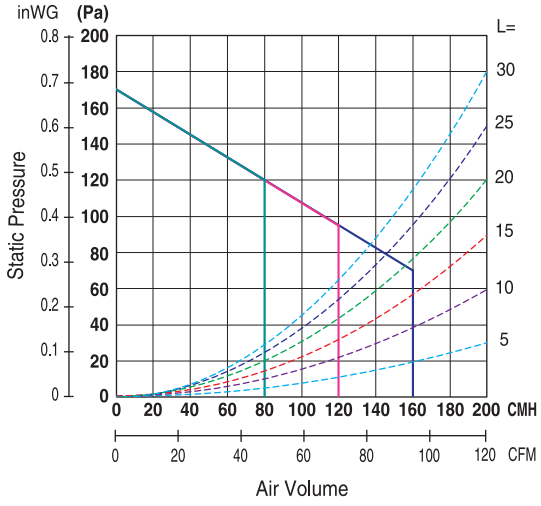
24JAB

- Direct current (DC) motor
- Constant airflow
- Variable air volume
- 15-minute delay timer
- Resonance-Noise-Absorption Stucture
- Taper blade sirocco fan
- Pre-installed power cord
  * Subject to different markets

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
24JAB	220-240	50/60	160	94	160	94	8	8	742	742	31	31
					120	71		5.2		556		26
					80	47		3.6		441		20

Weight [kg]	2.9	Installation Space [mm]	240 x 240	Duct Size [mm]	ø100

Note : Values in Consumption and Noise are Specified ay Static Pressure of 0 Pa
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
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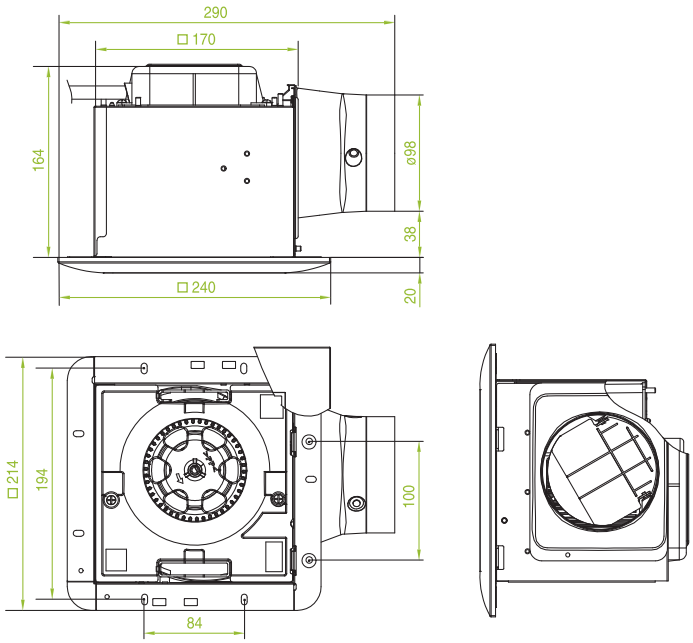
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Super Quiet Series

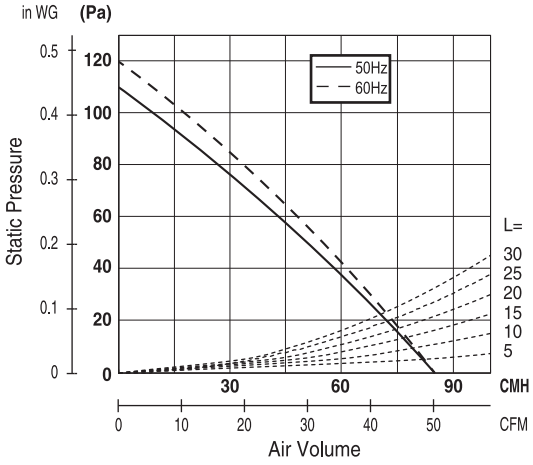
17CUG

- Super low noise design
- Long life ball bearing motor
- Taper blade sirocco fan
- Resonance-Noise-Absorption Stucture
- Reverse flow prevention shutter
- Pre-installed power cord

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume		Consumption [W]	RPM [min^{-1}]	Noise [dB(A)]
	[V]	[Hz]	[CMH]	[CFM]			
17CUG	110	60	85	50	9.5	760	27
	220	50	85	50	8.5	750	23.5
		60	85	50	10	770	26
	230	50	85	50	9.5	775	26
	240	50	90	53	10.5	800	27

Weight [kg]	1.9	Installation Space [mm]	177 x 177	Duct Size [mm]	ø100

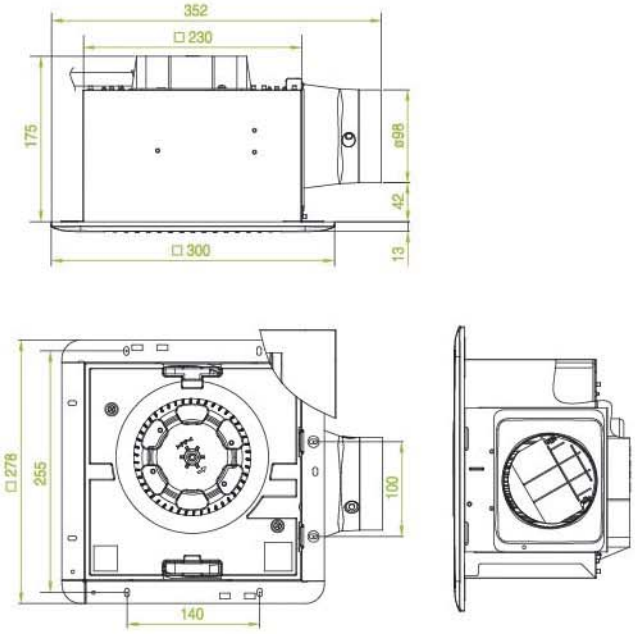
Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Super Quiet Series

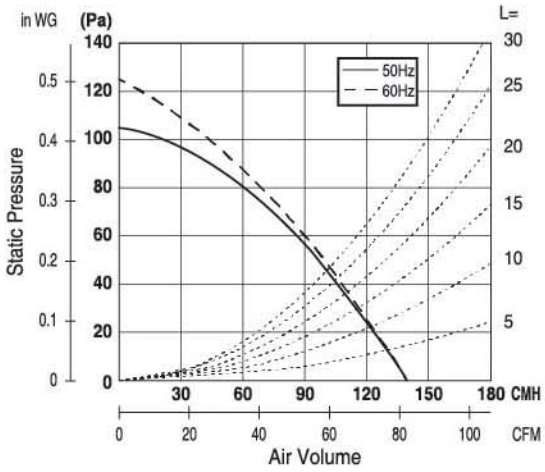
24CUG

- Super low noise design
- Long life ball bearing motor
- Taper blade sirocco fan
- Resonance-Noise-Absorption Stucture
- Reverse flow prevention shutter
- Pre-installed power cord

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume		Consumption [W]	RPM [min^{-1}]	Noise [dB(A)]
	[V]	[Hz]	[CMH]	[CFM]			
24CUG	110	60	140	82	13.5	610	28
	220	50	140	82	11	615	26
		60	140	82	15.5	615	28
	230	50	150	88	12.5	615	29
	240	50	160	94	14	660	30

Weight [kg]	2.8	Installation Space [mm]	240 x 240	Duct Size [mm]	ø100

Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
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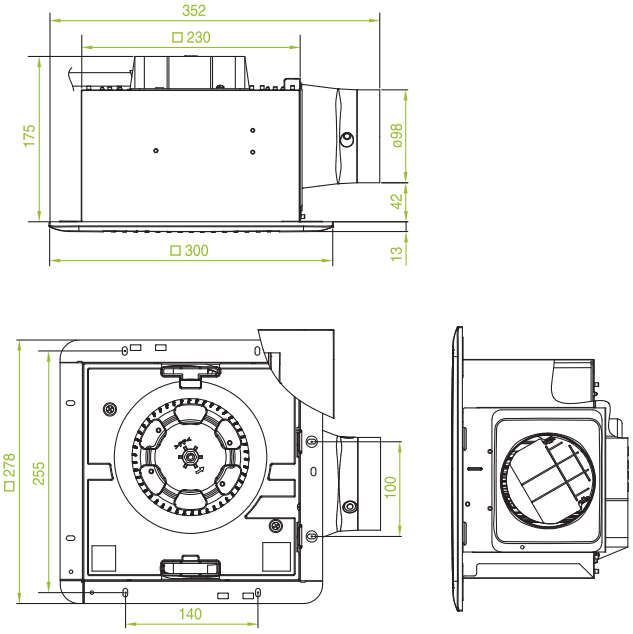
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Super Quiet Series

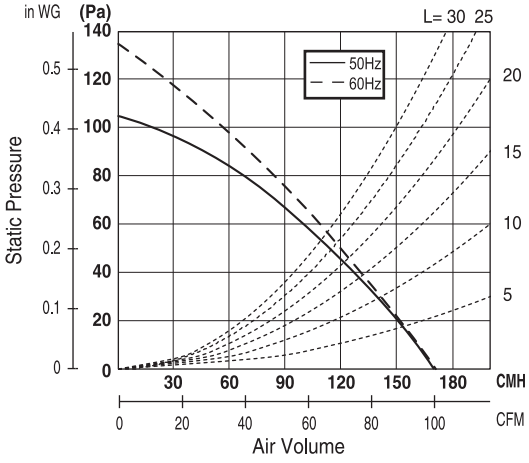
24CDG

- Super low noise design
- Long life ball bearing motor
- Taper blade sirocco fan
- Resonance-Noise-Absorption Stucture
- Reverse flow prevention shutter
- Pre-installed power cord

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume		Consumption [W]	RPM [min^{-1}]	Noise [dB(A)]
	[V]	[Hz]	[CMH]	[CFM]			
24CDG	220	50	170	100	14.5	700	29.5
		60	170	100	16.5	700	31.5
	230	50	180	106	16	700	32.5
	240	50	190	112	17.5	740	32.5

Weight [kg]	2.8	Installation Space [mm]	240 x 240	Duct Size [mm]	ø100

Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
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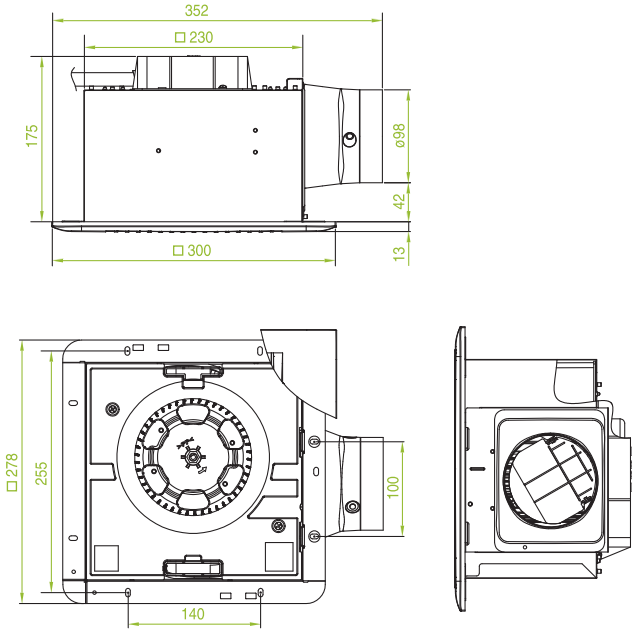
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Super Quiet Series

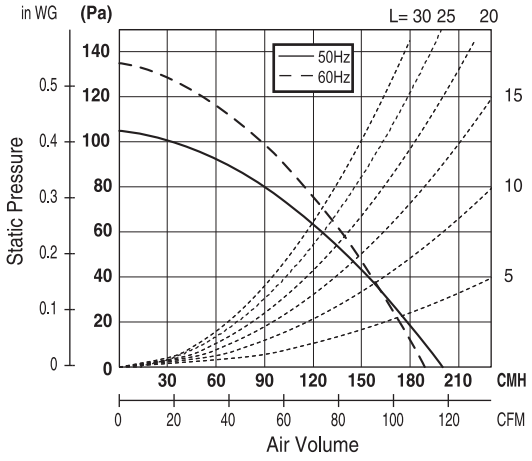
24CHG

- Super low noise design
- Long life ball bearing motor
- Taper blade sirocco fan
- Resonance-Noise-Absorption Stucture
- Reverse flow prevention shutter
- Pre-installed power cord

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume		Consumption [W]	RPM [min^{-1}]	Noise [dB(A)]
	[V]	[Hz]	[CMH]	[CFM]			
24CHG	220	50	200	118	18	760	33.5
		60	190	112	22	730	33.5
	230	50	210	124	20	800	35
	240	50	210	124	22	850	36

Weight [kg]	2.8	Installation Space [mm]	240 x 240	Duct Size [mm]	ø100

Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
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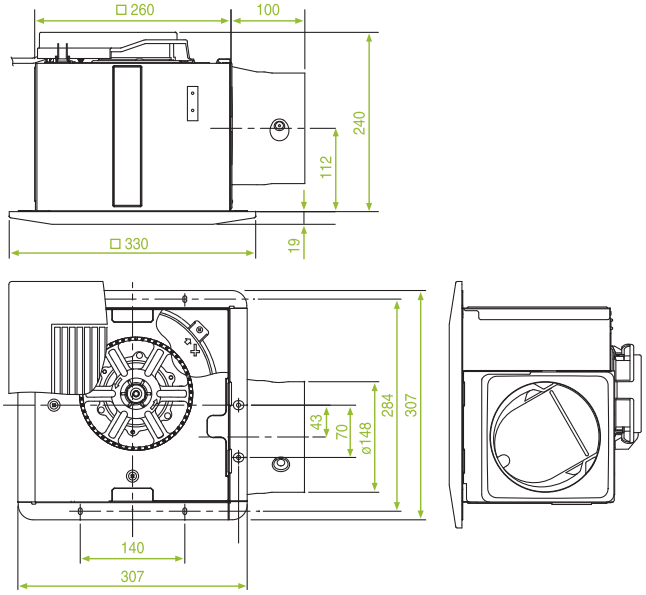
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Super Quiet Series

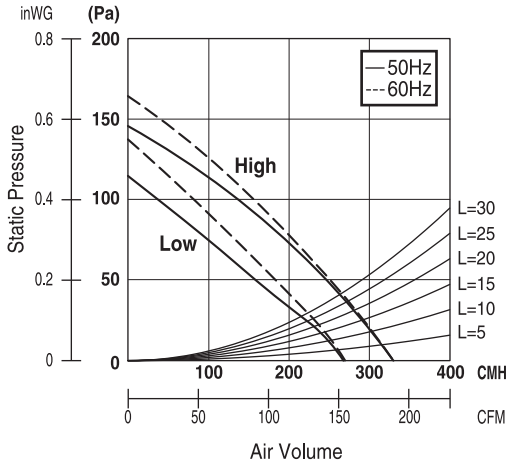
27CHH

- Super low noise design
- Long life ball bearing motor
- Taper blade sirocco fan
- Double chamber design
- Pre-installed power cord
- 2 speed selectable

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
27CHH	110	50	305	180	215	127	25	19	520	405	33	27
		60	310	182	225	132	29	21	520	410	33.5	28
	127	50	350	206	255	150	33	25	590	455	36	30
		60	360	212	265	156	38.5	28	585	465	36.5	30.5
	220	50	330	194	260	153	28	23	570	480	34	30
		60	330	194	270	159	33	26	570	490	34	31
	230	60	345	203	285	168	36	29	590	510	35.5	32
	240	50	360	212	290	171	34	27.5	610	520	36.5	32

Weight [kg]	4.4	Installation Space [mm]	270 x 270	Duct Size [mm]	ø150

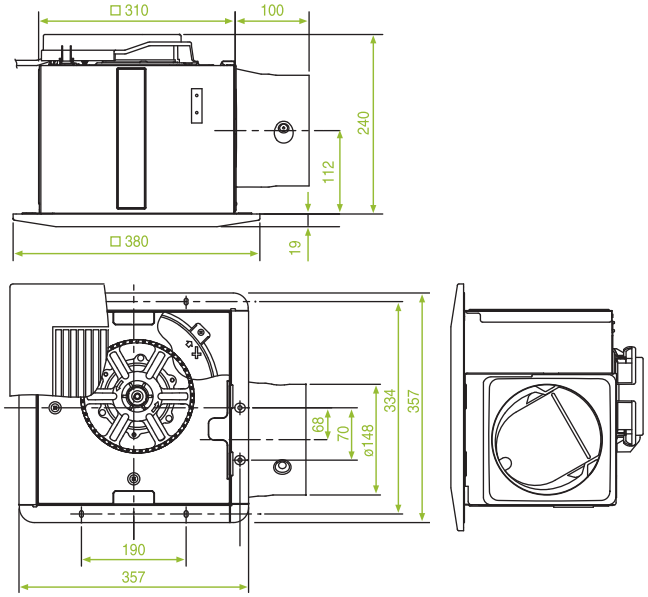
Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Super Quiet Series

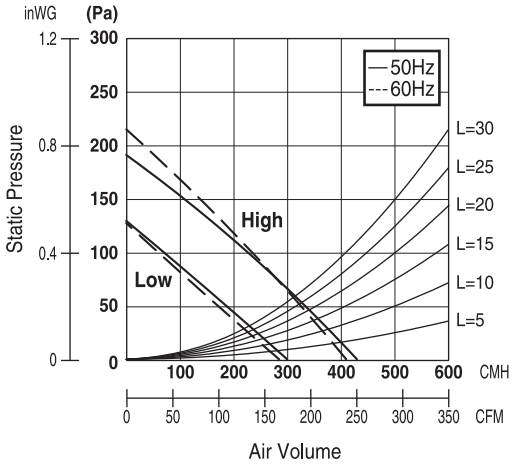
32CDH

- Super low noise design
- Long life ball bearing motor
- Taper blade sirocco fan
- Double chamber design
- Pre-installed power cord
- 2 speed selectable

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
32CDH	110	50	370	218	265	156	35	28	540	440	33	26.5
		60	365	215	255	150	37	28	540	425	33	26
	127	50	440	259	320	188	45	36	620	480	37.5	29
		60	435	256	310	182	49	37	620	480	36.5	28.5
	220	50	430	253	300	177	42	32	590	460	36	28
		60	410	241	285	168	48	33	580	450	35.5	27.5
	230	60	430	253	305	180	52	32	610	460	36.5	28.5
	240	50	470	277	330	194	50	38	650	490	38.5	30

Weight [kg]	5.2	Installation Space [mm]	320 x 320	Duct Size [mm]	ø150

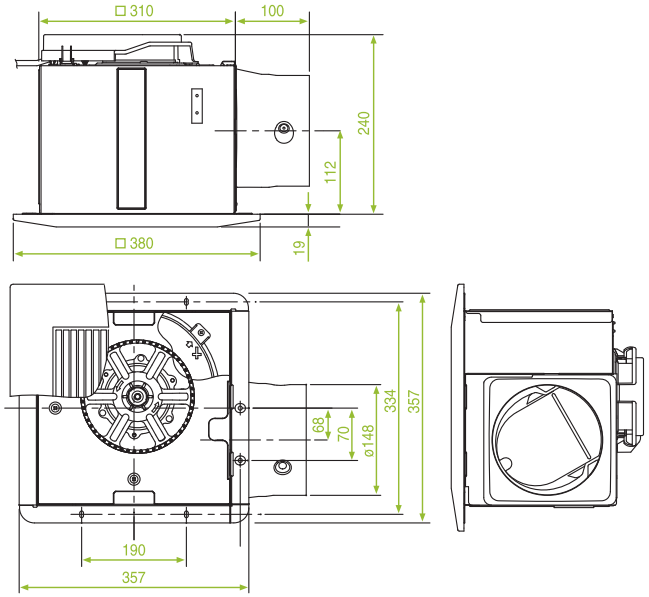
Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Super Quiet Series

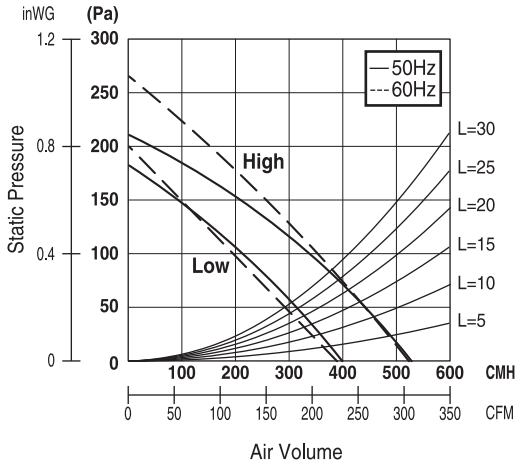
32CHH

- Super low noise design
- Long life ball bearing motor
- Taper blade sirocco fan
- Double chamber design
- Pre-installed power cord
- 2 speed selectable

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
32CHH	220	50	530	312	400	235	55	45	710	570	41	34
		60	525	309	390	230	61	47	695	540	40.5	33
	230	60	545	321	410	241	68	51	725	570	41.5	34.5
	240	50	580	341	450	265	64	53	770	615	43	37

Weight [kg]	5.6	Installation Space [mm]	320 x 320	Duct Size [mm]	ø150

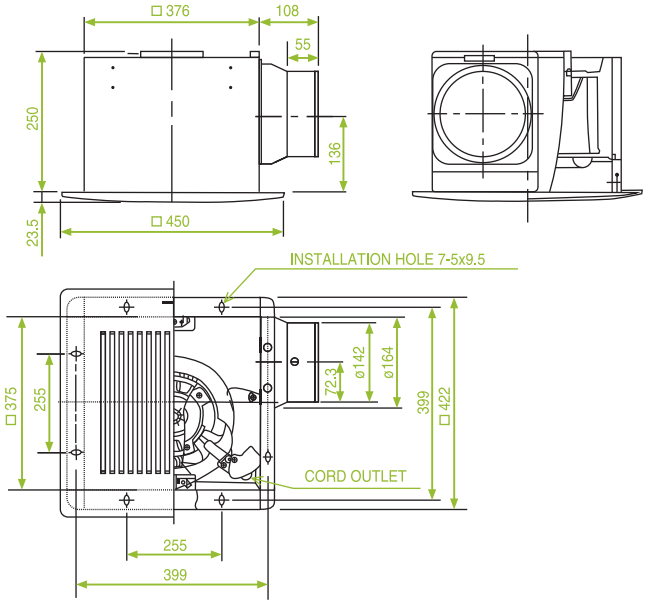
Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Standard Series

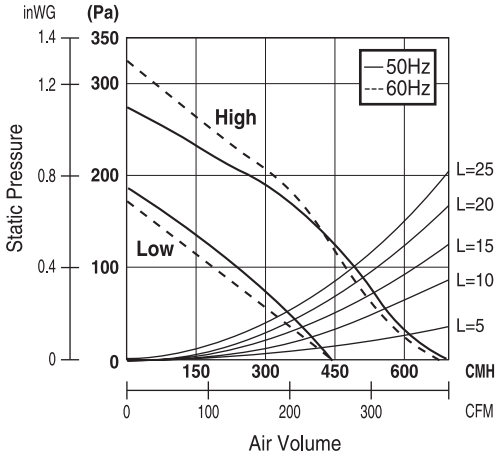
38CDG

- High-Low speed selectable
- Condenser motor with thermal cut-off
- Well lubricated bearing for long life operation
- High performance sirocco fan

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
38CDG	110	50	590	347	390	230	75	53	590	430	42.5	34
		60	590	347	370	218	86	53	590	419	42.5	33.5
	127	50	690	406	475	280	98.5	70	681	483	46	36.5
		60	670	394	450	265	113	71	676	466	46	35.5
	220	50	640	377	430	253	90	66	645	456	44	35
		60	630	371	410	241	98	66.4	628	439	43.5	34.5
	230	50	675	397	440	259	96	72	670	480	46	36
		60	665	391	430	253	107	72.6	657	458	45	35.5
	240	50	700	412	470	277	104	78	699	495	47	37

Weight [kg]	9.7	Installation Space [mm]	385 x 385	Duct Size [mm]	ø150

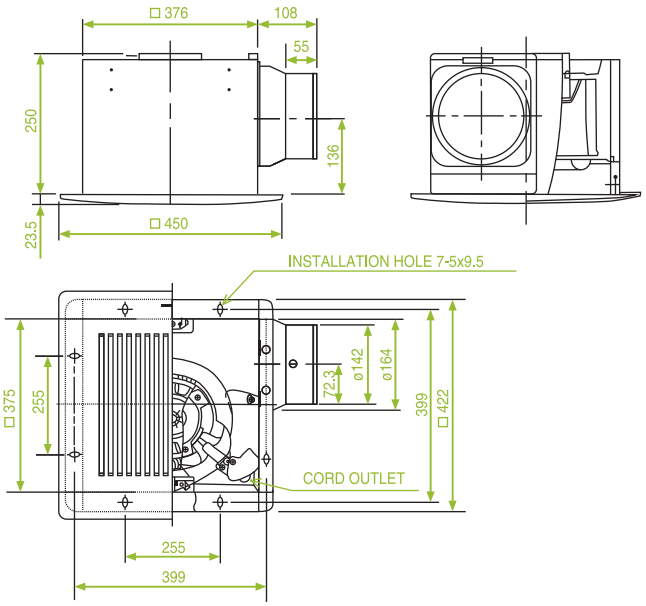
Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

Standard Series

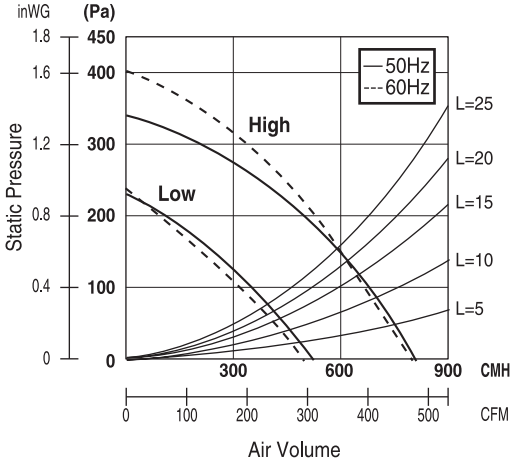
38CHG

- High-Low speed selectable
- Condenser motor with thermal cut-off
- Well lubricated bearing for long life operation
- High performance sirocco fan

Dimension (Unit : mm)



Performance Data (220V 50Hz / 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
38CHG	110	50	725	427	460	271	104	74	712	488	47.5	36.5
		60	710	418	430	253	117	74	696	463	47	35.5
	127	50	825	486	540	318	134.5	97	804	562	50	40
		60	825	486	510	300	155.5	97	804	527	50	39
	220	50	800	471	525	309	122	89	790	540	49.5	39.5
		60	790	465	500	294	138	90	760	509	49	39
	230	50	800	471	470	277	122	84	775	485	49	37
		60	775	456	440	259	138	83	756	461	48.5	36
	240	50	835	491	490	288	132	90	807	504	50	38

Weight [kg]	10.4	Installation Space [mm]	385 x 385	Duct Size [mm]	ø150

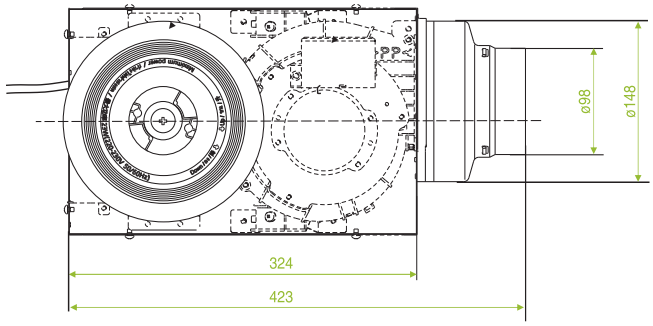
Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

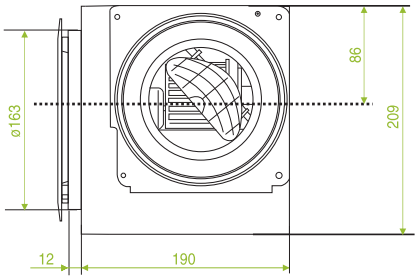
15CLA

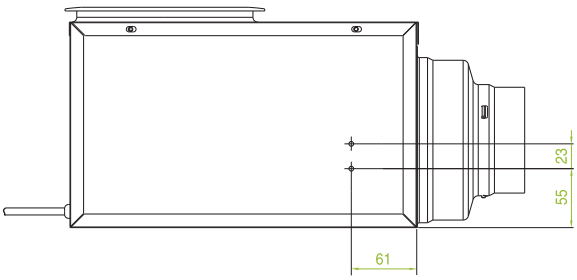
- Dual function of ventilation and lighting with 1 unit
- 165mm aperture for lighting
- Adjustable lamp positioning for glare reduction
- Body hidden above ceiling for neat appearance of interior
- Effective ventilation airflow with 130m³/h
- Able to connect duct with 100mm or 150mm diameter

  * Lamp bulb not supplied

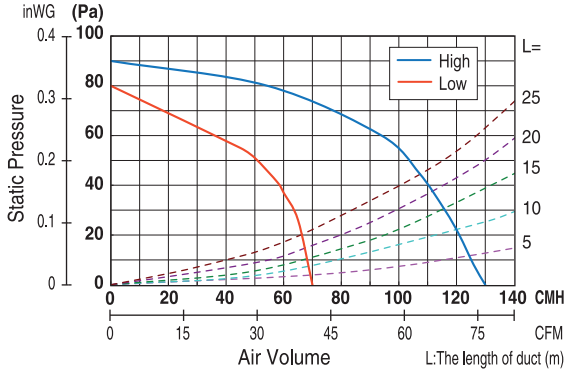
Dimension (Unit : mm)







Performance Data (230V 60Hz)



Specification

Model No.	Voltage		Air Volume				Consumption [W]		RPM [min⁻¹]		Noise [dB(A)]	
			Hi		Lo							
	[V]	[Hz]	[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo
15CLA	230	60	130	77	70	41	17	12	1,135	664	39	27

Weight [kg]	3.7	Installation Space [mm]	/	Duct Size [mm]	ø100 / ø150

Note : RPM data is for reference only, values may vary subject to different conditions

Lamp Type: Fluorescent or LED Lamp (E27) / Max. Wattage: 23W

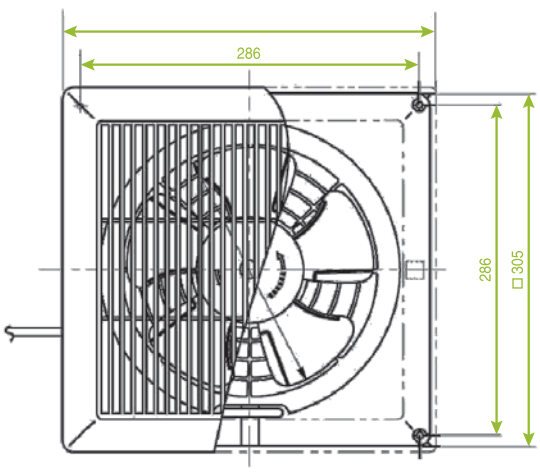
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

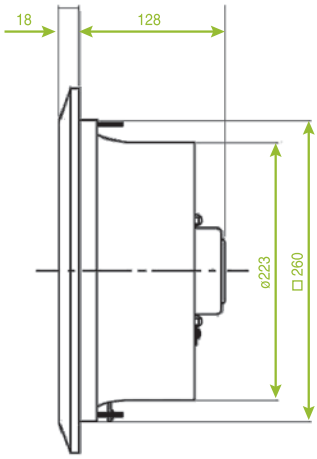
Propeller Series

20CQT1

- Non-duct Type
- High air volume
- Easy installation
- Designed for a long service life with continuous daily operation
- Motor equipped with thermal fuse

Dimension (Unit : mm)





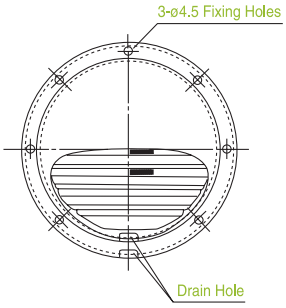
Specification

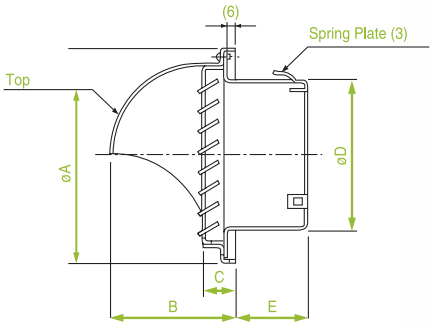
Model No.	Voltage		Air Volume		Consumption [W]	RPM [min^{-1}]	Noise [dB(A)]
	[V]	[Hz]	[CMH]	[CFM]			
20CQT1	110	50	438	258	16.3	1,155	40.5
		60	444	261	18.7	1,181	40.8
	220	50	438	258	22.6	1,153	40.5
		60	436	257	23.9	1,245	41.4
	230	50	444	261	23.9	1,186	40.8
		60	468	275	25.5	1,297	42.5
	240	50	450	265	25.7	1,207	41.5

Weight [kg]	1.8	Installation Space [mm]	270 x 270	Duct Size [mm]	/

Note : RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

MGX100K / MGX150K (Pipe Hood With Net)
MCX100K / MCX150K (Pipe Hood Without Net)



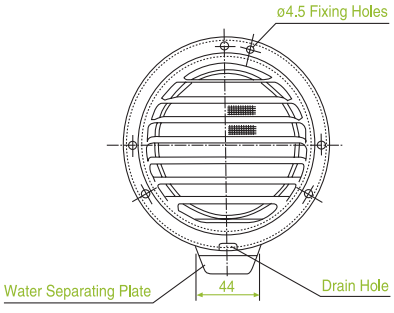


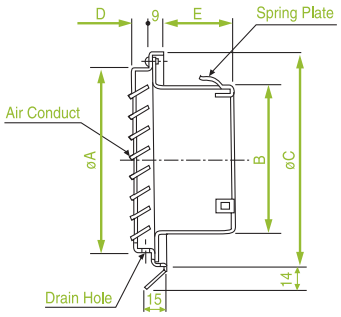
With Net (MGX)

Without Net (MCX)

Dimension (mm)							
Model No.	A	B	C	D	E	Dimension of Net [mm]	Diameter of Applicable Pipe [mm]
MGX100K	141	79	20	97	48	2.5 x 2.5	ø 100
MGX150K	190	106	23	147	53	2.5 x 2.5	ø 150
MCX100K	141	79	20	97	48	-	ø 100
MCX150K	190	106	23	147	53	-	ø 150

VGX100K / VGX150K (Vent Cap With Net)
VCX100K / VCX150K (Vent Cap Without Net)





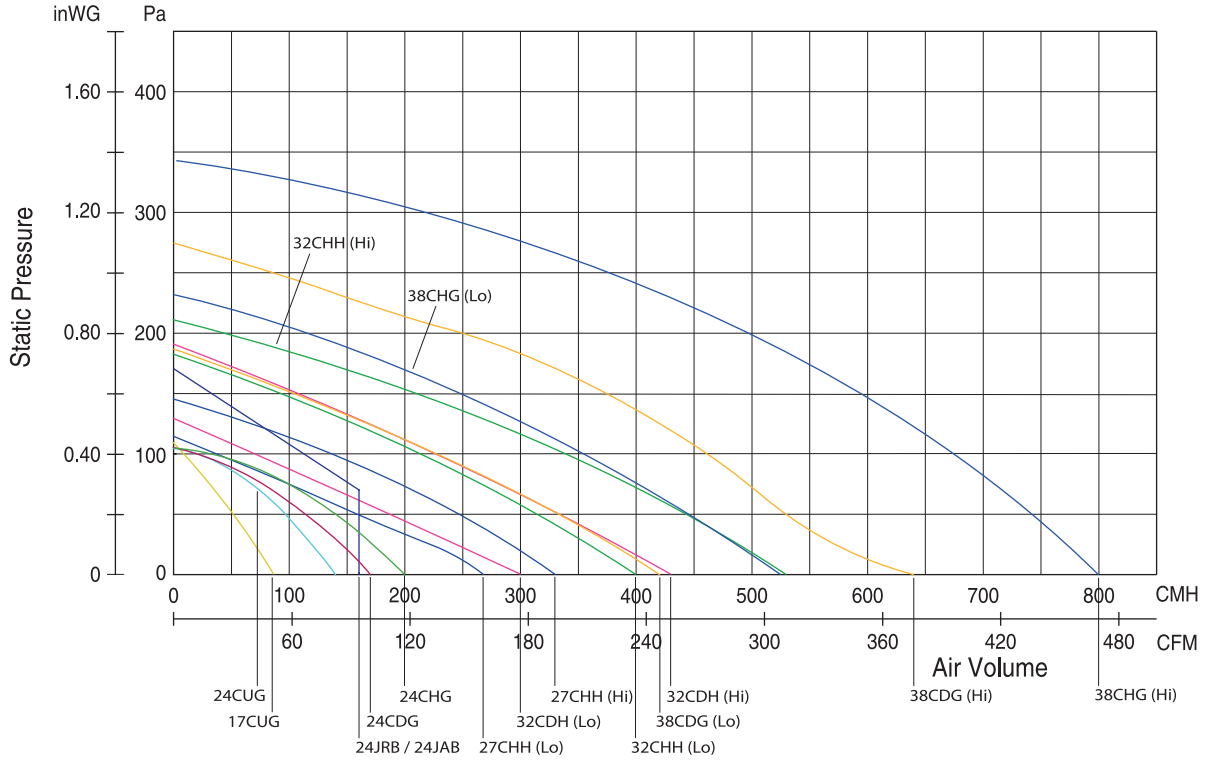
With Net (VGX)

Without Net (VCX)

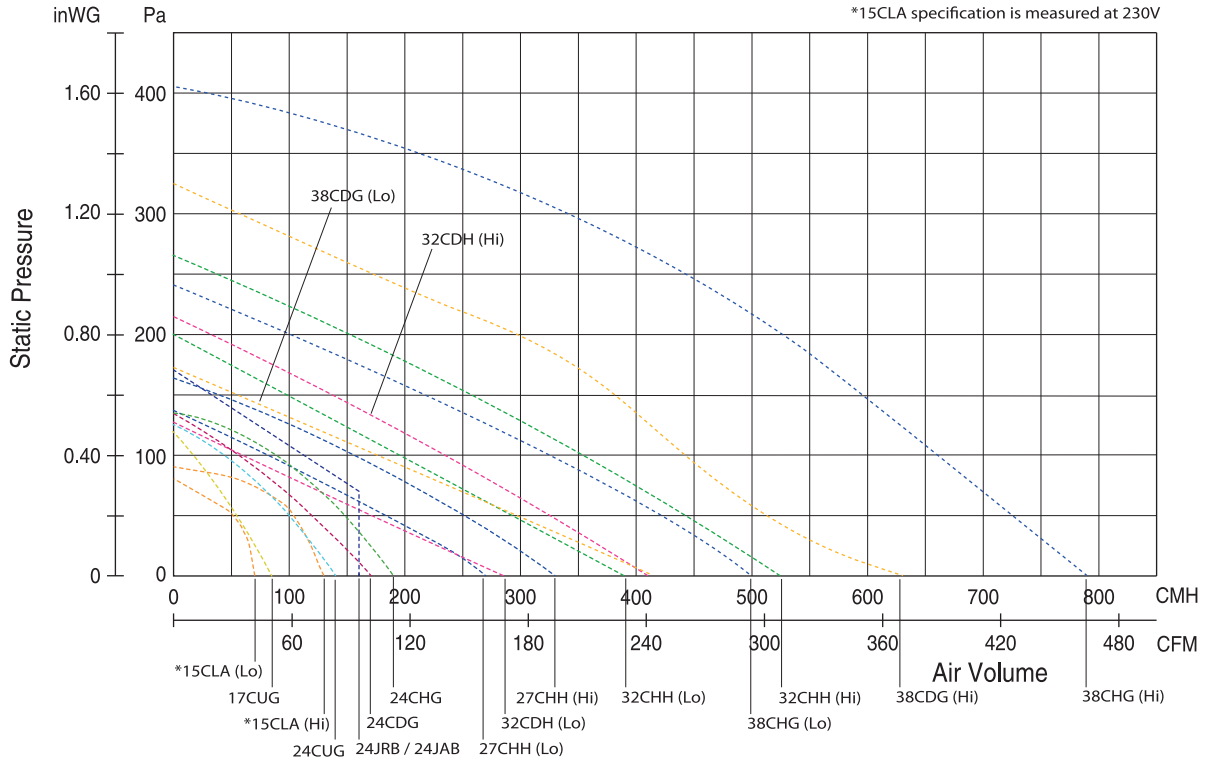
Dimension (mm)							
Model No.	A	B	C	D	E	Dimension of Net [mm]	Diameter of Applicable Pipe [mm]
VGX100K	120	97	145	13	47	2.5 x 2.5	ø 100
VGX150K	169	147	195	18	52	2.5 x 2.5	ø 150
VCX100K	120	97	145	13	47	-	ø 100
VCX150K	169	147	195	18	52	-	ø 150

Selection Chart

220V 50Hz



220V 60Hz

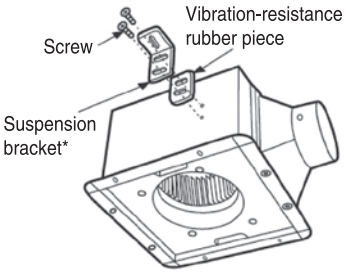


Installation Method

Applicable Models : 17CUG / 24CUG / 24CDG / 24CHG / 27CHH / 32CDH / 32CHH

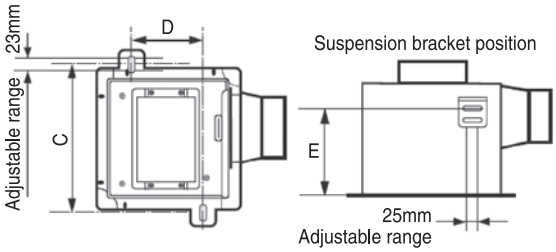
1A Installation with anchor bolts

1. Secure the 1 set of suspension bracket (optional accessory) with screws.



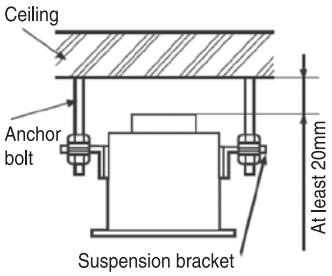
The screw length should not exceed 8mm.

* 2 sets of accessories are required for 32CDH and 32CHH



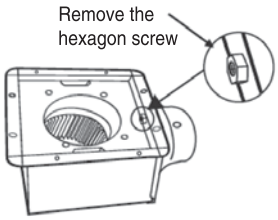
Model No.	C	D	E
17CUG	206mm	89mm	103mm
24CUG / 24CDG / 24CHG	266mm	131mm	112mm
27CHH	296mm	160mm	158.5mm
32CDH / 32CHH	346mm	200mm	158.5mm

2. Mount the fan body enclosure on the anchor bolts (M8-M10, not supplied)

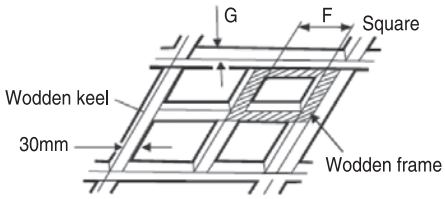


1B Installation with wooden keel

1. First remove the hexagon screw attaching the adaptor assembly to the fan body.



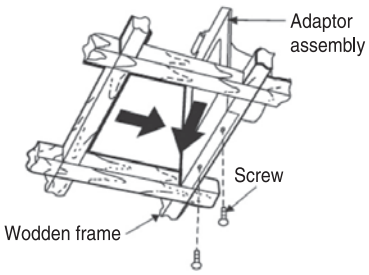
2. Build a wooden frame horizontally from the keel. Note that the distance between the top of the fan body and the ceiling should be at least 20mm.



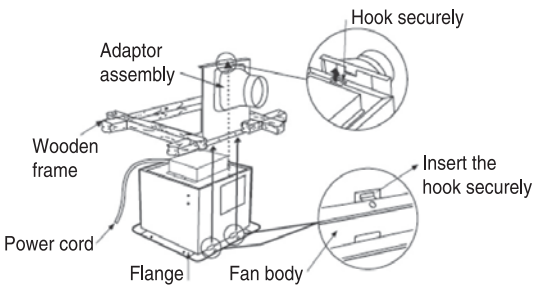
Model No.	F	G
17CUG	177mm	25-30mm
24CUG / 24CDG / 24CHG	240mm	25-30mm
27CHH	270mm	25-30mm
32CDH / 32CHH	320mm	25-30mm

* Ceiling joist must be subject to static load more than 5 times of the product weight.

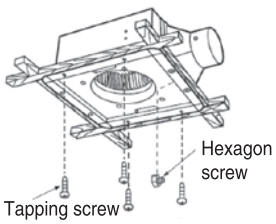
3. Attach the adaptor assembly to the wooden frame as shown in the figure.



4. Insert the fan body in the wooden frame, and connect it to the adaptor assembly.



5. Firmly aecure the fan body with four tapping screw and a hexagon screw.

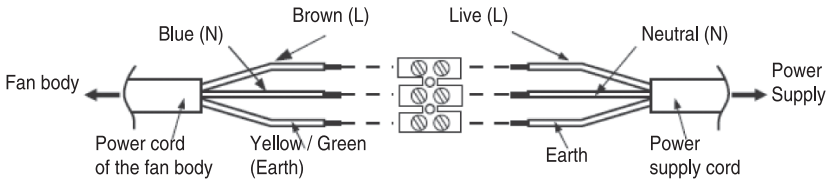


2 Power cord connection

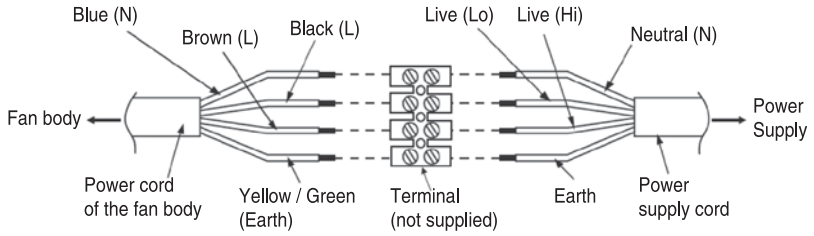
Connect the power cord to the power supply line according to the wiring diagram and the local electrical wiring rules of fixed wiring.

Make sure all connections are fastened firmly after wiring is finished.

For 17CUG / 24CUG / 24CDG and 24CHG

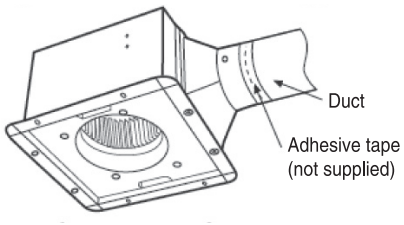


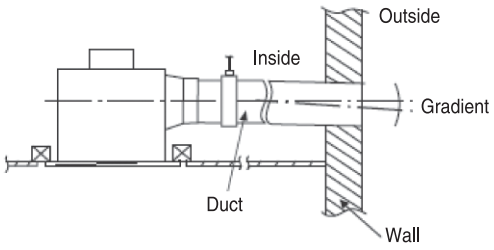
For 27CHH / 32CDH and 32CHH



3 Duct connection and ceiling plate installation

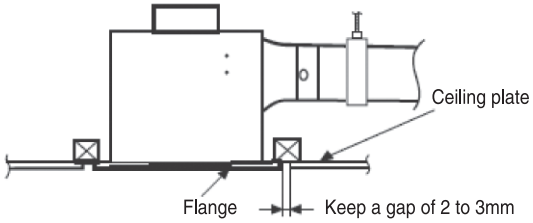
1. Insert the duct into the adaptor assembly, and tighten it with adhesive tape (not supplied).
   (Suspend the duct from the ceiling to prevent any external force onto the fan body).





Slope the duct downward and guide it through the wall to the outside. Be sure to prevent rainwater from falling in the duct from its outlet. (The minimum size of the hole opening on the wall is : ø116mm for 17/24 models, ø168mm for 27/32 model).

2. Install the ceiling plate. Note that the gap between the flange and the ceiling plate should be 2 to 3mm.

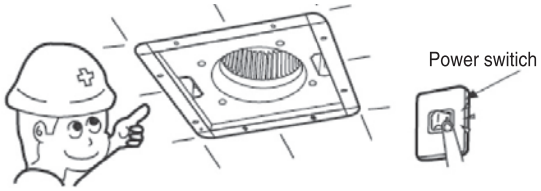


3. Install the pipe hood or vent cap (optional accessories) on the outer wall.

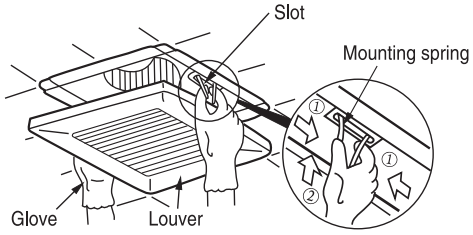
Model No.	Pipe Hood	Vent Cap
17CUG / 24CUG / 24CDG / 24CHG	MCX100K	VCX100K
27CHH / 32CDH / 32CHH	MCX150K	VCX150K

4 Test run and louver installation

1. When the power is turned on, check for malfunctions as follow:
   Does the fan rotate correctly?
   Does the fan rotate anti-clockwise?
   Is there any abnomal sound or vibration?



2. Insert the mounting spring into the slots and mount the louver to the fan body. (Please wear gloves during installation).



Comparison Table (220V)

Model No.	[Hz]	Air Volume				Consumption [W]		RPM [min^{-1}]		Noise [dB(A)]		Weight [kg]	Duct Size [mm]
		Hi		Lo									
		[CMH]	[CFM]	[CMH]	[CFM]	Hi	Lo	Hi	Lo	Hi	Lo		
24JRB	50 / 60	160	94	160	94	8	8	742	742	31	31	2.9	ø100
				120	71		5.2		556		26		
				80	47		3.6		441		20		
24JAB	50 / 60	160	94	160	94	8	8	742	742	31	31	2.9	ø100
				120	71		5.2		556		26		
				80	47		3.6		441		20		
17CUG	50	85	50	-	-	8.5	-	750	-	23.5	-	1.9	ø100
	60			-	-	10	-	770	-	26	-		
24CUG	50	140	82	-	-	11	-	615	-	26	-	2.8	ø100
	60			-	-	15.5	-		-	28	-		
24CDG	50	170	100	-	-	14.5	-	700	-	29.5	-	2.8	ø100
	60			-	-	16.5	-		-	31.5	-		
24CHG	50	200	118	-	-	18	-	760	-	33.5	-	2.8	ø100
	60	190	112	-	-	22	-	730	-		-		
27CHH	50	330	194	260	153	28	23	570	480	34	30	4.4	ø150
	60			270	159	33	26		490		31		
32CDH	50	430	253	300	177	42	32	590	460	36	28	5.2	ø150
	60	410	241	285	168	48	33	580	450	35.5	27.5		
32CHH	50	530	312	400	235	55	45	710	570	41	34	5.6	ø150
	60	525	309	390	230	61	47	695	540	40.5	33		
38CDG	50	640	377	430	253	90	66	645	456	44	35	9.7	ø150
	60	630	371	410	241	98	66.4	628	439	43.5	34.5		
38CHG	50	800	471	525	309	122	89	790	540	49.5	39.5	10.4	ø150
	60	790	465	500	294	138	90	760	509	49	39		
15CLA	60	130	77	70	41	17	12	1,135	664	39	27	3.7	ø100 / ø150
20CQT1	50	438	258	-	-	22.6	-	1,153	-	40.5	-	1.8	-
	60	436	257	-	-	23.9	-	1,245	-	41.4	-		

Note: 15CLA specification is measured at 230V
RPM data is for reference only, values may vary subject to different conditions
Test Condition
- Air volume, electric characteristic and noise are specified at the static pressure of 0 Pa
- The values of noise level is A weighted average sound pressure level, the mean value are measured by our company, within 3+ to 7- dB tolerance
- The values of noise level are measured at 1 m apart from the side of fan body when ducts are connected on both inlet and outlet side
- The values of air volume are the mid-points of results measured by our company, within ±10% tolerance

SINCE 1909
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