

UCAN[®]

Humidifiers



General Catalogue

Innovative Humidifier

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REGISTERED ORGANIZATION
No.1524-ISO9001
No.E2094-ISO14001



MS
CM002

UCAN humidifier - made in JAPAN

Made in Japan.

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PTC Steam Humidifier
UC-TJ1000C



PTC Steam Humidifier
Humidasduo HD-M



PTC Steam Humidifier
UP-X Series



PTC Steam Humidifier
UP-XCD Series



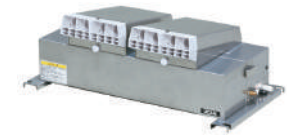
Resistive Steam Humidifier
MAGY UC-MGT Series



Evaporative Humidifier
UC-EM1 / EU1



Evaporative Humidifier
DELTA X 600S



Ultrasonic Humidifier
FT-F UVSV Series



Ultrasonic Humidifier
FT-40FSC1UVSV



Ultrasonic Humidifier
FT-N UVSV Series



Ultrasonic Humidifier
FT-S UVSV Series



Ultrasonic Humidifier
KIRIPET FT-M43



Ultrasonic Humidifier
FT-P / PD UVSV Series



Ultrasonic Humidifier
FT-W41 / W41S UVSV

Proportional Control System

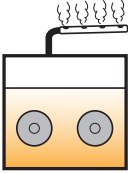
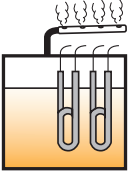
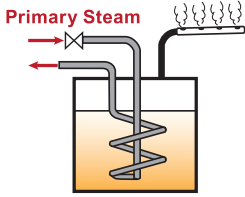

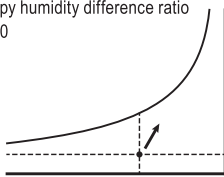
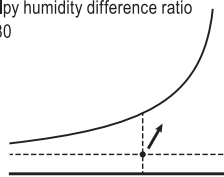
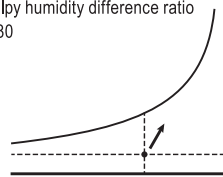
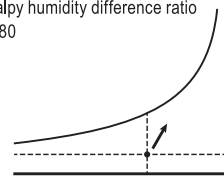


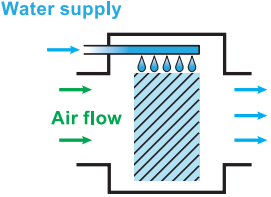
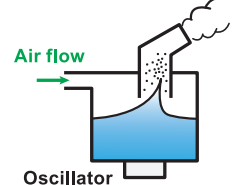
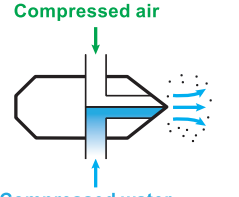
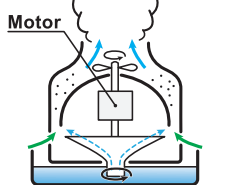
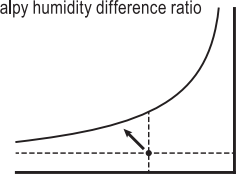
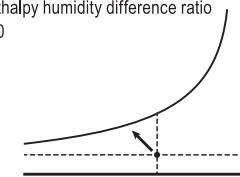
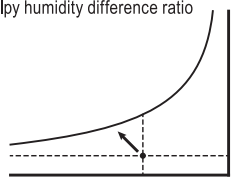
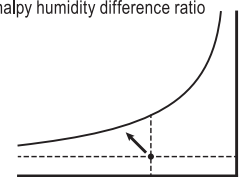
Phase Control System
UCR unit



Vacuum-Suction Drainage System for A/C
Drainsweeper UC-PL Series

Comparative Table of Various Kinds of Humidifiers

System of Humidification	Steam Humidification			
	PTC immersion heater-type	Resistive type	Indirect steam type (steam on steam)	Electrode type
Method of humidification	With PTC immersion heaters possessing self-regulating capability immersed in water in a tank, the water is heated and is caused to evaporate.	With an electric heater immersed in a water tank or cylinder, water is heated and vaporized.	Primary steam from a boiler, etc.is led to a heat exchanger to heat water in a tank indirectly and to cause generation of secondary steam.	With a plural number of electrode poles immersed in a water tank or cylinder, water is heated and vaporized.
Construction				
Characteristics and condition of particulates	Saturated vapor	Saturated vapor	Saturated vapor	Saturated vapor
Characteristics of variations on the psychometric chart				
Changing condition of the air	Isothermal humidification (Actually a slight rise)	Isothermal humidification (Actually a slight rise)	Isothermal humidification (Actually a slight rise)	Isothermal humidification (Actually a slight rise)
Humidification output kg/h	0.3~80 kg/h	1~62.5 kg/h	1~300.0 kg/h	1~78 kg/h
Humidification efficiency %	100 %	100 %	100 %	100 %
Ratio of effective use of water supply	80...90 %	80...90 %	80...90 %	80...90 %
Power consumption W/kg	750~1000 W/kg	≒750 W/kg	Low power consumption	≒750 W/kg
Control Characteristics	ON-OFF	○	○	○
	Proportional	○	○	○
	Proportional responsiveness	○	○	△
Quality of supply water	Pure water. Some models can use soft water.	Pure water & Soft water	Equivalent to city main water, pure and soft water	Equivalent to city main water (Soft water & pure water not usable)
Cleanliness of humidification	Clean (Sterile and odorless)	Clean (Sterile and odorless)	Clean (Sterile and odorless)	Clean (Sterile and odorless)
Main replacement parts	PTC immersion heater (Approx.7000~10000 Hr)	Sheathed heater (Approx.7000 Hr)	Water tank, Heat exchanger	Steam generation cylinder (Approx.1200~1800Hr)
Maintenance in normal / continuous operation	Use of purified water helps make maintenance work easier and prolongs the service life.	Use of purified water helps make maintenance work easier and prolongs the service life.	Use of purified water helps make maintenance work easier and prolongs the service life.	Periodical replacement of the cylinder is necessary.
Features	Outstanding controllability. Long service life with immersion heaters made of semi-conductor ceramics. Free of fear of fire hazard (Possible to build into a unit concealed in the ceiling or a cassette plugged into the ceiling).	Outstanding controllability. Easy maintenance.	Small electric capacity. Large volume humidification is possible.	Pretreatment of water not required. Requires only a small space for installation
Applications and method of installation	General A/C and Industrial A/C Cassette type Built-in A/C units or ducts, Direct indoor spraying	General A/C and Industrial A/C Built-in A/C units or ducts, Direct indoor spraying	General A/C and Industrial A/C Built-in A/C units or ducts, Direct indoor spraying	General A/C and Industrial A/C Built-in A/C units or ducts, Direct indoor spraying
Notable points	If pure water is not used, scales could accumulate to shorten the unit's service life. Cautioned against vapor condensation in low temperature.	Cautioned against forming phenomenon due to residual cutting oil, etc. is mixed in the piping at the early stage of operation. Breeding off is necessary.	Needs source of steam as well as piping system. Steam capacity is controlled on the primary steam side.	Cautioned against forming phenomenon due to residual cutting oil etc. mixed in the piping at the early stage of operation. Breeding off is necessary. Cautioned against vapor condensation in low temperature. Not possible to use when the water's electrical conductivity is low.

Water (Adiabatic) Humidification				System of Humidification
Evaporative type	Ultrasonic system	Atomized air and water mixture spray	Centrifugal atomizing	Method of humidification
Water flows over film (media) made of high polymeric fiber and is caused to evaporate by the air flowing from an air conditioning fan.	Direct atomization of water at normal temperature by sending ultrasonic waves toward the surface from the bottom of a water reservoir.	Sending compressed air into one side of the spray nozzle and water into the other side to be atomized and spray under pressure.	Rotating disc connected to a motor scatters water by centrifugal force against fixed blade to be atomized into fine mist and mixed with air.	
				Construction
High molecule air Water molecule 2.4Å	Finest in water mist spray system. Average 1...10µm	Relatively coarse. 5~35µm	Relatively coarse. 30~50µm	Characteristics and condition of particulates
				Characteristics of variations on the psychometric chart
Cooling humidification (Isoentropic and wet bulb change)	Cooling humidification (Isoentropic change)	Cooling humidification (Isoentropic change)	Cooling humidification (Isoentropic change)	Changing condition of the air
0.3~700 kg/h	0.4...30 kg/h	2.5...440 kg/h	0.8...3.5 kg/h	Humidification output kg/h
100 %	80...100 %	30...100 %	80...100 %	Humidification efficiency %
30...70% (Direct water method)	80...100 %	30...100 %	80...100 %	Ratio of effective use of water supply
Low power consumption	80...100 W/kg	Low power consumption	80...100 W/kg	Power consumption W/kg
○ (self-adjusting)	○	○	○	ON-OFF
×	○	×	×	Proportional
△	○	○	○	Proportional responsiveness
Equivalent to city main water. (Water treatment not required)	Equivalent to city main water, pure water	Equivalent to city main water, pure water	Equivalent to city main water	Quality of supply water
Clean (Secondary function of air cleansing)	Purifier is required against white powder phenomenon. UV lamp and drainage solenoid valve prevents bacteria breeding.	White powder phenomenon	White powder phenomenon	Cleanliness of humidification
media (Approx.7000~10000Hr)	Oscillators (Every 5000 hrs of operation)	Nozzle, Pump	Bearing (Approx.20000~30000Hr)	Main replacement parts
Simple structure, small number of component parts. Easy maintenance.	Use of purified water helps make maintenance easier and prolongs the service life of the replaceable parts.	Easy maintenance. Caution against blocking of the spray nozzles.	—	Maintenance in normal / continuous operation
Small electric capacity. Cooling effect in a room with high sensible heat. No over saturation and no vapor condensation.	Cooling effect in a room with high sensible heat. Effectively saving of water and energy.	Suited for large-volume humidification.	Water and energy-saving	Features
General A/C and Industrial A/C Cassette type Built-in A/C units or ducts Outdoor air processing system, Heat exchanger unit	Mainly for industrial A/C (cold storage, open show cases) Built-in A/C units or ducts, Direct indoor spraying	General A/C and Industrial A/C Built-in A/C units or ducts Direct indoor spraying	General A/C and Industrial A/C Built-in A/C units or ducts Direct indoor spraying	Applications and method of installation
Bad odor may generate depending on the condition. Specific case study is necessary for special application and its performance (EX for the rainy season, built into heat exchanger unit, and under cooler operation, etc.).	Use of water purifier device prevents white powder phenomenon. The germ prevention system is standard on all UCAN ultrasonic models. Caution when used with low face velocity.	It needs compressed air. Droplet problem if spray nozzle is blocked. High noise level.	Water droplets may splash on the floor. Be selective as to where to install.	Notable points

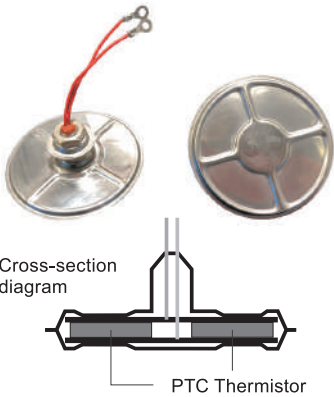
Steam - the Royal Road of Humidification

It is now a matter of common knowledge that use of steam is the best among the various means available to humidify the human living environment. It is germless, odorless and dustless besides it helps to keep the body warm to the core because it does not lower the room temperature. The humidity can be set at the most pleasant level as it can be completely controlled. Even when the room temperature is lowered by 2 or 3 C, it remains comfortably warm. It eliminates electrostatic charges that cause shocks and crackling of the clothing. With office automation equipment functioning more smoothly under steam humidification, work progresses even more efficiently. In winter, the air is very dry. When the humidity level drops to about 20%, influenza virus are more active and run riot. However if the room humidity level raises up to about 50%, the virus activities get weak. And it makes air hydrate, supporting people's breathing to come easy. The ciliary activity of bronchial become smoothly that eliminate inhaled virus from the body swiftly. It becomes less likely to catch the flu. Steam humidification protects precious human health from season of dryness in winter.

PTC steam humidifier

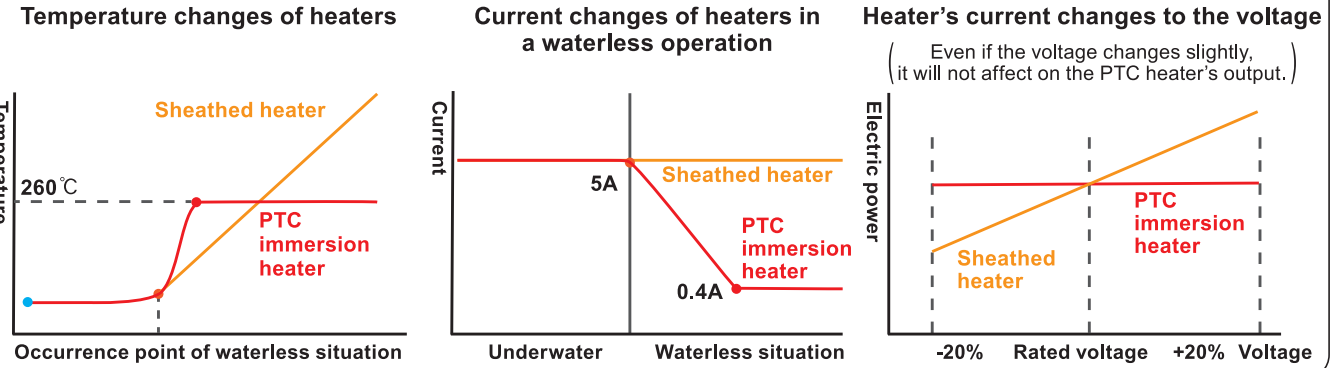
Our PTC steam humidifier uses PTC immersion heater as a heating element, which was developed by ourselves. It is a ceramic semiconductor heater made by mixing and sintering the barium titanate and other substances. The greatest character of our PTC immersion heater is to have self temperature control system. It gives large power outputs only under water. Even if waterless operation should occur, the amperage would drop down in the air to one thirteenth of that while the element is in the water. When a voltage is applied, the resistance becomes minimum at approximately 100° C, which is the boiling point of water. Once the temperature exceeds 100°C, it rises rapidly to 260°C. At this degree point which is the ignition point of paper, the heater's material suddenly becomes non-conductive, limiting the flow of current. The heater surface temperature will not rise above a certain level. Therefore, even if the waterless operation should occur due to the unexpected accident, our PTC steam humidifier can be used safely without risking a fire. This is the world's first steam humidifier that uses PTC thermistor and no steam humidifier except our PTC model can be installed inside of the ceiling in Japan.

PTC immersion heater
Model : UCH-2100/2200



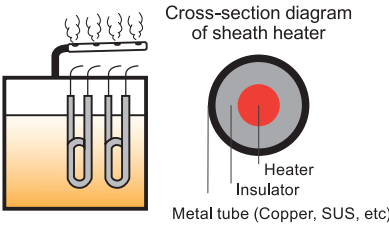
- Safe from fire
- High power and quick boiling
- No breaking and High durability
- Only one that can be installed into the ceiling*

* It is based on our research.



Resistive type steam humidifier

A sheath heater with Nichrome wire is used to heat the water. Since it carries the heat supply stably by rated power from beginning stage of power distribution, the capacity of the humidification keeps steady, so it has superior controllability and responsiveness performance. In addition, precise requirements such as proportional control can be easily made by simply controlling the sheath heater.



NOTES

- There are other types of steam humidifiers besides those mentioned above include indirect steam and electrode type steam humidifiers, etc. We explain here about PTC and resistive steam type humidifiers.
- With regard to the usage water quality for PTC and resistive type steam humidifier, purified water is recommended to prevent the scale from generating, because when the heater has an accumulation of scales on its surface, it may result in the deterioration of heat exchange and may also cause the heater to rupture.



PTC steam humidifier

UC-TJ1000C

UC-TJ1000C

Ceiling-installed cassette type PTC steam humidifier available in 1.1 kg/h capacity. Pure water by Reverse Osmosis water device is available. It makes maintenance cycle reduce and prolongs the unit's life. Gives hygienical, sterilized and odorless steam humidification suitable for human A/C systems. Generates steam effectively that spreads throughout the whole room.

Comfortable.
Efficient and Reliable. Simply the best.



UC-TJ1000C is operated by smart remote controller with a built-in humidistat, UC-610A. Thus it eliminates the complicated work such as wiring and installation at the site when a humidistat is necessary afterward. 1 remote controller can control max. 9 of UC-TJ1000C individually. It commands each unit to decide ON/OFF operation and air volume, set the desired humidity, etc. It controls the operation efficiently and contributes to energy saving. Smart remote controller UC-610A

Features

- High safety, long life PTC immersion heaters are used.
- Independently installed and operated for direct room interior humidification. Being set into the ceiling so it saves space.
- Designed to take out the water reservoir part instantly, it can get the maintenance work started easily.
- Use of pure water makes maintenance cycle reduce. It produces less scale.
- Equipped with drainage pump that makes plumbing work easily. It can refill and remove the water when cleaning quickly.
- Water supply shutoff valve prevents the accidents such as leakage by water level sensor's malfunction and dust clogging in the water solenoid valve.
- User friendly remote controller * with a built-in humidistat. It turns the unit ON or OFF, set the desired humidity and adjust the air volume, etc.
- Differently from evaporative type, steam humidifier does not cause the cold draft.

*Please see the product brochure of smart remote controller UC-610A for the details.

Applications

- Hospitals ●Elder care facilities ●Schools
- Office buildings ●Public buildings
- Hotels ●Commerce facilities, etc



Hospital



Office room

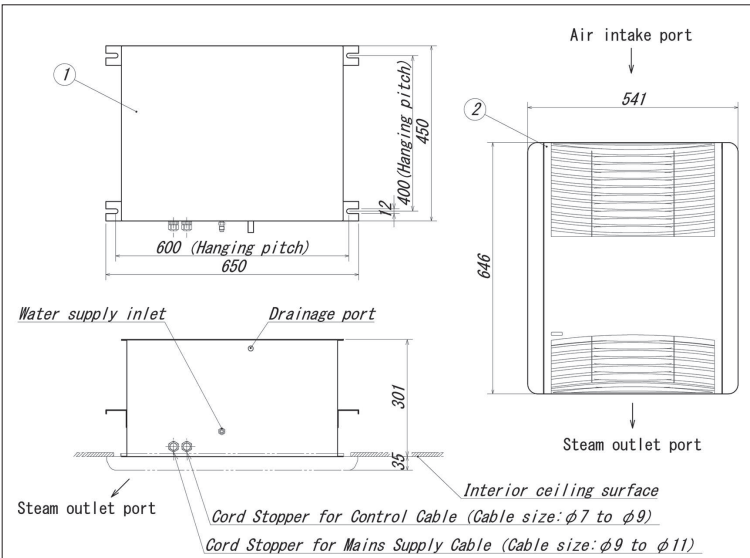
Specifications

Model	UC-TJ1000C	
Capacity (kg / h)**	H : 1.1 L : 0.5 *	
Power supply	1ϕ 2W AC230V 50 / 60Hz	
Rated power (kW)	H : 1.1 L : 0.6 *	
Rated current (A)	H : 5.5 L : 3.0 *	
Air volume (m ³ / h)	H : 480 M : 300 L : 180	
Weight (kg)	Dry : 27.0	Operating : 30.0
Water quality	Pure water, R.O. treated water (1...20μS/cm)	
Water supply system	Automatic water supply system with float sensor and water supply solenoid valve	
Water supply pressure	0.03...0.3MPa (0.3...3.0 kgf / cm ²)	
Control system	On / Off control	
LED indicator lamp (Main unit)	Power supply, Operation, Abnormal alarm	
Remote controller	Operation, Air volume(H / M / L)*, Abnormal alarm	
External signal	Operation, Blanket warning (Depletion of water,Overflow, Leakage, Overheat)	
Safety equipment	Device to prevent waterless operation, Water supply shutoff valve, Overflow sensor, Circuit breaker, Water leakage sensor, Thermostat for overheat protection	
Standard accessories	Strainer (Rc1/2, 1pc), Water supply copper pipe (ϕ6.35 flare L=1000, 1pc), Operational manual (1 set)	

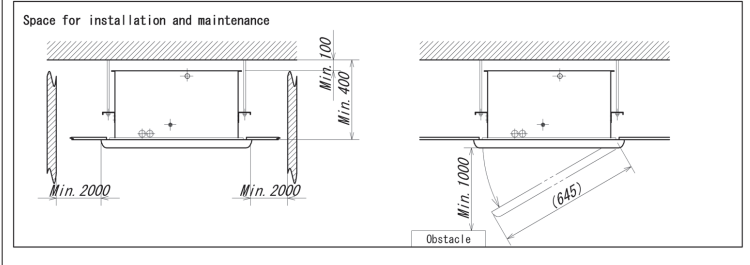
*H: High M: Middle L: Low

** Steam capacity changes automatically when the air volume is low.

Standard Dimensions(mm)



No.	Name	Material
①	Main unit	Galvanized steel sheet
②	Face panel	Resin (Color : White, DIC P-5)



PTC steam humidifier

HD-M2200



HD-M

Portable type PTC steam humidifier available in 1.2 and 2.4 kg/h capacities. Gives hygienical, sterilized, odorless steam humidification suitable for human A/C system.

Terrific steam capacity among the industrial fields.

Humidasduo HD-M

Features

- Mobile with wheels.
- Use of high safety, long life PTC immersion heater.
- Has no cause for concern over fire breaking out even in the waterless operation.
- Air cleaning and sterilization capability by use of photocatalytic TiO₂ (Titanium dioxide) filter and sterilization lamp.
- Eye-friendly display panel shows various messages.
- Easy, simplified operation with just one push of a button.
- No piping work needed, fitted with portable water tanks (10L tank × 2) . One time filling gives approx. 8 hours (HD-M2200) and 16 hours (HD-M2100) continuous humidifier operation.

Applications

- Offices ● Schools ● Public spaces ● Hospitals
- Beauty salons ● Art museums
- Electronic component plants, etc

Humidified Area

HD-M2100	HD-M2200
Approx. 160 m ³	Approx. 320 m ³
Approx. 64 m ²	Approx.128 m ²

It can maintain 22℃ and 50%RH of indoor air in case outdoor is 0℃ and is 50 %RH (As ceiling height is 2.5 m and air exchange rate is one time per hour).

Specifications

Model		HD-M2100	HD-M2200
Capacity (kg / h)		H : 1.2 L : 0.5	H : 2.4 L : 1.2
Power supply		1 ϕ2W AC230V 50 / 60Hz	
Rated power (W)		H : 1100 L : 600	H : 2100 L : 1100
Rated current (A)		H : 4.8 L : 2.6	H : 9.1 L : 4.8
Air volume at steam outlet port (MAX.)		30 m³ / h	
Air volume for air cleaning and sterilization		30 m³ / h	
Weight (kg)	Dry	24.0	24.5
	Full	44.0	44.5
Water quality		Pure water, R.O. treated water (1...20μS/cm)	
Water tank capacity		10L×2	
Humidity setting		10...99% RH	
Ambient condition		1...40℃ (No freezing), Max.70%RH	
Safety equipment		Circuit breaker (ELB) to prevent overcurrent, Device to prevent waterless operation	
Auxiliary function		Output switch (L) & (H), Display for current relative humidity (%RH), Function for air cleaning, Function for air sterilization, Fault indications on display	
Standard accessories		Water tank (2pcs), Operational manual (1set)	



Hospital

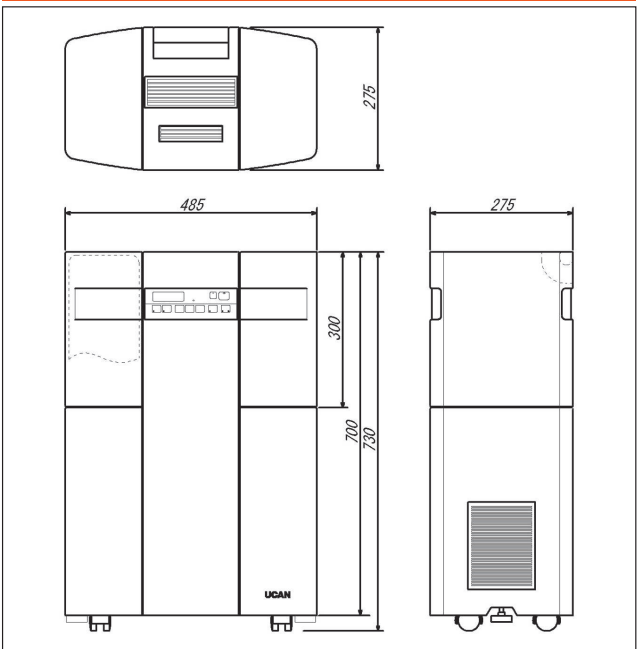


Lobby



Display space

Standard Dimensions(mm)



UP-X

PTC steam humidifier

UP-X Series

Compact-sized PTC steam humidifier to set into a duct, a ceiling-installed or a built-in type air conditioners.
Pure water by Reverse Osmosis water device is available. It makes maintenance cycle reduce and prolongs the unit's life.
Easy in-plant assembly into air-conditioning units facilitates installation at a construction work.
Gives hygienical, sterilized and odorless steam humidification suitable for human A/C system.

Comfortable.
High safety.
Easy to operate.

Features

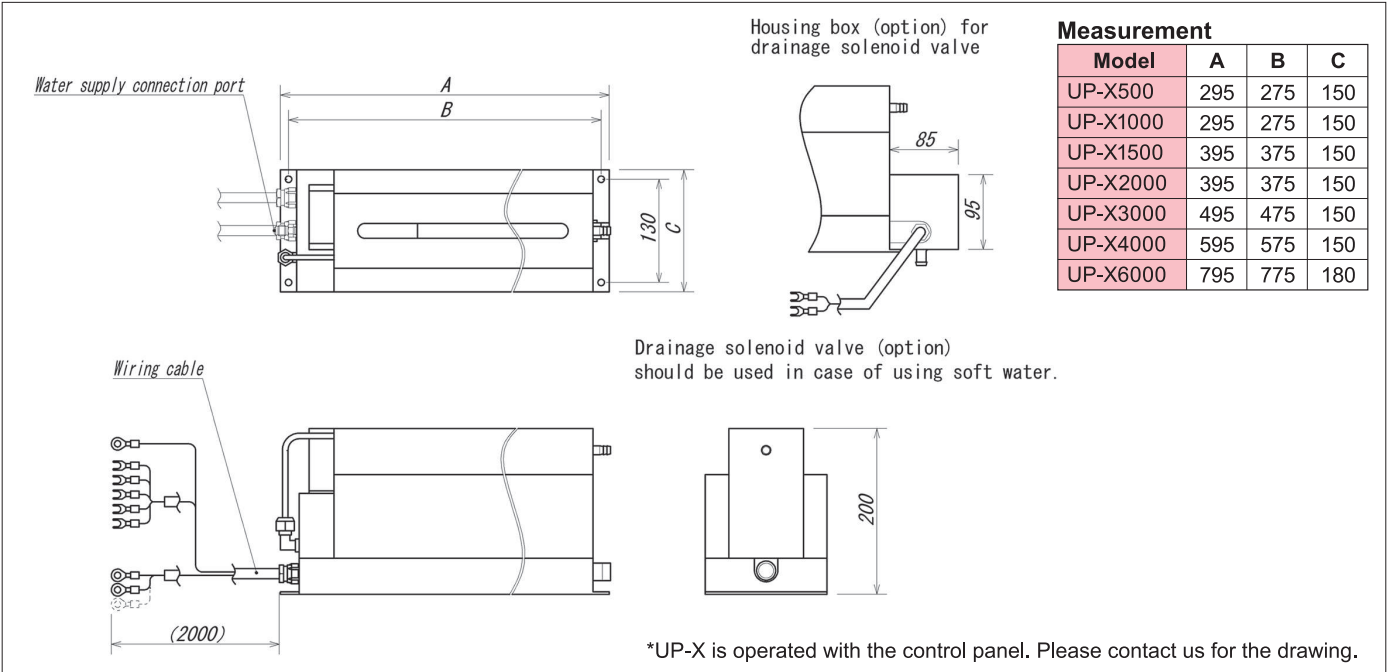
- Use of high safety, long life PTC immersion heater.
- 7 models are available according to the steam capacities from 0.5...7.2 kg/h.
- Simple construction hardly cause failure and facilitates the maintenance work.
- It designed compactly that can be used at a small place.
- It operates by interlocking with air conditioner or a signal from the indoor humidistat.



Applications

- For installing into a duct or building into various kinds of air conditioners: Ceiling-mounted duct type, built-into the ceiling type, air-handling units, all-in-one air conditioners, and food processing equipments

Standard Dimensions(mm)



Specifications *CE compatible models are UP-X500...4000.

Model	UP-X500	UP-X1000	UP-X1500	UP-X2000	UP-X3000	UP-X4000	UP-X6000
Capacity (kg / h)	0.5	1.2	1.8	2.4	3.6	4.8	7.2
Power supply	1ϕ2W AC230V* 50 / 60Hz						3ϕ3W AC200V* 50 / 60Hz
Rated power (kW)	0.5	1.0	1.5	2.0	3.0	4.0	6.0
Rated current (A)	2.2	4.3	6.5	8.7	13.0	17.0	15.0
Water quality	Pure water, R.O. treated water (1...20μS/cm), Soft water						
Water supply system	Automatic water supply system with float sensor and water supply solenoid valve						
Water supply pressure	0.03...0.5MPa (0.3...5.0 kgf / cm²)						
Weight (kg)	7.2	7.5	9.7	10.0	12.5	15.0	20.0
Control panel	1.5						3.0
Ambient condition	[Temperature] Main unit : 1...40℃ (No freezing), Control panel : Max.40℃ [Relative humidity] Max.90%RH						
Control System	On / Off control						
Safety equipment	Limit switch to preclude waterless operations, Water supply shut-off valve (double-barreled solenoid valve) and External alarm to be activated if overflows. UP-X500...2000 fitted with a circuit protector in the power supply circuit, UP-X3000...6000 fitted with a protective fuse in the control circuit						
Standard accessories	Strainer (Rc1/2, 1pc), Water supply copper pipe (ϕ6.35 flare L=1000, 1pc), Operational manual (1 set)						

*Other power supply types are available on request.



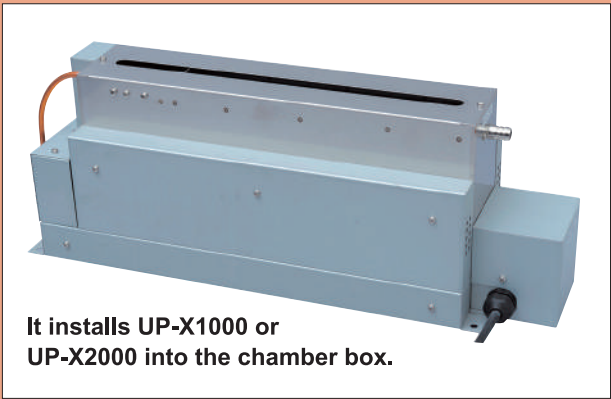
PTC steam humidifier

UP-X2000CD

UP-XCD Series

Chamber box type that installed PTC steam humidifier. It is just connected into the duct. 2 models are available according to capacities 1.0 and 2.0 kg/h. PTC steam humidifier is the only steam humidifier which can be installed into the inside of ceiling. Being set into the ceiling, it does not mar the beauty of the interior.

Comfortable.
High safety.
Easy to operate.



It installs UP-X1000 or UP-X2000 into the chamber box.

Features

- High safety, long life PTC immersion heaters are used.
- It doubles as a drainage pan thus there is no chance of unexpected water leakage accident.
- It operates by interlocking with air conditioning system or the signals from indoor humidistat.
- Quiet operational sound without use of fan.
- Thorough safety measures: Automatic drainage system when the unit stops operating. It prevents bacteria and water microbism from growing in the reservoir. Double-barreled solenoid valve stops supplying water when overflow is detected.

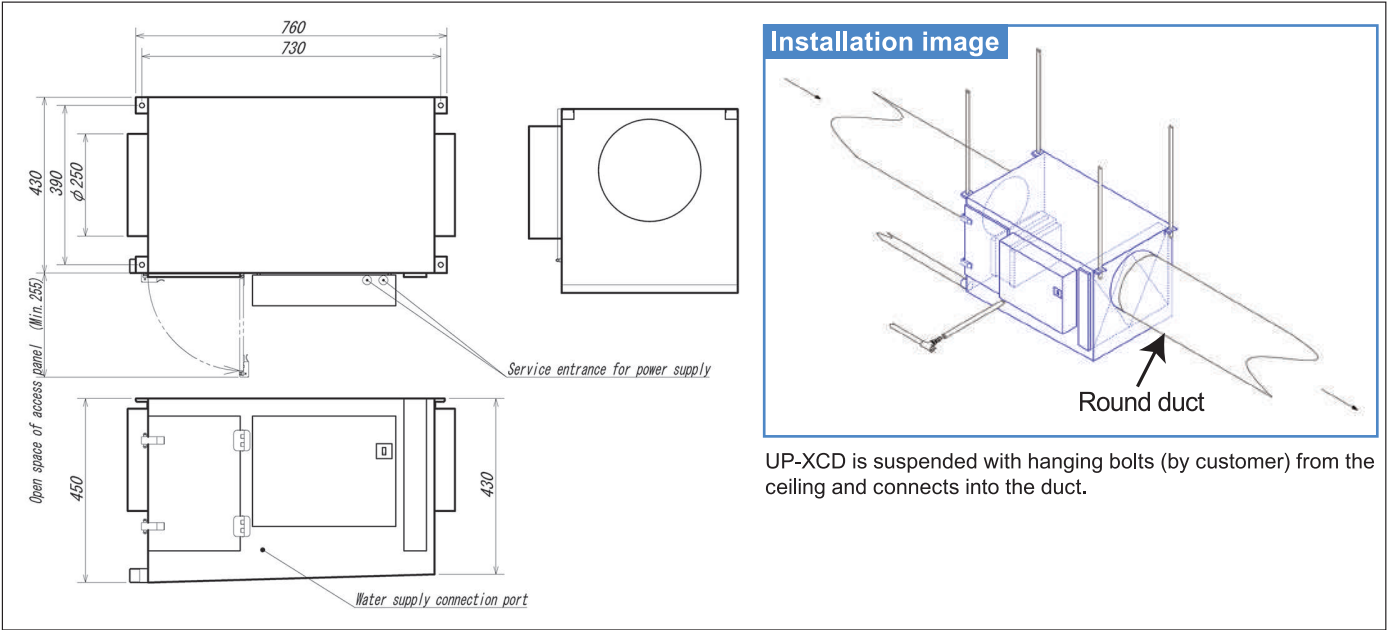


UP-XCD connected into the duct.

Applications

- Offices ●Each facilities of hospitals ●Special elderly nursing homes ●Museums ●Manufacturing plants
- Luxury homes, etc

Standard Dimensions(mm)



Specifications

Model	UP-X1000CD	UP-X2000CD
Capacity (kg / h)	1.0	2.0
Power supply	1φ 2W AC230V* 50 / 60Hz	
Rated power (kW)	1.0	2.0
Rated current (A)	4.3	8.7
Weight (kg)	21.5	23.0
Water quality	Pure water, R.O. treated water (1...20μS/cm), Soft water	
Water supply system	Automatic water supply system with float sensor and water supply solenoid valve	
Water supply pressure	0.03...0.3 MPa (0.3...3.0 kgf/cm²)	
Ambient condition	Main humidifier unit : 1...40°C (No freezing) Control panel : Max.40°C Relative humidity : Max.90% RH	
Control system	On / Off control (Input through no-voltage contactor), Proportional control (input 4...20mA)	
External signal	Operation, Blanket warning (Depletion of water, Overflow)	
Safety equipment	Device to preclude waterless operations, Water supply shut-off valve (double solenoid valve), External alarm	
Standard accessories	Strainer (Rc1/2, 1pc), Water supply copper pipe (φ6.35 flare L=1000, 1pc), Operational manual (1 set)	

*Other power supply types are available on request.



PTC steam humidifier



POCKET JP-300,500

For floor-type fan coil unit or compact-sized air conditioner type available 0.3 and 0.5 kg/h steam capacities.
With quick evaporation, it gives highly efficient humidification without condensation.
Gives hygienical, sterilized and odorless steam humidification suitable for human A/C system.

Comfortable.
High safety.
Easy to operate.

POCKET JP-300,500

Features

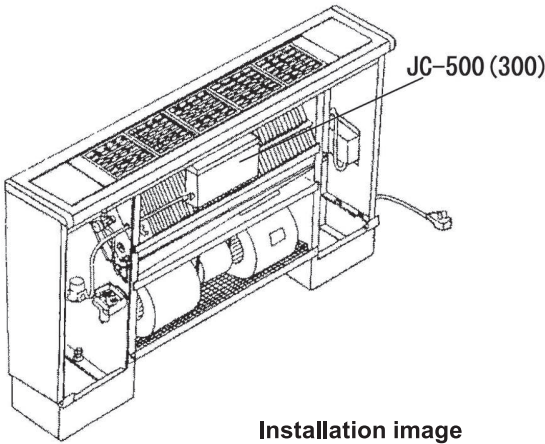
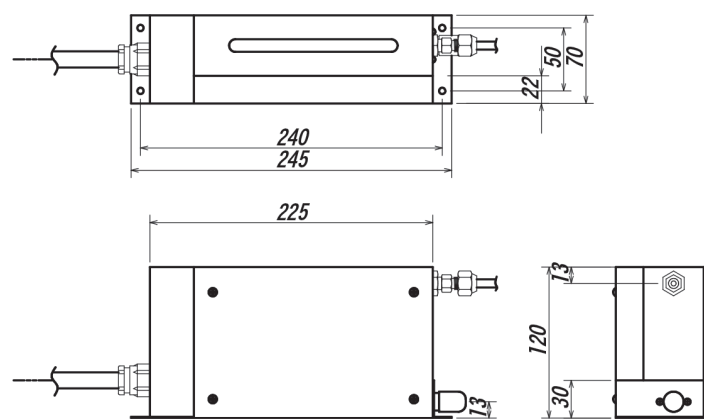
- It is installed on the secondary coil side of either a compact-sized air conditioner or a floor-type fan coil unit.
- Compact size and simple installation but full-fledged humidification with steam.
- Use of high safety PTC immersion heater.
- Use of purified water helps make possible a long period of maintenance-free operation.

Applications

- Floor-type fan coil units, built-in duct type air conditioners
- For use in a compact-sized air conditioning units

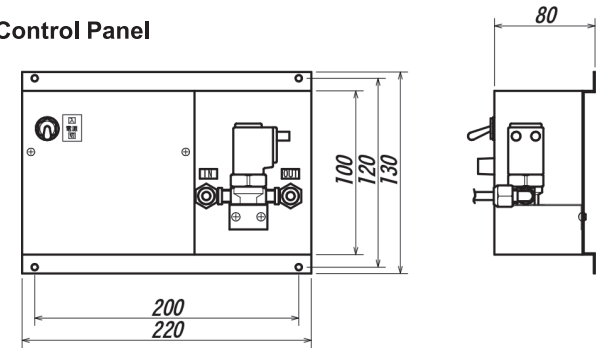
Standard Dimensions(mm)

JP-300/JP-500



Installation image

Control Panel



- Specify the direction of flow in the piping work (Either right or left facing the front.).
- Interlock the humidifier with the fan.
- Automatic humidity control can be achieved if combined with a humidistat.

Specifications

Model	JP-300	JP-500
Capacity (kg/h)	0.3	0.5
Power supply	1φ 2W AC230V* 50 / 60Hz	
Rated power (kW)	0.3	0.5
Rated current (A)	1.5	2.5
Water quality	Pure water, R.O. treated water (1...20μS/cm)	
Water supply pressure	0.03...0.5 MPa (0.3...5.0 kgf/cm ²)	
Water supply system	Automatic water supply system with float sensor and water supply solenoid valve	
Weight(kg)	1.2	
Ambient Conditions	Main humidifier unit 1...70°C (No freezing), Max.90% RH	
Control System	On/Off control	
Standard accessories	Water supply strainer (Rc1/2, 1 pc), Water supply copper pipe (φ6.35 x 1000 mm, 2 pcs), Operation manual (1 set)	

*Other power supply types can be available on request.



JC-500

PTC steam humidifier



POCKET JC-300,500

Installed on the side panel of a floor-type fan coil unit with the steam nozzle inserted to the upper part of the coil for humidification. Available 0.3 and 0.5 kg/h steam capacities. With quick evaporation, it gives comfort steam air without condensation. Gives hygienical, sterilized and odorless steam humidification suitable for human A/C system.

Comfortable.
High safety.
Easy to operate.

POCKET JC-300,500

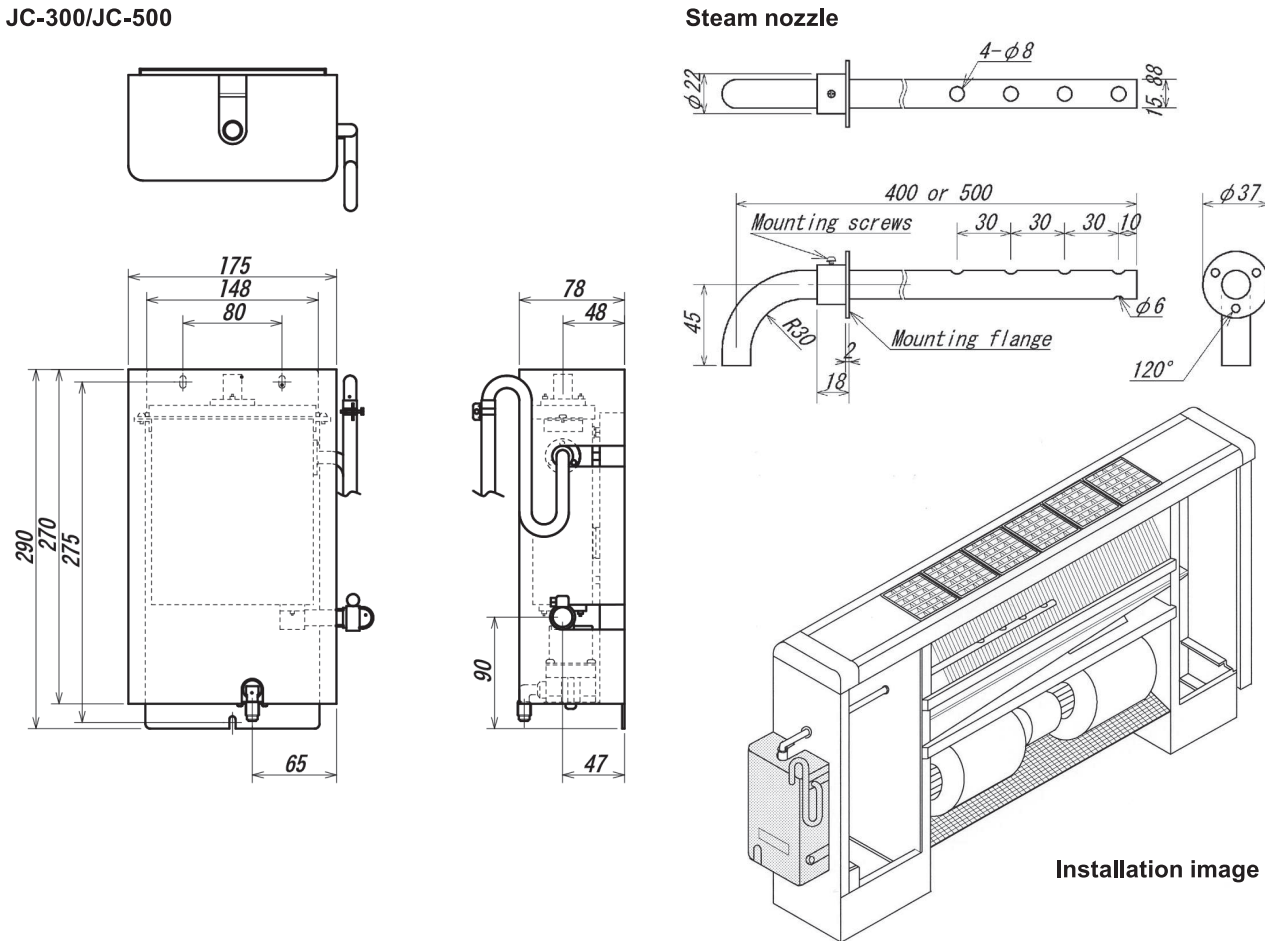
Features

- It is installed on the side panel of a floor-type fan coil. Steam nozzle is inserted to the upper part of the coil.
- Compact, high safety, long life steam humidifier by use of PTC immersion heater.
- Long life with no wear and tear of the essential parts.
- No loss in static pressure.
- Use of purified water assures a long period of maintenance-free operation.

Applications

- For floor-type air conditioners like fan coil unit in : offices, hotels, hospitals, nursing homes, protective care institutions, public facilities, art museums, libraries, natural history museums, etc

Standard Dimensions(mm)



Specifications

Model	JC-300	JC-500
Steam output(kg/h)	0.3	0.5
Power supply	1φ 2W AC230V* 50 / 60Hz	
Rated power(kW)	0.3	0.5
Rated current(A)	1.5	2.5
Water quality	Pure water, R.O. treated water (1...20μS/cm)	
Water supply pressure	0.03...0.5 MPa (0.3...5.0 kgf/cm ²)	
Water supply system	Automatic water supply system with float sensor and water supply solenoid valve	
Weight(kg)	4	
Ambient Conditions	Main humidifier unit 1...50°C (No freezing), Max.90% RH	
Control System	On/Off control	
Standard accessories	Steam nozzle with flange (1 pc), Steam hose with hose band (300 mm, 2 pcs), Water supply strainer (Rc1/2, 1 pc), Water supply copper pipe (φ6.35 x 1000 mm, 1 pc), Operation manual (1 set)	

*Other power supply types can be available on request.



UC-MG2~15T

Resistive steam humidifier

ELECTRIC STEAM HUMIDIFIER

MAGY[®]

UC-MGT Series

Resistive type steam humidifier available in 2.5...62.5 kg/h capacities. It is suitable for constant temperature and humidity room and clean room where require high precision proportional control, etc. It is designed with emphasis on safety, easy to maintain, high precision proportional control.

Features

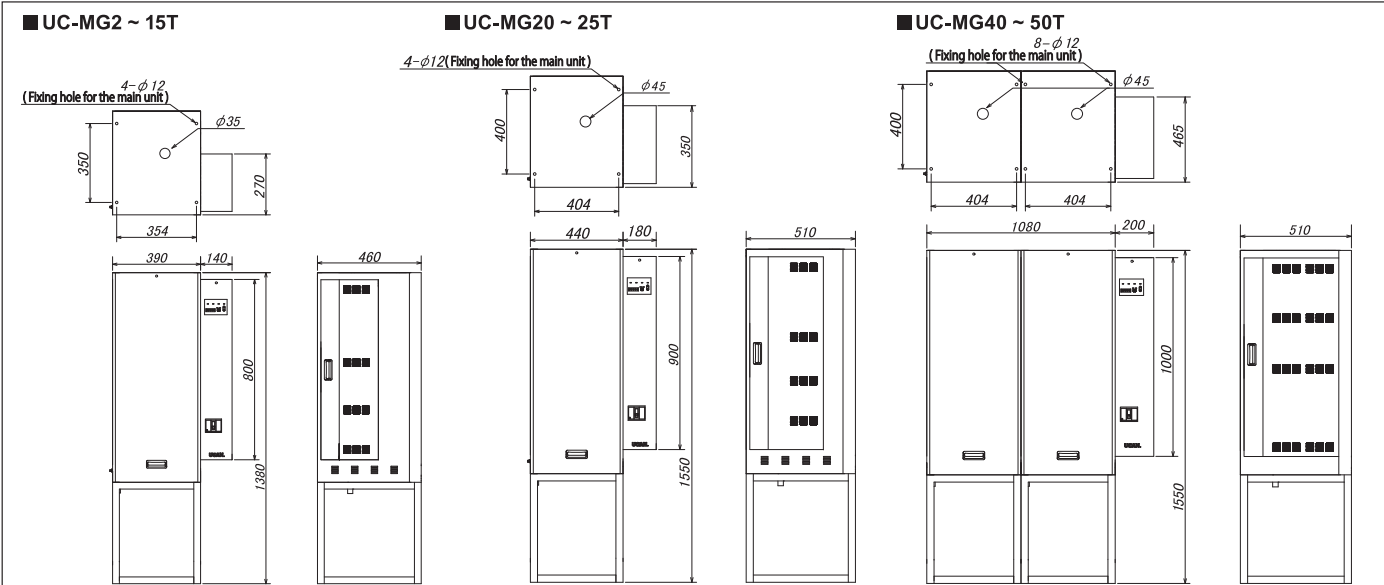
- It can be controlled with On-Off as well as proportional control system by setting the board.
- Removable bottom plate is designed to detach by only 20 seconds. Accumulated scale can be cleaned instantly.
- Ball-tap water supply system is adopted. It reduces the depression of steam capacity when supplying the water.
- Equipped with a mechanism to cut off supplying water in case of detecting high water level or water leakage.
- Periodical drainage system works to drain the water from the reservoir to prevent the mineral concentration.
- Fan unit for direct-humidification is available for UC-MG2T...15T.
- It is stand-alone type. No need to use the cradle.

Applications

- Clean rooms
 - Office buildings
 - Hospitals
 - Factories
 - Bedrock baths
- etc.



Standard Dimensions(mm)



UCAN's cylinder separable system

Bottom plate can be dismantled easily by releasing the clamp. No need to take out the steam cylinder to clean scales.

Dismounts instantly. Easy to service.

A tray is installed at the bottom of the housing, it fixates the bottom plate when detaching the clamp.



*Fan unit for direct humidification is available for UC-MG2...15SP.

Specifications

Models UC-MG (P):Proportional Control		2T	4T	6T	8T	12T	15T	20T	25T	40T	50T
Capacity(kg/h)		2.5	5.0	7.5	10.0	15.0	18.7	25.0	31.0	50.0	62.5
Rated current(A)		3.2	6.2	9.2	12.3	18.3	22.9	30.5	38.1	60.9	76.1
Rated power(kW)		2.1	4.1	6.1	8.1	12.1	15.1	20.1	25.1	40.1	50.1
Power supply		3 φ3W AC380V (50 / 60Hz)									
No. of Condensation drain hose(φ8)		1							2		
Weight(kg)	Dry	47.0			50.0			75.0		145.0	
	Operating	57.0			65.0			100.0		197.0	
No. of Steam cylinder		1							2		
In-duct static pressure		±980Pa (±100mmH ₂ O)									
Water quality		Pure water, R.O treated water (1...20μS/cm), tap water and soft water Water temperature : Max.40℃									
Water supply system		Ball-tap water supply system									
Water supply pressure		0.03...0.3MPa (0.3...3.0kgf / cm²)									
Main body water supply inlet		φ 6.35 flare									
Drainage connection port		O.D φ 22.23									
Ambient condition		Ambient temperature : 1...40℃ (No freezing), Max.70%RH									
Control	ON-OFF	Two position control (input through no-voltage contactor)									
	Proportional control	Current input 4...20mA(ambient temperature at 23-℃, input impedance 250Ω)									
External signal (output from no-voltage contactor)		Operation, Blanket warning (Depletion of water, Overflow, Over-heating), Regular inspection, Water leakage as option									
Safety equipment		Circuit breaker for electric leakage, Resettable thermostat to prevent overheating, Device to prevent waterless operation									
Standard accessories		【Strainer (Rc1/2, 1 pc), Water supply copper pipe(Φ6.35 L=600,1 pc), Steam spray nozzle / Steam hose(L=1500 with hose band, 2 pcs), Water drainage hose(L=1500 with hose band, 1 pc), Condensation drainage hose(2000mm with hose band, 1 pc)】, Operational manual(1 set) *UC-MG40T and MG50T double the quantity in 【】brackets.									

For the water quality, we recommend the customer to use purified water by R.O. device. In case that use of tap water may reduce heater life by the adherence of scale. In case of soft water may bubble in the cylinder, generate noise or discharge hot water.

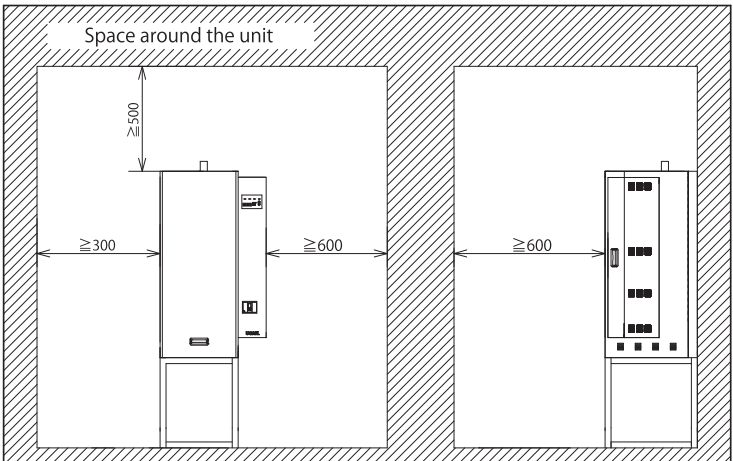
Drainage Cooling System (Option)

This system supplies the cooling water to mix with the waste water (high temperature) from UC-MGT. It is lowered the water temperature before being discharged.

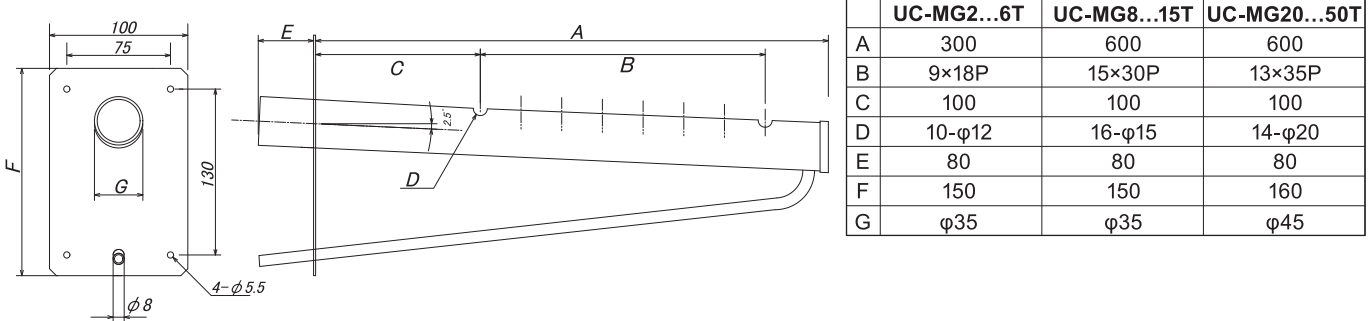
Without drainage cooling system: High temperature drainage (Approx.95℃)

With drainage cooling system: Supplying cooling water, Drainage cooling system drains (Approx.70℃)

Drainage piping

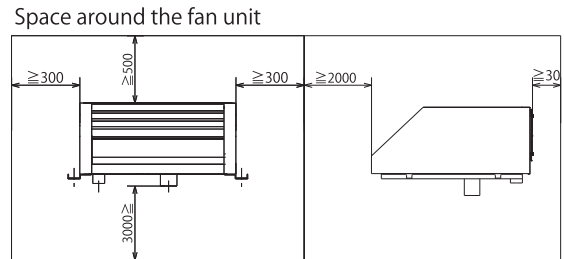
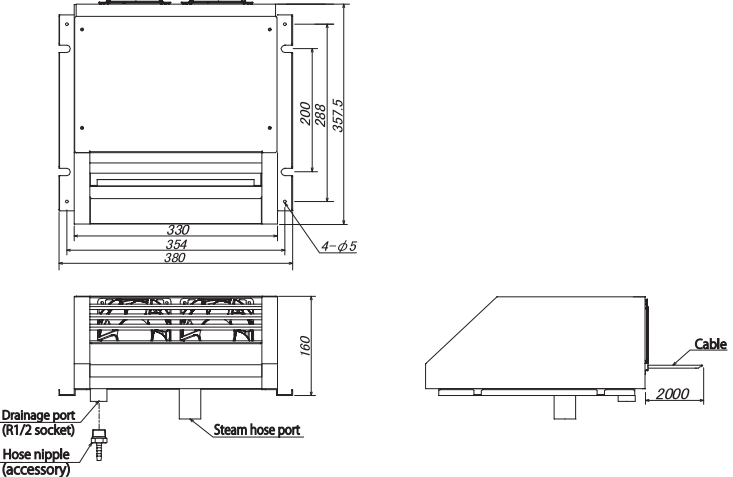


Steam Nozzle (External dimensions)



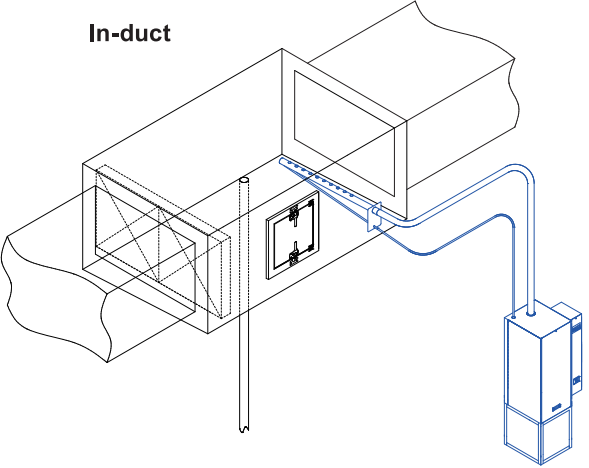
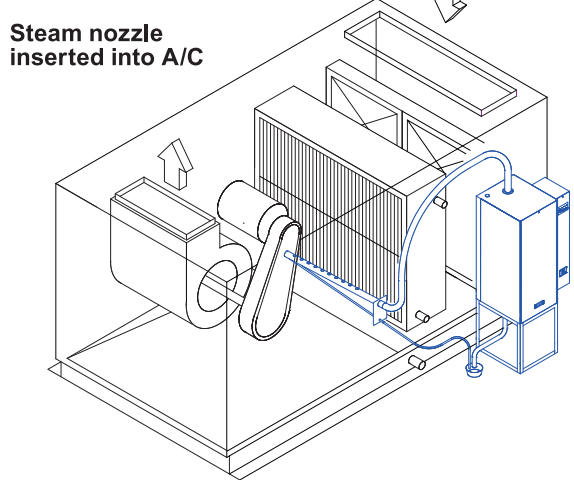
	UC-MG2...6T	UC-MG8...15T	UC-MG20...50T
A	300	600	600
B	9×18P	15×30P	13×35P
C	100	100	100
D	10-φ12	16-φ15	14-φ20
E	80	80	80
F	150	150	160
G	φ35	φ35	φ45

Fan Unit (External dimensions)



Fan unit for	UC-MG2...6T	UC-MG8...15T
Power consumption	10W	25.9W
Max. static pressure	70.4Pa	135Pa
Air flow	5.6 m3/min	7.7 m3/min
Operational sound	Max.40dB	Max.49dB
Weight	6.5kg	6.5kg

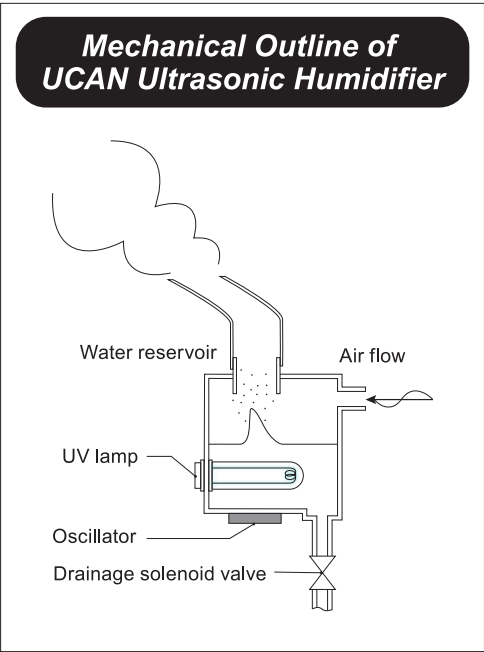
Installation Examples



Best-Fitted Humidification for Refrigeration and Cold Chain

As the principle of ultrasonic humidifier, it converts water into mist to spray into the air. An oscillator attached to the bottom of the water reservoir vibrates the water inside at a high frequency of 1.7 MHz. This causes a water column, from the tip of which a mist with water droplets of 1-10µm is generated. Ultrasonic humidifier is classified under the same category of water humidification such as evaporative humidifier and twin-fluid atomizer. It deprives evaporative latent heat when evaporating, which makes reducing the temperature. Consequently, those types of humidifiers are suitable for the industrial applications like textile facility and printing factory where require cooling air all the year round since they generate higher heating value. They are also effectively and variously used for a refrigerated storage for fruits, vegetables and lower temperature storage for grains. Not just only humidify the room but also reduce the room temperature which reducing load of refrigerating equipment and economizes the running cost as a result.

Mechanical Outline of UCAN Ultrasonic Humidifier

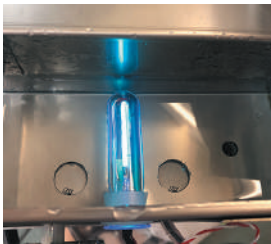


Unique Hygiene System for Contamination- Germicidal Device

This system is consisted of an immersion-type UV lamp which is mounted inside the water reservoir of a humidifier and drainage solenoid valve as automatic drainage system, which are the standard equipment for export models.

The germicidal ray radiated by UV lamp kills various kinds of bacteria in the water reservoir. Drainage solenoid valve drains from the water reservoir to empty automatically whenever the power supply is shut off.

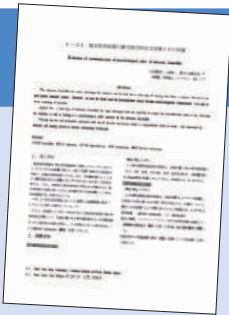
If requires to drain the old water periodically and supply fresh water while operating, the optional control timer is usable.



- UV lamp's disinfecting ray works effectively against any kind of microbes.
- The water reservoir is made of stainless steel with a high reflecting efficiency, which helps raise the disinfecting effect of UV lamp.
- UV lamp is mounted at even intervals to ensure the uniformity of irradiation.
- While the humidifier is in operation, the water inside the reservoir flows rapidly around the outer tube of UV lamp. due to the cavitation created by ultrasonic waves. It helps raise the efficiency of irradiation of disinfecting ray.
- Replacement of the expired lamps is made easy as it is designed for simple insertion.
- Whenever the power supply is shut off, drainage solenoid valve drains automatically from the water reservoir to empty.
- In case of using the control timer (option), the unit can be periodically drained and supplied with fresh water while it is in operation.

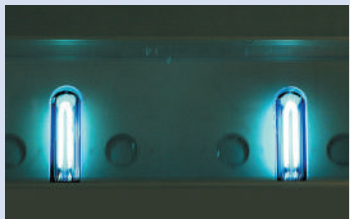
The germicidal effectiveness already proven by Japanese public research institute.

The germicidal effectiveness of the UV lamps incorporated into UCAN ' s ultrasonic humidifiers has been positively proven through the research work conducted by the National Institute of Public Health of Japan in 2001. The device almost instantaneously kills with the germicidal ray of UV lamps any bacteria or viruses that penetrate into the water in the humidifier' s reservoir. Consequently the spray mist is kept free of germs.



Component Parts of Germicidal Device

Ultraviolet lamp (UV lamp)



The germicidal ray radiated by this UV lamp kills various kinds of bacteria and viruses by effecting directly on the DNA's that control their genes. Since no chemical substance is used in the sterilization, the mist has no effect on human body. Life time of UV lamp is about 10,000 hours.

Drainage solenoid valve



It opens the valve automatically when the unit' s power is turned off, then drains the water from the water reservoir and empty it. Further, with using a control timer, the drain solenoid valve can be operated periodically even during operation, draining old water and supplying fresh water

Control Timer *



The control timer allows to set the humidifier to operate or stop at any desired time. For example, you can set it to operate only during opening hours, or to drain periodically to maintain a hygienic cycle. There are two types: a type with a built-in transformer box and a type that is installed separately. (*Optional time)

NOTES

■ Precaution statement for selection of ultrasonic humidifier

Quality of the water supply

- Water is transformed into a fine mist and spray it into the air. Mineral matter dissolved in the water is released to the air directly, then turn to be "white powder" with evaporation which suspending in the air and adhering to the equipment or the walls in the room.
- The white powder may cause troubles such as flickering the computer screen or suspending white dust in a clean room. To prevent to produce white powder, pure water should be used for the supplying water.
- However most applications like refrigerator for fruits and vegetables, mushroom cultivation and humidification for printing factory can use normal tap water.

Connecting to the water supply piping

- Please follow the local regulation to connect the water supply piping.

Replacement of oscillator

- Oscillator is consumable goods, kindly replace it at running accumulated time every about 5,000 hours.
- Check the mist condition time to time, since the oscillator may burn out less than 5,000 hours depend on the water quality.

Proportional control system

- Almost all our humidifiers can work with proportional control system, UCR unit.
- UCR unit is the phase control system. It linearly controls the relative humidity with operating signals that cause variation of voltage. Please refer to P. 38 in this catalogue.



Ultrasonic humidifier

FT-F UVSV Series

Available in 2.0...12.0 L/h capacities designed for wide applications from refrigerated storage to clean room.
It prevents the loss of ingredient to keep up the products freshness and asset value from moisture loss caused by operating refrigerator.
Comes equipped with germicidal device by UV lamps and a drainage solenoid valve to enhance the hygiene humidification.

Long mist distance.
Easy maintenance.
Meet the wide applications.



FT-F UVSV Series

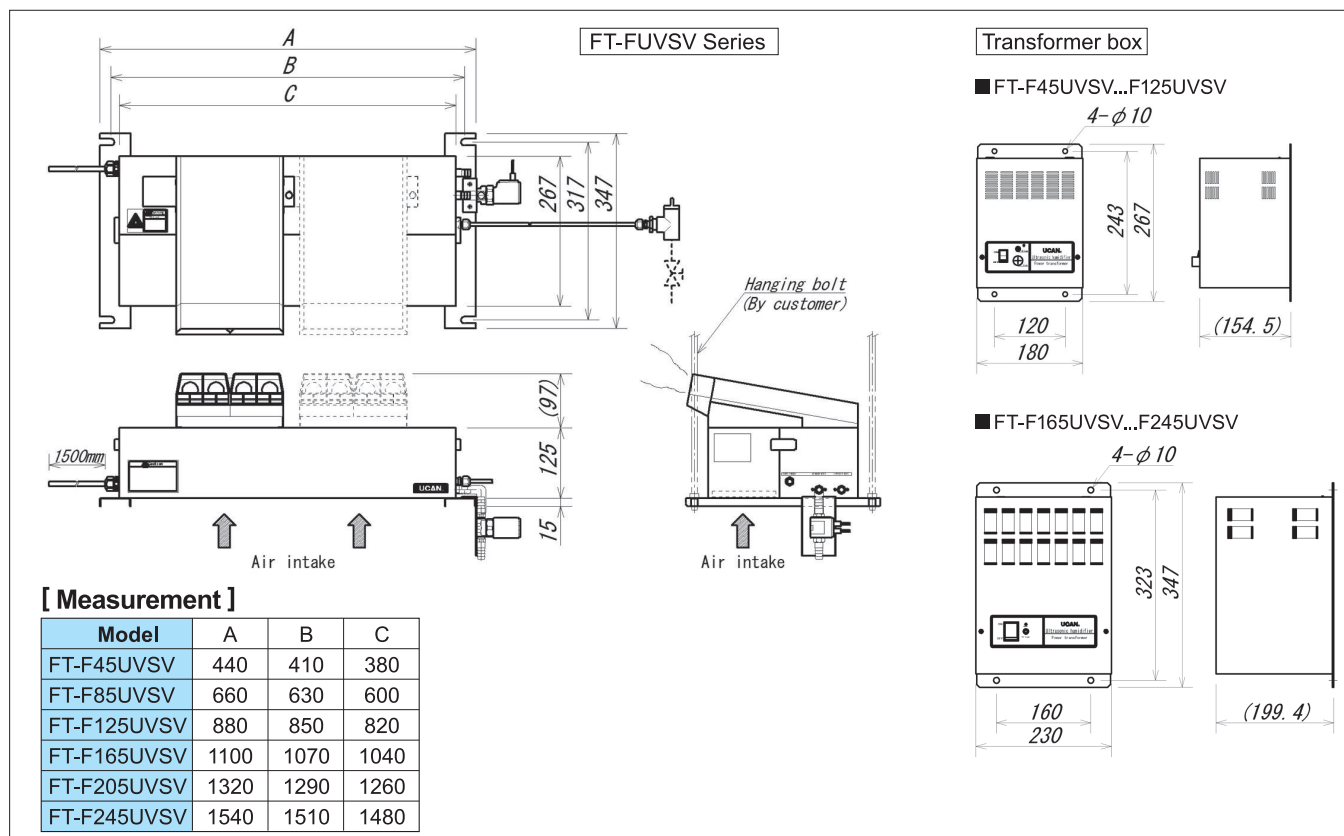
Features

- Evaporative mist lowers the surrounding air temperature, allowing energy-saving humidification in a refrigerated storage.
- Powerful drip-proof air blower to make mist spray long distance.
- User-friendly construction : It can be dismantled without any tool, so easy to clean the water reservoir and air filter.
- Main unit is used by suspending with hanging bolt (by customer) or installing on the wall with mounting bracket (optional part).
- Many optional parts are available : mounting bracket, drainage pan, timer, humidistat, and phase control system, etc.

Applications

- Refrigerated storages for vegetables, fruits
- Low-temperature storages for grains
- Plant germination rooms, plant nurseries, orchid cultures
- Food processing clean rooms
- Storages for cigars, wine cellars, etc

Standard Dimensions(mm) Drawings for CE Compliance, please contact us.



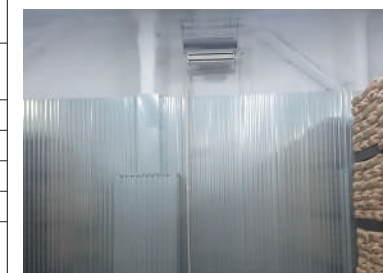
Specification

Model FT-UVSV		F45	F85	F125	F165	F205	F245
Capacity (L / h)		2.0	4.0	6.0	8.0	10.0	12.0
Power supply		1 ϕ2W AC230V*					
Power consumption (VA)		175	325	474	624	774	924
No. of oscillators (pcs)		4	8	12	16	20	24
Air volume (m ³ / min) 50 / 60Hz		3.3 / 3.7	6.6 / 7.4	9.9 / 11.1	13.2 / 14.8	16.5/18,5	19.8/22.2
Weight (kg)	Unit	8.1	12.0	15.4	19.3	23.2	27.1
	Trans.box	5.5	8.0	10.0	11.5	15.0	17.5
Water supply system		Automatic water supply system with float switch and water supply solenoid valve					
Water quality		Tap water, Pure water or R.O. treated water (1...20 μS/cm) We recommend pure water to prevent white powder from producing.					
Water supply pressure		0.03...0.5MPa (0.3...5.0 kgf / cm ²)					
Control system		On / Off control, Proportional control (Option)					
Ambient condition		5...40℃ (No freezing), Max.90%RH					
Replacement of oscillator		At about every 5,000 cumulative hours of operation					
Safety equipment		Device to prevent waterless operation, Fuse to prevent overcurrent, Thermostat to prevent water overheating (cutoff at 55℃), Surge filter					
Standard accessories		Transformer box (1 pc), Strainer (Rc1/2, 1pc),Water supply tube (ϕ 6.0 L=1000 , 1pc), Overflow hose ((ϕ12 x ϕ 16) L=1000, 1pc), Drainage hose ((ϕ12 x ϕ 16) L=1000, 1pc), Spare fuse (1pc), Operational manual (1 set)					

* Other power supply types are available on request.



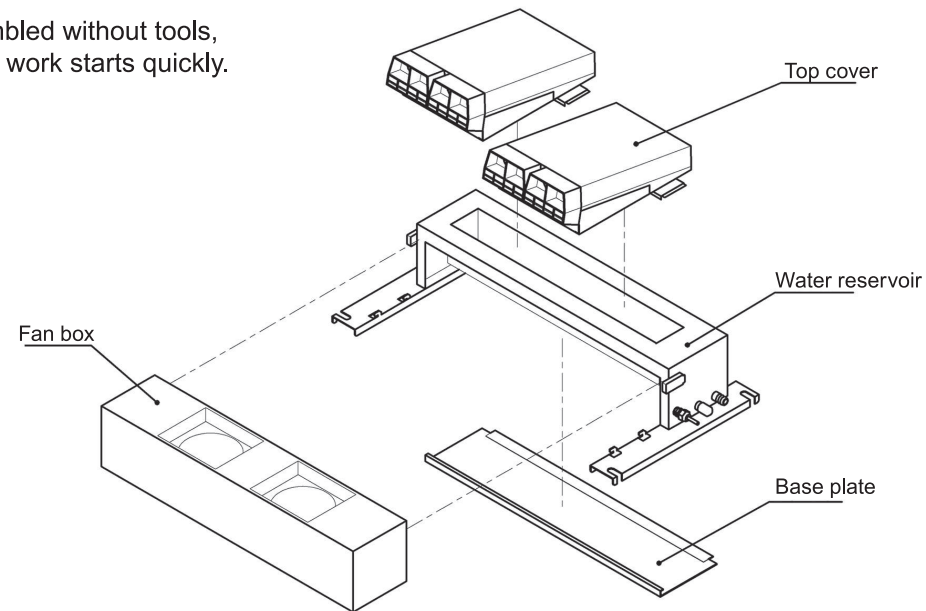
Refrigerated storage



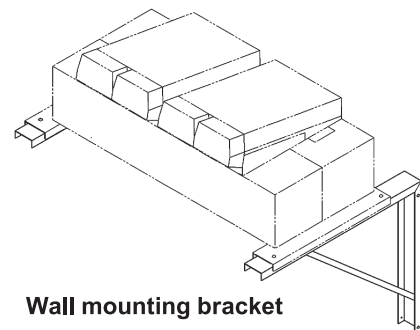
Rice warehouse

Structural drawing

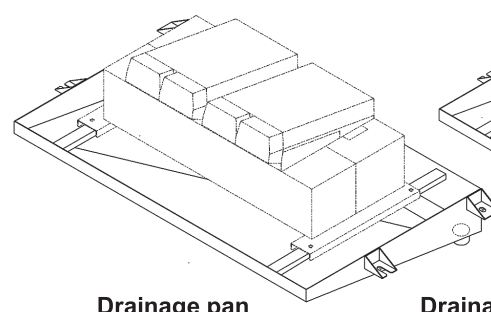
It can be disassembled without tools, so that the service work starts quickly.



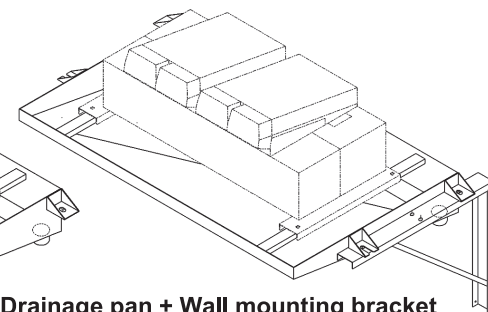
Optional parts



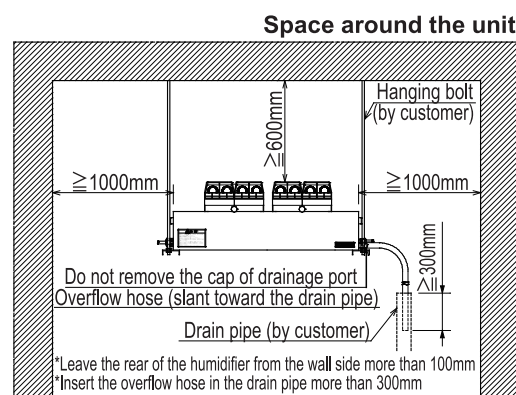
Wall mounting bracket



Drainage pan

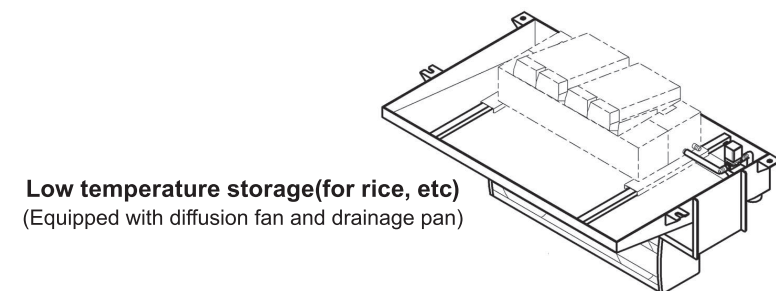


Drainage pan + Wall mounting bracket

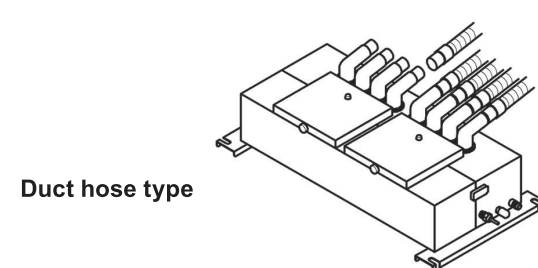


Drainage pan is hanged from the ceiling with hanging bolts*
(*Local procured parts).
It can also be used as wall- mounting type with using the wall mounting bracket.

For special application and specification (Option)



Low temperature storage(for rice, etc)
(Equipped with diffusion fan and drainage pan)



Duct hose type

Other special specifications are available (• Anti-freezing • For fumigation warehouse • Wet-resistance • Proportional control...etc).

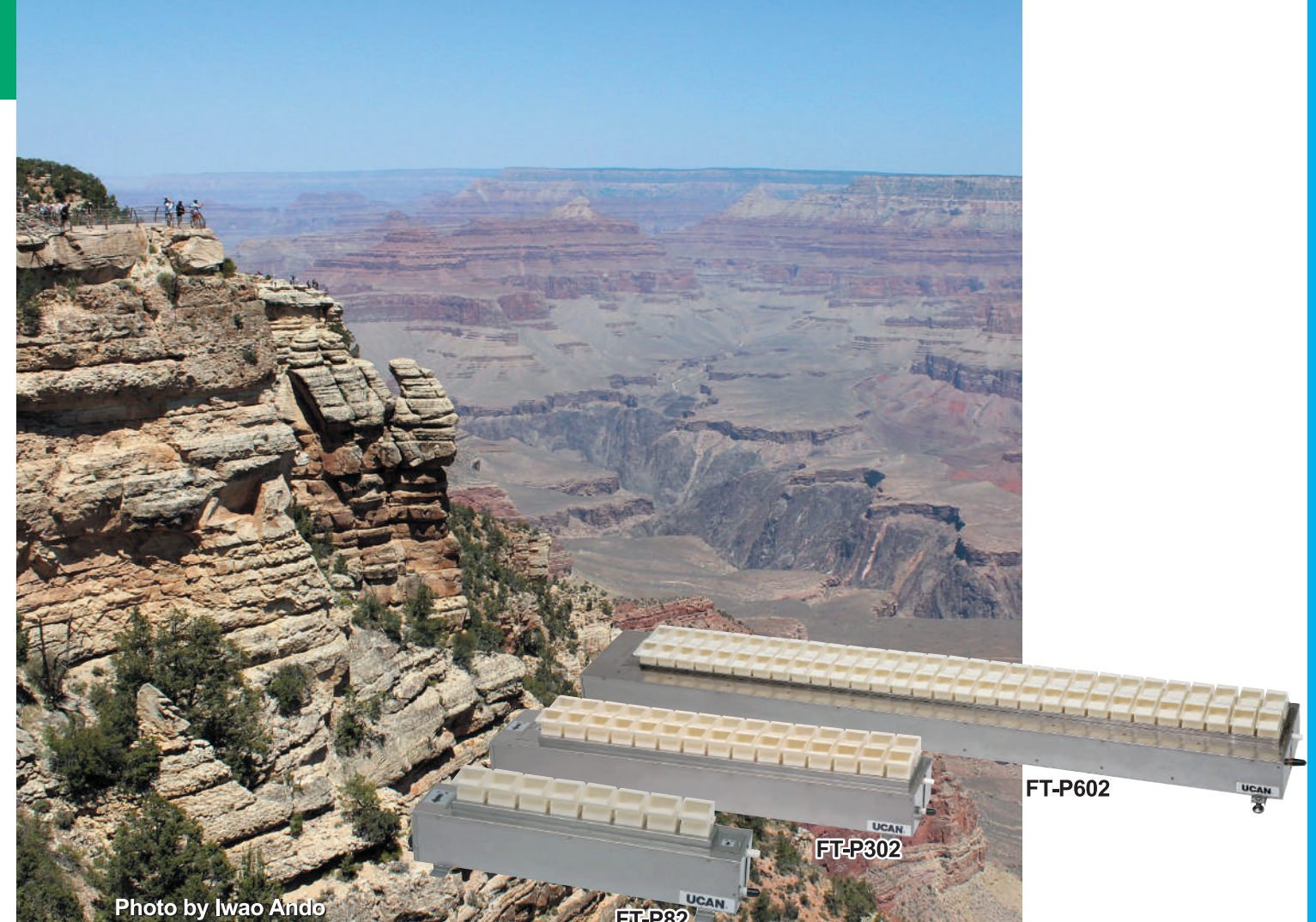


Photo by Iwao Ando

Ultrasonic humidifier

FT-P UVSV Series FT-PD UVSV Series

Available in 1.0...30.0 L / h capacities designed to build into air-conditioning units and in ducts. Comes equipped with germicidal device by UV lamps and a drainage solenoid valve to enhance the hygiene humidification.

Low running cost.
High accuracy control.
Meet the wide applications.

Features

- Extensive 12 models as per capacity.
- Low running cost : Energy consumption is about one-thirteenth that of resistive steam humidifier.
- Only half of water usage compared with evaporative humidifier.
- Quiet operation : No motor, pump and fan are used.
- FT-PD series have indicator lamps in the transformer box. It shows the status of operation.

Applications

- To be incorporated into all-in-one air-conditioning systems, air-handling unit and in-duct, etc
- Best suited for use in offices and factories where much heat is generated

Standard Dimensions(mm) Drawings for CE Compliance, please contact us.

FT-P/PD22...162UVSV

FT-P/PD242/302UVSV

FT-P/PD482/602UVSV

FT-P Series Transformer box

FT-P22...122

FT-P142...302

FT-PD Series Transformer box

FT-PD22~602

FT-P482/602

Model	Measurement	
	L	P
FT-P/PD22 UVSV	230	130
FT-P/PD42 UVSV	340	240
FT-P/PD62 UVSV	450	350
FT-P/PD82 UVSV	560	460
FT-P/PD102 UVSV	670	285(×2)
FT-P/PD122 UVSV	780	340(×2)
FT-P/PD142 UVSV	890	395(×2)
FT-P/PD162 UVSV	1000	450(×2)
FT-P/PD242 UVSV	780	340
FT-P/PD302 UVSV	945	423
FT-P/PD482 UVSV	1480	690
FT-P/PD602 UVSV	1810	855

In-duct

All-in-one A/C

Model (PD UVSV)	Measurement(mm)		
	A	B	C
FT-PD22...162	308	332	169
FT-PD242...302	348	372	202
FT-PD482...602	375	399	168.5

Specifications

Model FT - UVSV	P/PD22	P/PD42	P/PD62	P/PD82	P/PD102	P/PD122	P/PD142	P/PD162	P/PD242	P/PD302	P/PD482	P/PD602
Capacity (L / h)	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	12.0	15.0	24.0	30.0
Power supply	1 ϕ 2W AC230V*											
Power consumption (VA)	92	155	217	285	348	410	479	541	909	1046	1545	1926
No. of oscillators (pcs)	2	4	6	8	10	12	14	16	24	30	48	60
Weight (kg)	Unit	3.4	4.2	5.0	5.9	6.6	7.5	8.5	12.0	14.0	22.5	23.5
	Trans.box	3.3	3.9	8.0	9.0	9.3	10.4	10.5	15.5	18.5	22.0	23.0
Water supply system	Automatic water supply system with float switch and water supply solenoid valve											
Water quality	Tap water, Pure water or R.O. treated water (1...20μS/cm) We recommend pure water to prevent white powder from producing.											
Water supply pressure	0.03...0.5MPa (0.3...5.0 kgf / cm²)											
Control system	On / Off control, Proportional control (Option)											
Ambient condition	5...40℃ (No freezing), Max.90%RH											
Replacement of oscillator	At about every 5,000 cumulative hours of operation											
Operational status by indicator lamps (for PD series)	Power supply, Operation, Water supply, Water depletion, Overflow											
Safety equipment	Device to prevent waterless operation, Fuse to prevent overcurrent, Thermostat to prevent water overheating (cutoff at 55℃), Surge filter											
Standard accessories	Transformer box (1 pc), Strainer (Rc1/2, 1pc), Water supply tube (ϕ6.0 L=1000, 1pc), Overflow hose ((ϕ12 x ϕ16) L=1000, 1pc), Drainage hose ((ϕ12 x ϕ16) L=1000, 1pc), Spare fuse (1 pcs), Rubber pad for installation of the unit (4...6 pcs), Operational manual (1 set)											

* Other power supply types are available on request.



Ultrasonic humidifier

FT-N UVSV Series

Compact-sized humidifiers available in 0.5, 1.0 and 1.5 L/h capacities designed for easy installation into all sorts of equipments 10... 30 m³ .
With various brackets (option), this model can be installed either inside the host equipment or outside*.
Comes equipped with germicidal device by UV lamp and drainage solenoid valve to enhance the hygiene humidification.
*In the latter case, the interior is humidified through nozzles.

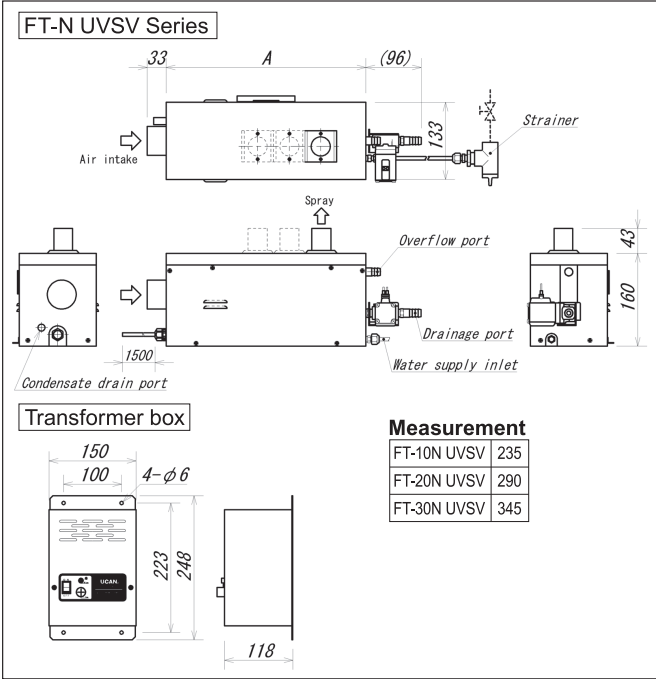
Features

- Functional installation.
- Equipped with drainage mechanism. Even it sucks misty air and condensation occurs around the fan, it drains externally. This precludes any effects on the electrical part from condensation.
- Many optional parts are available : air filter, mounting brackets, drain pan, and nozzle brackets.
- Duct hose to pinpoint the direction of spraying of mist toward the targeted area.

Applications

- Refrigerated storages for fruits and vegetables
- Wine cellars
- Food processing machineries
- Storages for cut flowers
- Mushroom culture
- Small-sized air conditioning units

Standard Dimensions(mm) Drawings for CE Compliance, please contact us.



Factory



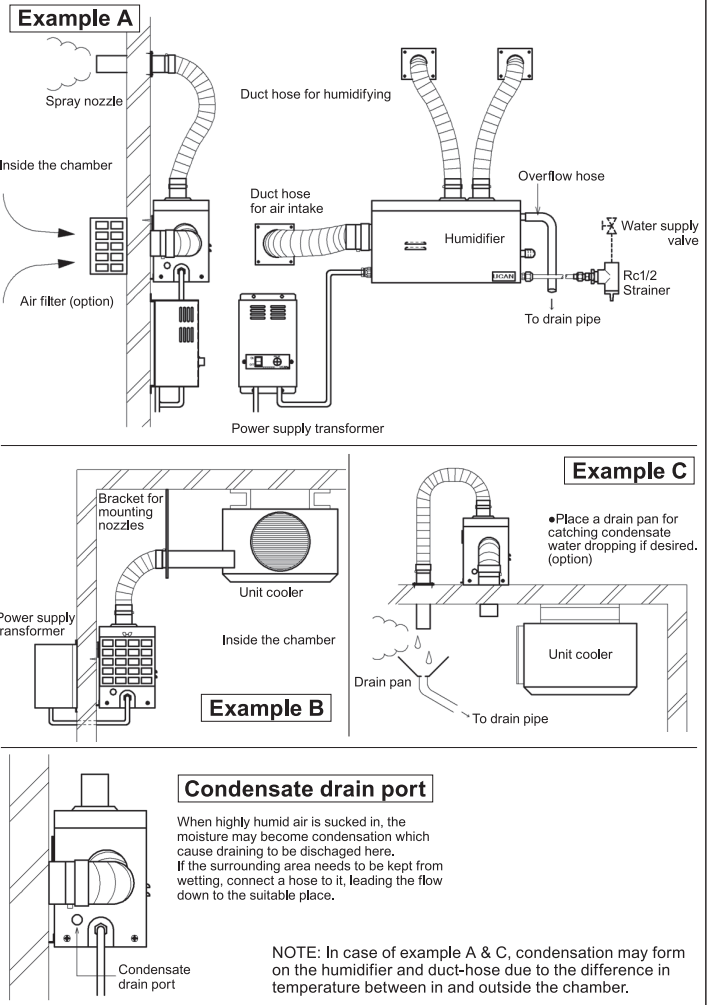
Wine cellar

Specifications

Model		FT-10NUVSV	FT-20NUVSV	FT-30NUVSV
Capacity (L / h)		0.5	1.0	1.5
Power supply		1 ϕ2W AC230V*		
Power consumption (VA)		70	108	140
No. of oscillators (pcs)		1	2	3
Weight (kg)	Unit	5.5	6.5	7.5
	Trans.box	2.5	5.1	5.0
Air volume (m³ / min)		0.5 / 0.6 (50 / 60 Hz)		
Water supply system		Automatic water supply system with float switch and water supply solenoid valve		
Water quality		Tap water, Pure water or R.O treated water (1...20µS/cm) We recommend pure water to prevent white powder from producing.		
Water supply pressure		0.03...0.5MPa (0.3...5.0 kgf / cm²)		
Control system		On / Off control, Proportional control (Option)		
Ambient condition		5...40°C (No freezing), Max.90%RH		
Replacement of oscillator		At about 5,000 cumulative hours of operation		
Safety equipment		Device to prevent waterless operation, Fuse to prevent overcurrent, Thermostat to prevent water overheating (cutoff at 55 °C), Surge filter		
Standard accessories				
Humidifying nozzle (ϕ32 L=120, ABS tube)		1pc	2pcs	3pcs
Air suction pipe (ϕ50 L=160, ABS tube)		1pc		
Duct hose (ABS tube)	Blow(ϕ32 L=440)	1pc	2pcs	3pcs
	Suction(ϕ50 L=380)	1pc		
Hose band	Blow(ϕ38)	2pcs	4pcs	6pcs
	Suction(ϕ58)	2pcs		
Others		Transformer box (1 pc), Strainer (Rc1/2, 1pc) Water supply tube (ϕ6.0 L=1000, 1pc), Overflow hose((ϕ12xϕ16) L=1000mm,1pc), Drainage hose((ϕ12xϕ16) L=1000mm,1pc), Condensate drain hose((ϕ10 xϕ12) L=1000mm,1pc), Mounting hook (1 set (with tapping screw, 2pcs)), Spare fuse (1 pc), Operational manual (1 set)		

29 * Other power supply types are available on request.

INSTALLATION EXAMPLE



Ultrasonic humidifier

Green Mister
FT-420S(SC1) UVSV
FT-520S(SC1) UVSV

For open showcase available in 0.5...2.5 L/h capacities. Supplies ample mist to every corner of the showcase to keep the products freshness and reduces distress goods. Comes equipped with germicidal device by UV lamps and a drainage solenoid valve to enhance the hygiene humidification.

Rich moisture has Rich benefits.

FT-420S(SC1) UVSV / 520S(SC1) UVSV

Applications For placing on the top of 6ft and 8ft (1.8m to 2.4m) wide open showcase.
FT-420S(SC1) UVSV...6ft (1.8m) wide case FT-520S(SC1) UVSV...8ft (2.4m) wide case

Features

Nozzles connect to the showcase duct.

Bypass keeps the cold and humid air in the showcase from effecting the electrical part while the unit is not operating.



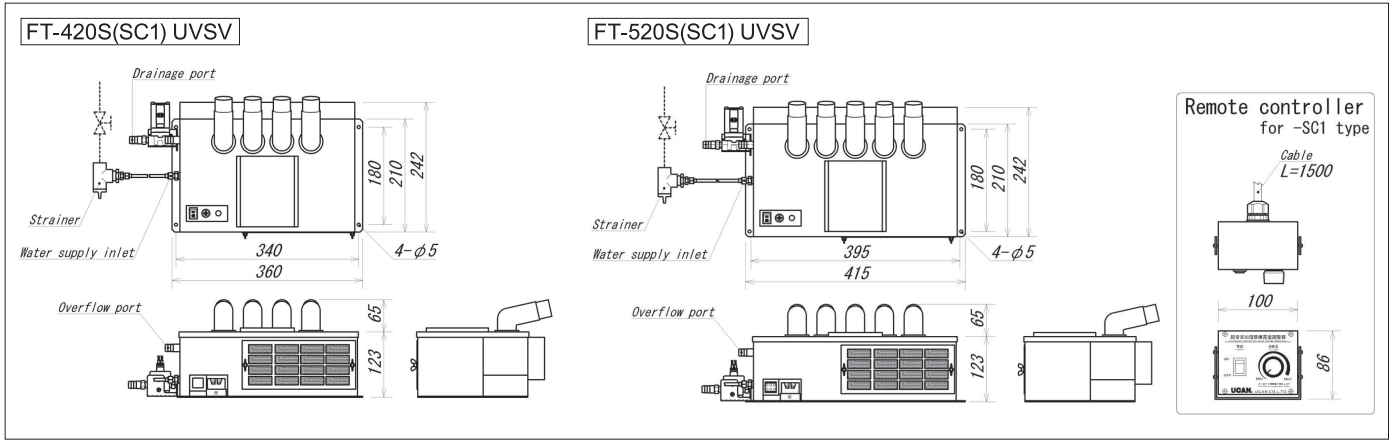
Open showcase for vegetables

Duct hose connection ports can be turned around 360°to facilitate the installment.

SC 1 types are equipped with a remote controller that makes to spray the mist at stepless level.

Air filter protects the unit from dust.

Standard Dimensions(mm) Drawings for CE Compliance, please contact us.



Specifications

Model (Green Mister)	FT-420SUUVSV	FT-420SC1UUVSV	FT-520SUUVSV	FT-520SC1UUVSV
Capacity (L / h)	2.0	0.5...2.0	2.5	0.5...2.5
Power supply	1 ϕ 2W AC230V*			
Power consumption (VA)	179		219	
No. of oscillators (pcs)	4		5	
Air volume (m³ / min)	0.6 / 0.55 (50 / 60Hz)			
Operating weight (kg)	8.0	8.5	9.0	9.5
Water supply system	Automatic water supply system with float switch and water supply solenoid valve			
Water quality	Tap water, Pure water or R.O. treated water (1...20µS/cm) We recommend pure water to prevent white powder from producing.			
Water supply pressure	0.03...0.5MPa (0.3...5.0 kgf / cm²)			
Control system	On / Off control			
Ambient condition	5...40℃ (No freezing) , Max.90%RH			
Replacement of oscillator	At about every 5,000 cumulative hours of operation			
Safety equipment	Device to prevent waterless operation, Fuse to prevent overcurrent, Thermostat to prevent water overheating (cutoff at 55℃) , Surge filter			
Standard accessories				
Remote controller	—	○	—	○
Spray nozzle	4pcs		5pcs	
VP-25 pipe	L=300, 2pcs		L=450, 2pcs	
Duct hose (ϕ 32)	L=440, 2pcs / L=630, 2pcs		L=340, 1pcs / L=440, 2pcs / L630, 2pcs	
Hose band (ϕ 38)	8pcs		10pcs	
Tapping screw	20pcs		24pcs	
Others	Strainer (Rc1/2, 1pc), Water supply tube (ϕ 6.0 L= 1000, 1pc), Overflow hose ((ϕ 12 x ϕ 16) L= 1000, 1pc), Drainage hose((ϕ 12 x ϕ 16) L= 1000, 1pc), Spare fuse (1 pc), Operational manual (1 set)			



Salad bar



Open showcase for fresh fishes



FT-40FSC1

Ultrasonic humidifier

FT-40FSC1UVSV

Ultrasonic humidifier for flat type open showcase available 0.5...2.0 L/h capacities. Supplies fine mist to showcase, keeping freshness of products. It has a visual effect of impressing freshness of stored foods, and stimulates customer's desire to purchase. Comes equipped with germicidal device by UV lamp and a drainage solenoid valve to enhance the hygiene humidification.

It embraces with mist gently.

Features

- Unit is installed on the top board of flat type open showcase and flows the mist air directly. It does not need to make holes for inserting the spray nozzles.
- The mist prevents fresh products from drying and makes stored foods fresh.
- It comes with the mist volume controller. Can adjust the amount of mist as required.
- The exterior of unit is made of stainless steel by applying hairline finish which has massiveness and fits the atmosphere of the showcase.
- User-friendly construction: It can be dismantled without any tool, so easy to clean the water reservoir and to do the service work.

Specifications

Model	FT-40FSC1 UVSV	
Capacity (L/h)	0.5...2.0	
Power supply	1φ230V*	
Power consumption (VA)	147	
No. of oscillators (pcs)	4	
Air volume (m³/min)	0.17	
Operating weight (kg)	Unit	6.1
	Trans. box	4.8
Water supply system	Automatic water supply system with float switch and water supply solenoid valve	
Water Quality	Tap water, Pure water or R.O. treated water (1...20 µS/cm)	
Water supply pressure	0.03...0.5 MPa (0.3...5.0 kgf/cm2)	
Control system	On / Off control, Proportional control (Option)	
Ambient condition	5...40℃ (No freezing), Max. 90%RH	
Replacement of oscillator	At about every 5,000 cumulative hours of operation	
Safety equipment	Device to prevent waterless operation, Fuse to prevent overcurrent, Thermostat to prevent water overheating (cutoff at 55 °C), Surge filter	
Standard accessories	Transformer box (1pc), Mist volume controller (1pc), Strainer (Rc1/2, 1pc), Water supply tube (φ6.0 L=1000), Overflow hose (φ12 x φ16 L=1000, 1pc), Drainage hose (φ12 x φ16 L=1000mm, 1pc), Mounting hook (1 pc with fixing screws), Screw for adjusting height (M3 x 20, 2pcs, M3 nut, 4pcs), Square fuse (1pc), Operational manual (1 set)	



Flat type open showcase



KIRIPET
FT-M43

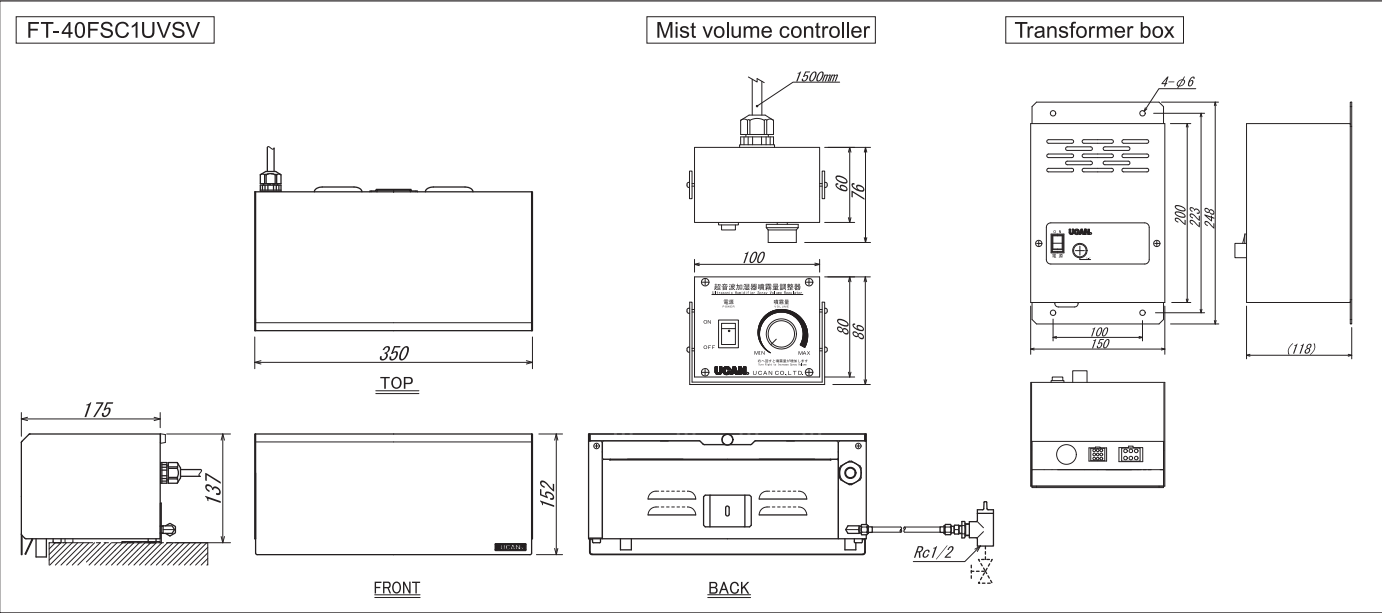
Ultrasonic humidifier

KIRIPET
FT-M43

Portable type available in 3.0 L /h capacity. Widely spray a mist through booster fan to reach a long distance than conventional nozzle type humidifier. Comes equipped with germicidal device by UV lamps to enhance the hygiene humidification.

Functional.
Safe.
Easy to operate.

Standard Dimensions(mm)



Features

- Portable type with wheels, no piping work needed.
- Booster fans spread the mist extensively and make it mix into the air quickly.
- Height of unit can be adjusted precisely with adjuster.
- Comes with 2 large-sized water tanks (13L × 2pcs). One time filling gives 8 hours continuous humidification.
- User friendly display panel.
- Stainless steel body that is durable and free from rust.

Applications

- **Offices** and factories where much heat is generated. Suitable for dust and static protection
- **Factories** of printing, textile, packaging, woodwork and film, etc. It is also useful for spot humidifying
- **Food processing** for cheese, brewery, distilled liquor and drying process of noodles, etc
- **Horticultural spray** for orchid, flowers and ornamental plant
- **Artificial cultivation** for various mushrooms



KIRIPET FT-M43



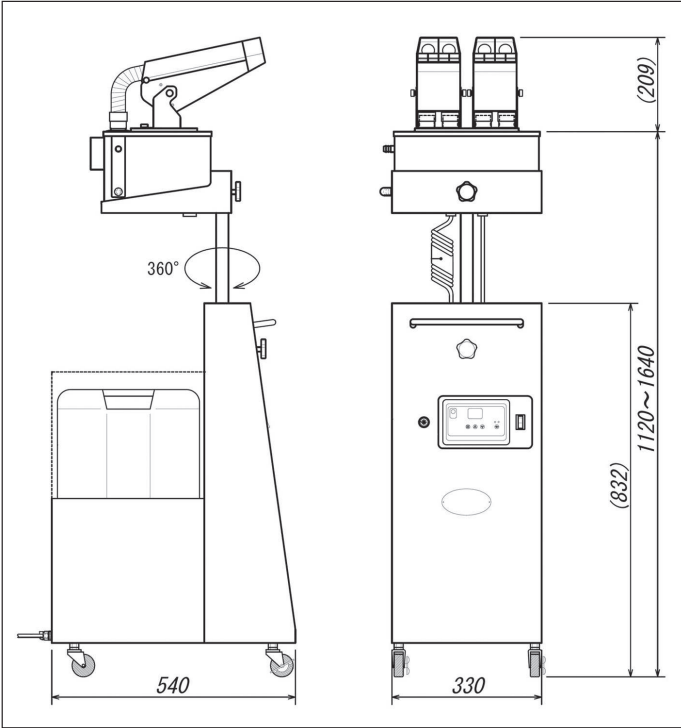
Garment factory



Restaurant

Standard Dimensions(mm)

Drawings for CE Compliance, please contact us.



Specifications

Model	KIRIPET FT-M43
Capacity (L / h)	3.0
Power supply	1 ϕ 2W AC230V *
Power consumption (VA)	266
No. of oscillators (pcs)	4
Operational weight (kg)	61
Air volume (m ³ / min) [50/60Hz]	Primary side : 0.5 / 0.6 Booster side : 1.09 × 2
Water tank capacity	13 L × 2pcs
Water quality	Tap water, Pure water or R.O. treated water (1...20μS/cm). We recommend pure water to prevent white powder from producing.
Control system	On / Off control
Ambient condition	5...40℃ (No freezing), Max.85%RH
Replacement of oscillator	At about every 5,000 cumulative hours of operation
Safety equipment	Circuit breaker to prevent overcurrent, Device to prevent waterless operation, Thermostat to prevent water overheating (cutoff at 55℃), Surge filter
Standard accessories	Overflow hose ((ϕ12 x ϕ16) L=1000, 1pc), Water tank (13L x 2 pcs), Water supply coil tube (1 pc), Operational manual (1 set)

*Other power supply types are available on request.



FT-W41

Ultrasonic humidifier

FT-W41 UVSV
FT-W41S UVSV

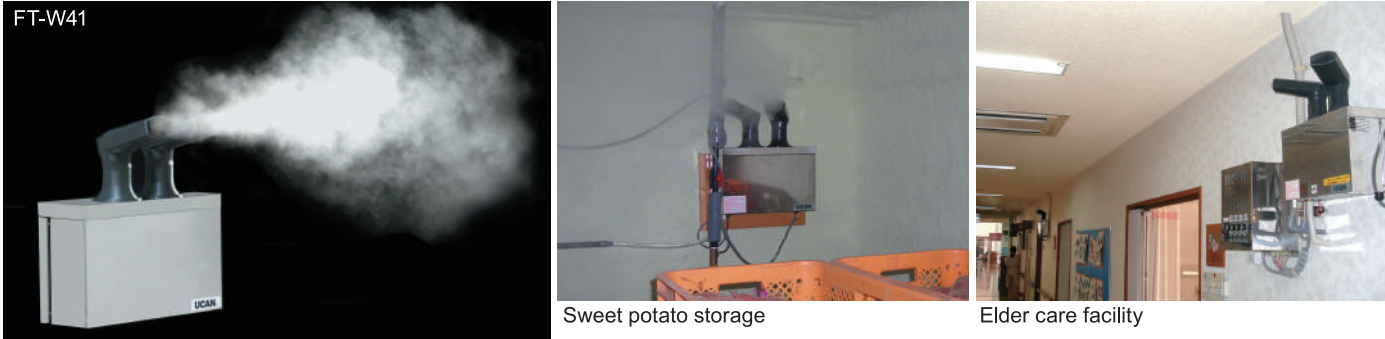
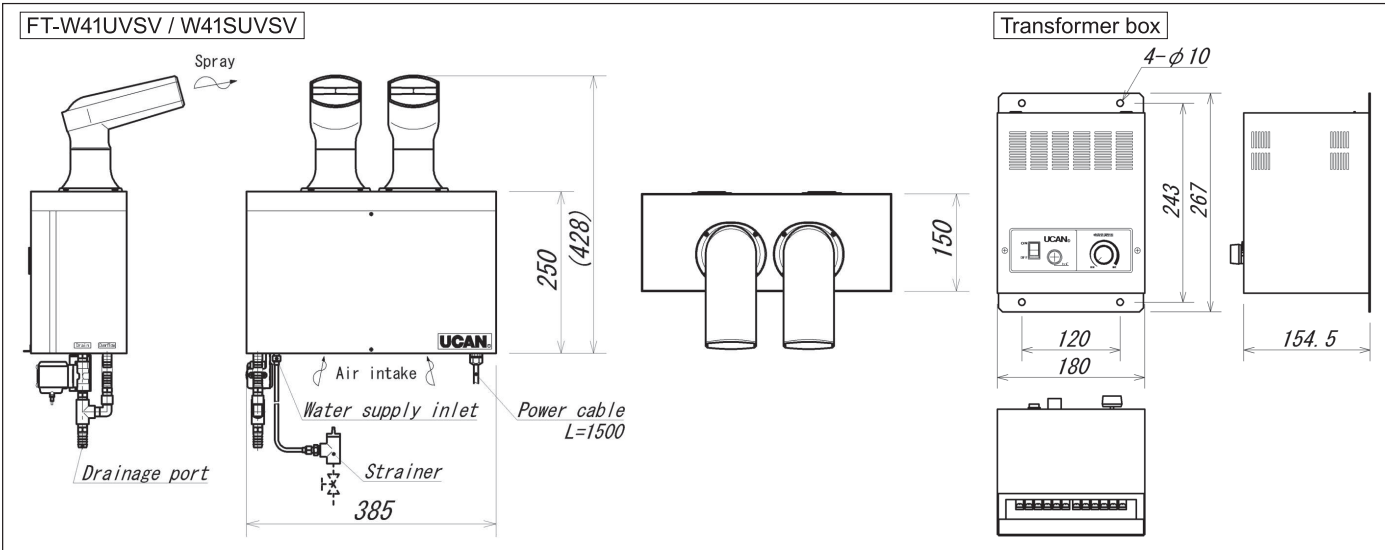
Available in 1.7(S type) and 2.4 L/h capacities designed to mount on the wall. Comes equipped with germicidal device by UV lamp and drainage solenoid valve to enhance the hygiene humidification.

Built-in high power fans ensure to spray any targeted area.

Features

- Rotatable spray nozzles which can spray any targeted area.
- Built-in powerful fans ensure to spray far off to every corner of storage.
- Spray the ultrafine particle mist which does not drop down.
- It comes with the mist volume controller. Can adjust the amount of mist as required.
- Easy to install on the site.

Standard Dimensions(mm)



Specifications

Model	FT-W41UVSV	FT-W41SUVSV
Capacity (L / h)	2.4	1.7
Power supply	1φ2W AC230V*	
Power consumption (VA)	250	196
No. of oscillators (pcs)	4	
Weight (kg)	Main humidifier unit 8.6	
	Trans.box 6.5	4.2
Air volume (m ³ / min)	6.6 / 7.4 (50 / 60 Hz)	
Water supply system	Automatic water supply system with float switch and water supply solenoid valve	
Water supply pressure	0.03...0.5MPa (0.3...5.0 kgf / cm ²)	
Water quality	Tap water, Pure water or R.O. treated water (1...20μS/cm) We recommend pure water to prevent white powder from producing.	
Control system	On / Off control, Proportional control (Option)	
Ambient condition	5...40℃ (No freezing), Max.90%RH	
Replacement of oscillator	At about every 5,000 cumulative hours of operation	
Safety equipment	Device to prevent waterless operation, Fuse to prevent overcurrent, Thermostat to prevent water overheating (cutoff at 55℃), Surge filter	
Standard accessories	Transformer box (1 pc), Strainer (Rc1/2, 1pc), Water supply tube (φ 6.0 L=1000, 1pc), Overflow hose ((φ 12 x φ 16) L=1000, 1pc), Drainage hose ((φ 12 x φ 16) L=1000, 1pc), Spare fuse (1pc), Mounting hook (1 set (with tapping screw, 2pcs)), Operational manual (1 set)	

37 * Other power supply types are available on request.

Applications

- Refrigerated storages for vegetables, fruits and grains
- Vegetables resuscitation storages in supermarkets
- Mushroom cultivations
- Factories for tobacco, printings, textiles, electronic components, food manufacturings, etc
- Test rooms, computer rooms, museums, clean rooms, etc

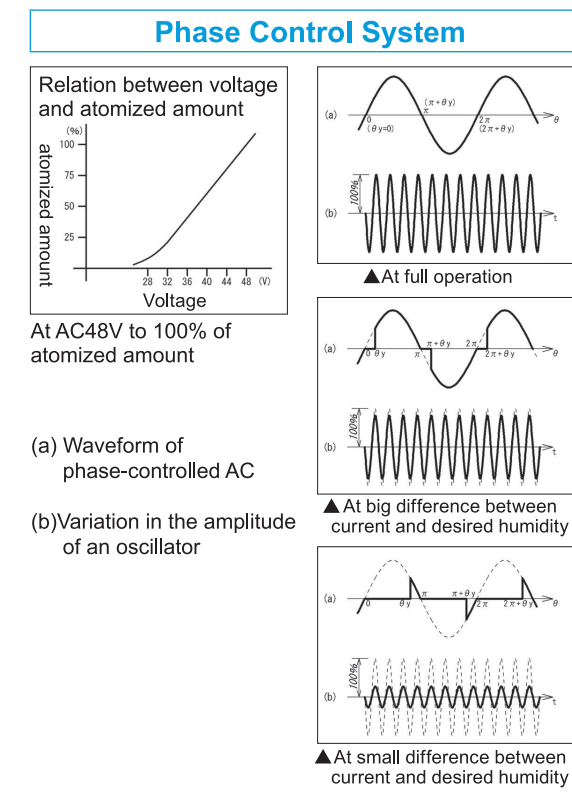


Proportional control system

UCR unit

Phase Control System UCR-unit

Phase control system offers the best possible precision control for ultrasonic humidification. Mist flow is linearly controlled with operating signals that cause variation of voltage which in turn changes the amplitude of oscillators in an ultrasonic humidifier. It ensures continuous operation and smooth proportional control.



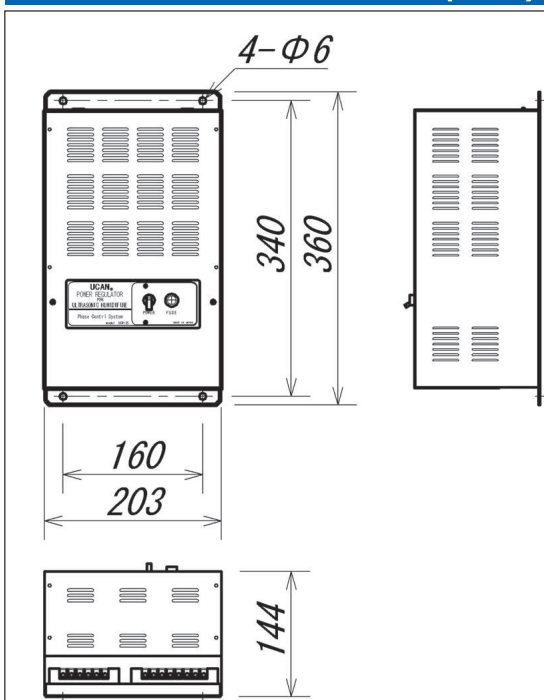
Features

- Relative humidity is linearly controlled with operating signals that cause variation of voltage which in turn continuously changes the volume of mist output.
- It is an ideal proportional control system that makes tracing operation smoother than On/Off system. It is available for almost all of UCAN ultrasonic humidifier models for phase control operation.
- The built-in switch for selection of input signals makes it possible to use different operating signals shown below:
Input signals : 0...20VDC, 0...10VDC, 0...135Ω, 4...20mA

Necessary equipments for phase-control

- For proportional control with electric current or voltage as an operating signal, it needs to have a humidifier, a UCR unit, a digital humidity controller, DC power supply and humidity sensor.
- For proportional control with resistance signal of 0...135Ω as an operating signal, it needs to have a humidifier, a UCR unit and a 0...135Ω humidity controller. NOTE: Humidity sensor and humidity controller are local procured parts.

Standard Dimensions(mm)



*Drawings for CE Compliance, please contact us.

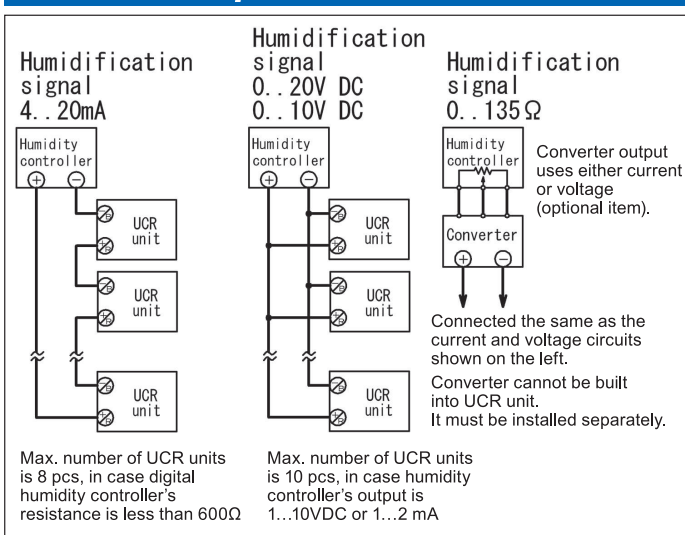
Specifications

Model	UCR-2503, 2508, 2510, 2515, 2525
Power supply	AC53V (50 / 60Hz)
Power frequency	50 / 60Hz (changed by a built-in switch)
Humidification signal (4 points switching) with dip switch	1. 0...20VDC input resistance 600kΩ 2. 0...10VDC input resistance 300kΩ 3. 0...135Ω 4. 4...20mA receiver resistance 62Ω
Range of output voltage	0...48 VAC
Control system	Phase control by thyristor with soft start
Power control function	0...100% (internal power volume)
Ambient condition	1...40℃, Max.90% RH (No dew condensation)
Weight	5.5kg
Safety equipment	Protection against over-current by use of a circuit protector
Standard accessories	VCTF cable (L=1800, 1pc), Tapping screw for installation (4 pcs), Fuse (2A, 1 pc), Operational manual (1set)

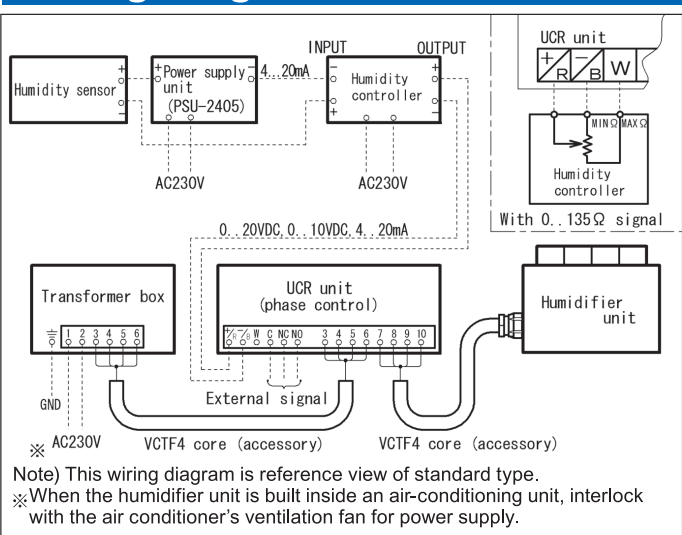
Electric Current by the Models

Model	Max. allowable current (A)	Max. of Oscillators (sets)
UCR-2503	3	4
UCR-2508	7.5	8
UCR-2510	10	12
UCR-2515	15	16
UCR-2525	25	30

Use of Multiple Number of UCR units



Wiring Diagram



Evaporative humidifier

Evaporative humidifiers are classified as a water (adiabatic) humidification type, same like as ultrasonic humidifier.

Our evaporative humidifiers adopt a down-flow permeation system in which water at ordinally temperature drips onto the media. Thanks to the unique self-cleaning function, there is no scattering of white powder even without special water treatment, unlike other humidifier types have this problem.



3 advantage points of evaporative humidifier

Energy-saving

It occurs the moisten air by vaporizing using only the sensible heat of the air, so no direct energy is required for humidification.

No condensation occurs

In principle, the relative humidity does not exceed 100% with the evaporative humidifier's function, so condensation does not occur.

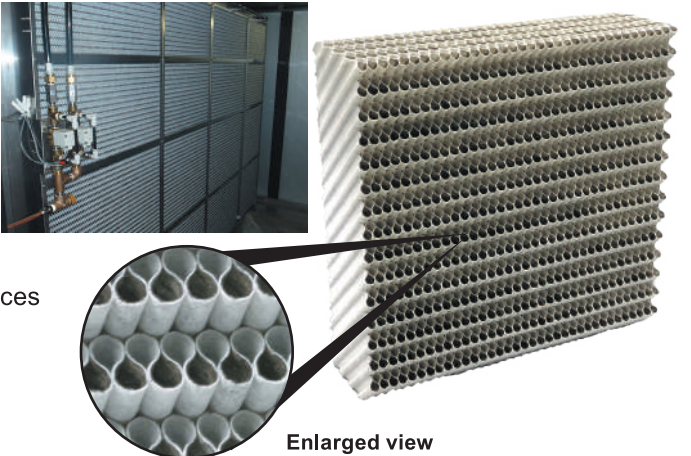
Low maintenance

Simple structure with minimum disruption.

UC-CORE

Evaporative element (media) UC-CORE, it uses the water-absorbent polymer composite fiber (honeycomb laminated / adhesive type) and uses a non-polluting material that complies with the domestic food sanitation law. It passed mold resistance test, antibacterial test of textile products, and flame retardancy test, does not contain harmful substances according to the RoHS directive, and does not cause secondary fire or generate toxic gas.

There is no porous material that takes in odors. It has a structure that is easily released even if it adheres to the surface, and also uses a material with a low risk of odor generation.



Features of UC-CORE

High shape intensity

UC Core adopts a honeycomb laminated and adhesive type that can maintain high shape retention strength. It makes less susceptible to damage and buckling.

Implement of air cleaning effect

Thanks to its unique structure, it makes the clean humidified air. During the operation, it captures dust suspended in the air and odors effectively then expels them outside the unit with draining water.

High face velocity

UC-CORE can be used at a surface velocity of Max. 4.5 m/s. It helps reduce the running costs of humidifiers and air conditioner.

High saturation efficiency

It has excellent water absorption properties, so that it allows the evaporation area of the wet media to be large, achieving high saturation efficiency. It is possible to humidify to high relative humidity ranges that were not possible with conventional water spray humidifiers. In addition, since the saturation efficiency remains constant even when the inlet air temperature is low, the performance can be maintained according to the design conditions.

Secured safety

The material used for UC-CORE complies with the domestic food sanitation act. Furthermore, it has passed the mold resistance test (JIS Z-2911) and the antibacterial test for textile products (JIS L-1902). Its flame retardancy is equivalent to UL94 HF-2, and there is no risk of secondary fires or generation of toxic gases.

NOTES

- The occurrence of odor**
Due to the structure of the media, odors may occur at the beginning of operation and when entering the season. This occurs when the adverse conditions (related to operating conditions, maintenance status, odorous substances contained in the ventilated air, and air quality) overlap. For details, please read the dedicated catalog and instruction manual and carry out appropriate operation and maintenance.
- Performance by evaporative humidifier**
In the case of using the evaporative humidifier in the intermediate seasons, as air cooler, and built in the total heat exchanger, a case study for the operation performance should be conducted to choose the right model. Also, there are cases that the operation performance may be insufficient due to differences between design conditions (room temperature and humidity, humidifier inlet temperature and humidity, outdoor air volume, etc.) and actual operating conditions, or due to the effects of scale adhesion, uneven flow, etc



Evaporative humidifier

DELTA X 600S

Ceiling-installed cassette type evaporative humidifier available 1.3...2.2 kg/h capacities.

It can be fitted into grid ceiling as well as conventional types.

Water flows down the media through the distribution pipe and evaporates by blowing air from the fan. Besides the high functionality, it pursued the hygiene humidification, which comes with automatic flushing system.

Hygienic.
Easy to operate.
Energy saving.

Applications

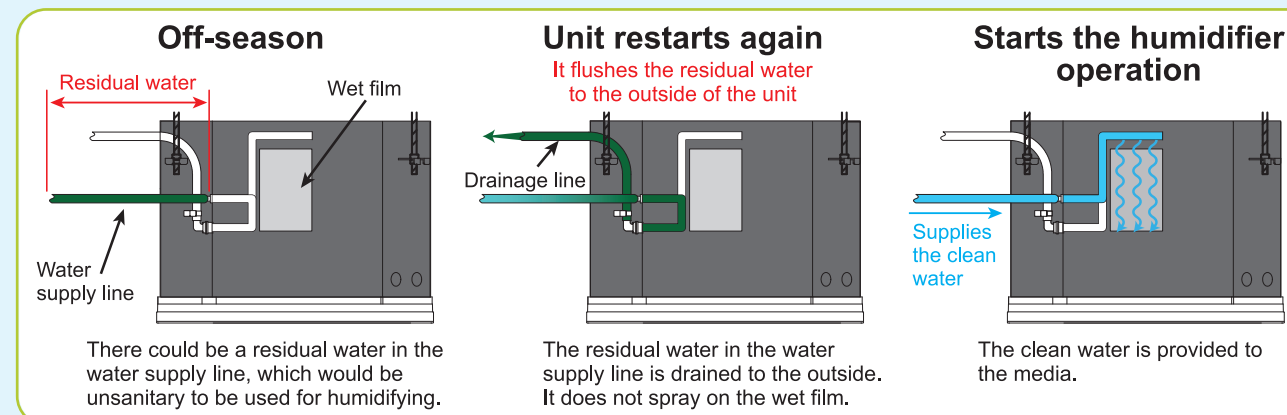
- Office building ● School ● Hospital
- Public and Commerce building
- Computer room ● Elder care facility
- Art museum ● Hotel

DELTA X 600S

Features

● Automatic flushing system

When Delta X restarts again after a certain period of time, it automatically flushes to drain the residual water accumulated in the water supply line without supplying to the media. Always clean water is provided for the humidifier operation.



● Secure hygiene measures

With the automatic flushing system, the following hygiene measures are implemented.

-Cleaning function for media

Before Delta X starts the humidifier operation, the media is washed by passing through water for a certain period of time to be cleaned.

-After-running

When the unit stops operation, it makes the wet media dry.

-Periodical drying function

It performs the drying operation (2 hours) for the media for every 22 hours of continuous operation.

● 2 face panels

The unit can be fitted into the grid ceiling as well as the conventional ceiling. Face panel can be chosen from 2 types of face panel. Designed to blow the air parallel to the ceiling and flow evenly into the room.

● Safety measurements

Equipped with various sensors to prevent water leakage.

If the abnormal water level is detected, the water supply cutoff valve will be activated.

If the event of a disaster happens, the emergency stop signal will work the unit to stop operation immediately.

● No whisker

No materials which produce the whisker are used.

● Equipped with humidistat

Humidistat is built in the main unit and the remote controller (UC-610A).

● Easy maintenance

The media can be taken out instantly by opening the face panel and just pushing the ejector button.



■ A for grid type ceiling



■ B for grid type and conventional type ceiling

Specification

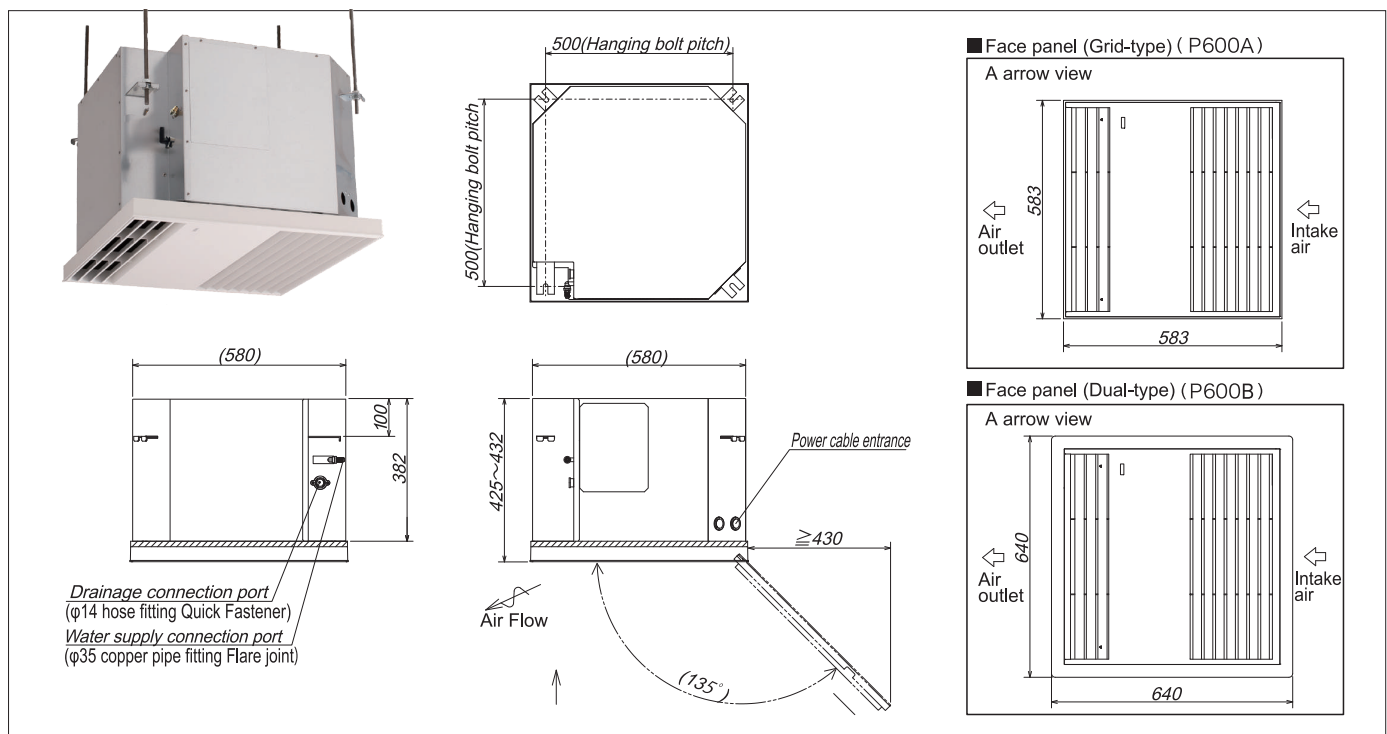
Model	UC-ΔX600S
Humidity capacity *	High: 2.2 kg/h Mid.: 1.6kg/h Low: 1.3 kg/h
Power supply	AC230V (50/60 Hz)
Power consumption	High: 48 W Mid.: 32 W Low: 24 W
Operation sound **	High: 44 dB Mid.: 40 dB Low: 36 dB
Weight	Dry: 28 kg Operating: 35 kg (face pane included)
Water quality	City water (National water quality standards for drinking water must be kept)
Water pressure	0.08MPa~0.5MPa
External output signal	Operation signal output and Alarm signal output (Non-voltage a-contact)
Ambient conditions	5...40°C Max.80% RH (No condensation, No freezing)
Ability of Drainage pump	Head 0.8m 0.6L/min
Number of unit(s) interlock	Up to 9 units (Setting by DIP switch in the main unit is required)

* Intake air condition: 23CDB 40%RH *It measured at anechoic room at 1.5 m positioned from the center of face panel.

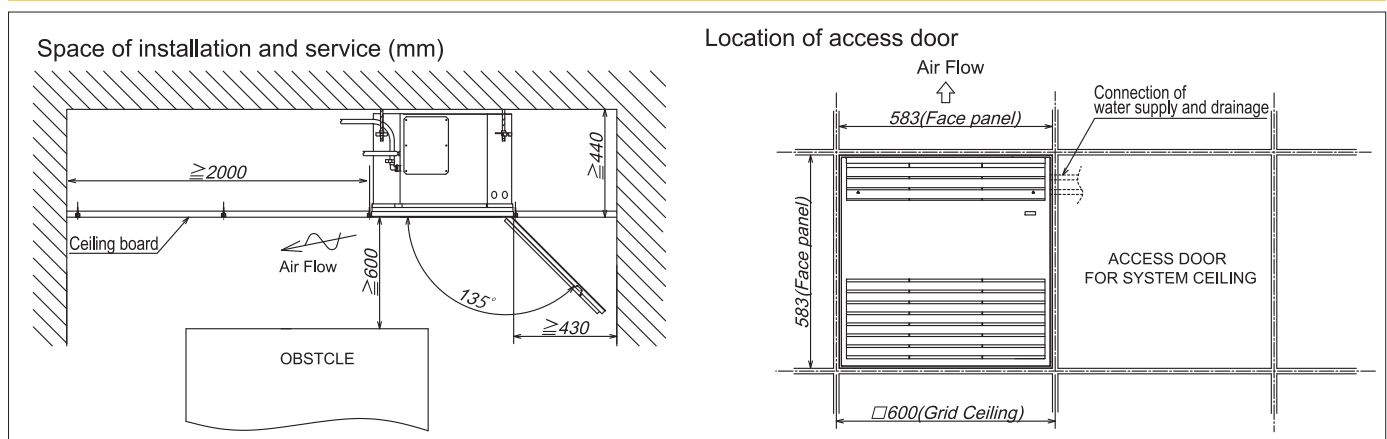
*** Please note that the temperature difference between the installation place and the intake air should be within 10°C.

DELTA X 600S

Standard Dimensions(mm)



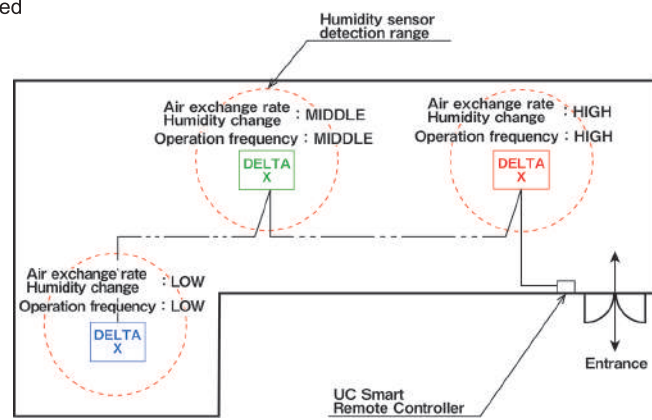
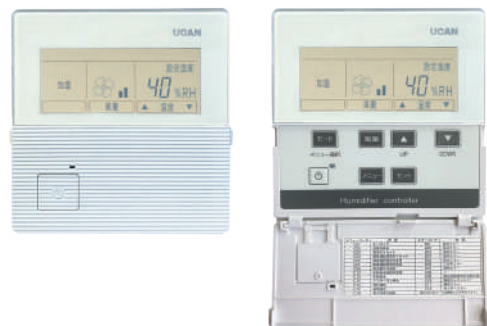
Space for installation and maintenance(mm)



Smart Remote Controller (UC-610A)

It controls several units individually.

Max. 9 units of Delta X can be controlled individually by just 1 smart remote controller. It controls each operation (on/off, humidity setting, and fan speed, etc) as needed at the installed site, leads to save energy. Humidistat is built in the smart remote controller and the humidifier unit. It detects the relative humidity in the installed place and adjust with this remote controller to meet the requested range. When the unit operates abnormally, the unit's number and the related error code are displayed on it. Also when the accumulated operating time reaches 3600 hours, it announces to replace the media.



Evaporative humidifier

UC-EM1 UC-EU1

Water flows down the media made of high absorbent polymeric fiber and is caused to evaporate by the air flow from an A/C fan. Applicable saturation efficiency is 35...85%. It makes clean humidified air as well as works for cooling effect in the room to release high sensible heat. Simple structure and small number of component parts. No oversaturation. No vapor condensation.

Clean surface with cascade.
High quality and high efficiency.
Save energy.

Features

- 1.5...4.5 m/s of face velocities are available.
- High quality media (UC-CORE) has high saturation efficiency by unique development structure.
- The structure of media slopes down on one side so makes it easy to clean the surface with cascade.
- It works air cleaning effect as secondary function.
- Space saving and easy maintenance.
- Low energy consumption.
- Tap water is available. Special water treatment is not required.

Applications

To be incorporated into various A/C systems : Total heat exchanger unit, Air handling unit, fan coil unit type, all-in-one A/C, chamber connected into duct, etc.

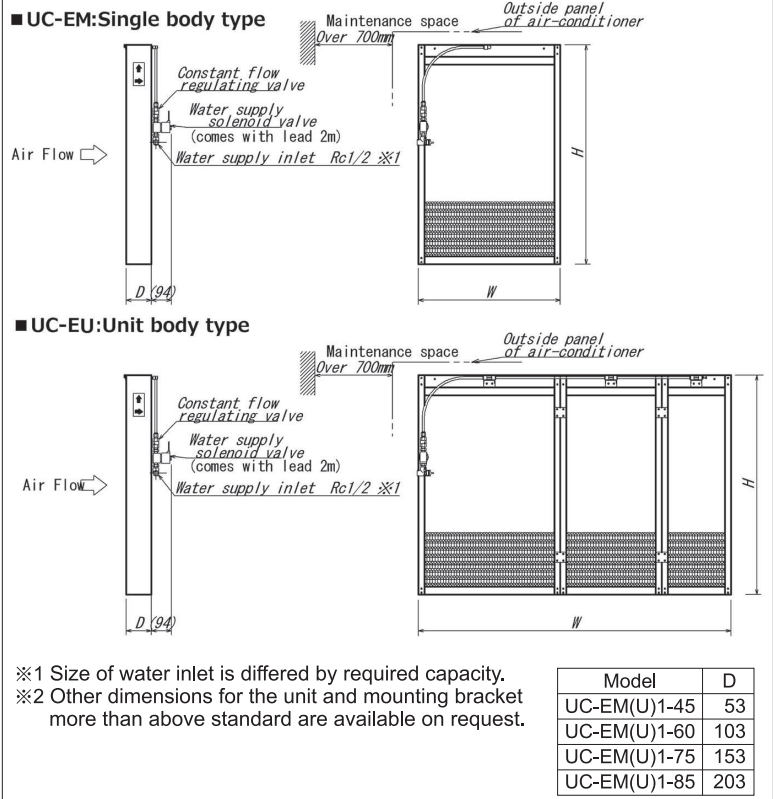


Air handling unit



Air conditioning system

Standard Dimensions(mm)



Specifications

Model		UC-E○1-45	UC-E○1-60	UC-E○1-75	UC-E○1-85
Applicable saturation efficiency		≤35...50%	51...60%	61...75%	76...85%
Applicable face velocity *1		1.5...4.0 m/s	1.5...4.5 m/s	1.5...4.5 m/s	1.5...4.5 m/s
UC-CORE (Media)	Material	High absorbent polymeric fiber (Honeycomb laminated, adhesive composition structure)			
	Heat resisting temperature	90 °C			
	Combustibility	Equivalent to UL94 HF-2			
Sanitation		Anti-bacteria and Mold resistance process. Complied with Food Sanitation Law. Passed JIS-L-1092 (Anti-bacteria test for textile products) Passed JIS-Z-2911 (Mold resistance test)			
Main components		Humidifier module (Element, Sprinkler system, Water supply kit, Body case)			
Tolerant range of operating conditions	Ambient temperature and humidity	Module body : 2...60 °C Water supply kit : 2...50 °C, Max. 90 %RH (No freezing)			
	Water supply temperature	2...40 °C			
	Water supply inlet pressure	0.08...0.7 MPa			
	Water quality	City water (Water quality standards for drinking water must be kept.)			
	Air inlet *2	Air filter which is upper 75% by gravimetric method must be installed.			
Power supply		1φ2W AC230V Other power supply types are available on request.			

※ Cross connection control should be applied. Directly in connection with pipe for city water should be avoided.
*1 It may be less than these values, depending on the operational conditions and the size of humidifier.
*2 Especially it is necessary for outside air conditioner. However it is unnecessary if it has been already incorporated.



Vacuum-suction drainage system

DrainsweeperTM
UC-PL Series

It is new product using an alternative vacuum method to clear drain problems. Strong suction power makes it possible to run off the drainage from air conditioner to outside forcibly and continuously. Limber tubes with φ16 and φ8 mm are used for the drainage piping. It can be installed easily if only there is narrow space. There is no need to concern for the inclination of pipeline and obstacles in the ceiling like the conventional drainage system.

Features

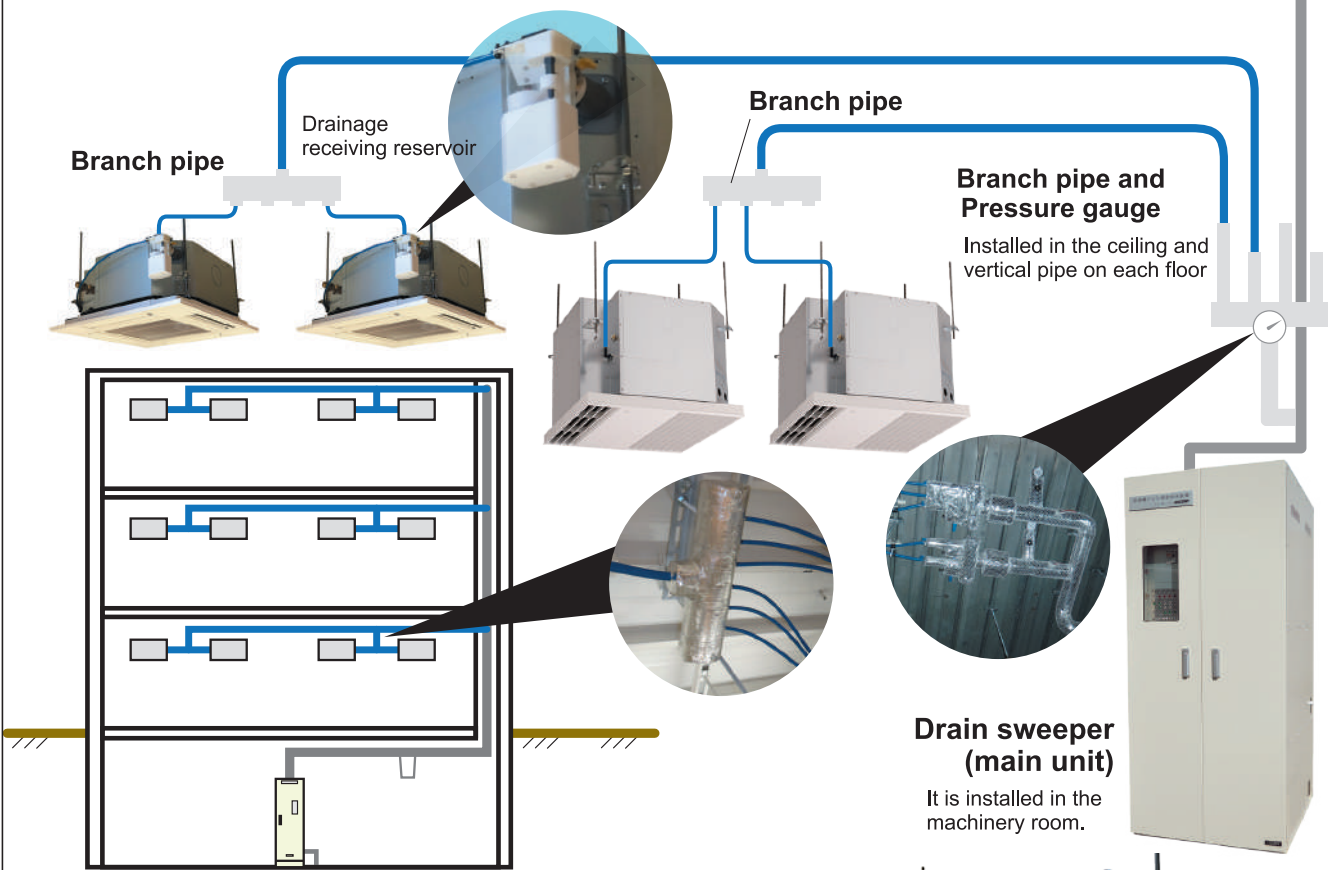
- It vacuum-sucks drainage water from air conditioning unit.
- It also sucks slime generated in the reservoir and the drainage piping. No risk of water leakage caused by jamming as seen in vinyl chloride piping.
- Installation is simple and easy. It reduces the construction cost by shortening the work period.
- Each size of drainage tube is φ16mm and φ8mm. The material is limber so it can be laid easily as long as there is an opening barely large enough to let these small sized tubes through.
- Push in fittings are used for tube-connecting. There is no need to thread-cutting and gluing to connect the drainage piping.
- EXCEED models are equipped with two suction tanks. The drainage treatment capacity is significantly greater than that of lower models, so it can also treat the drainage of an evaporative humidifier* (*Ceiling-installed cassette type Delta X).

Drainsweeper can handle the drainage from several tens of A/C by just single unit.

Max. applicable amount of A/C per 1 Drainsweeper :
EXCEED (PL1100) - 360 units
EXCEED (PL580) - 180 units
JUMBO - 80 units
MEDIUM - 40 units
QUARTER - 25 units

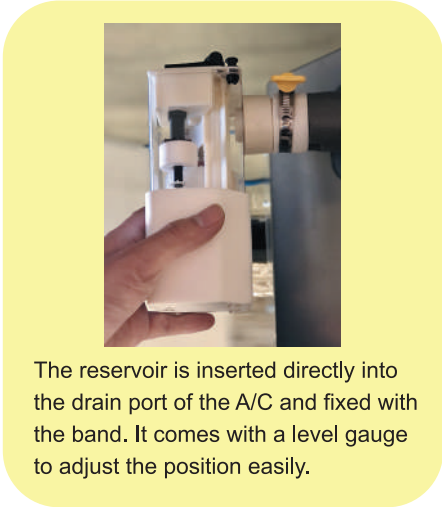
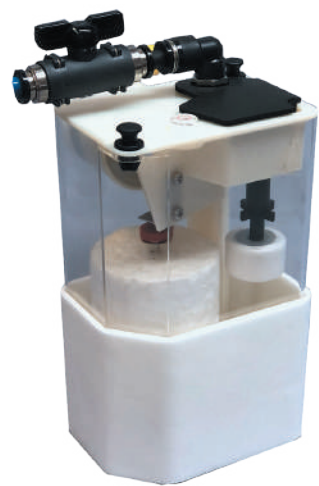
Installation Image

The main unit is installed in the lower part of the building, such as the ground floor and a machinery room.
The pipes are extended through PS plumbing to each floor.
The plumbing tubes are extended through branch pipes from the floor to the air conditioners.
By inserting a branch pipe as necessary, the drainage from multiple air conditioners can be discharged.



Drainage Receiving Reservoir

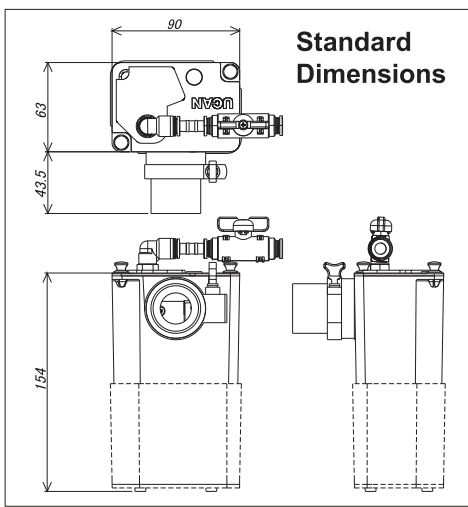
It receives temporarily the drainage water from A/C. When the drainage water is accumulated to a certain level, it is sucked up to the tank in the main unit of Drainsweeper.
By connecting it and A/C with an interlock, it prevents overflow in the unlikely event of an accident. If the problem occurs, A/C will be shut down immediately and the drain discharge will be stopped.



The reservoir is inserted directly into the drain port of the A/C and fixed with the band. It comes with a level gauge to adjust the position easily.

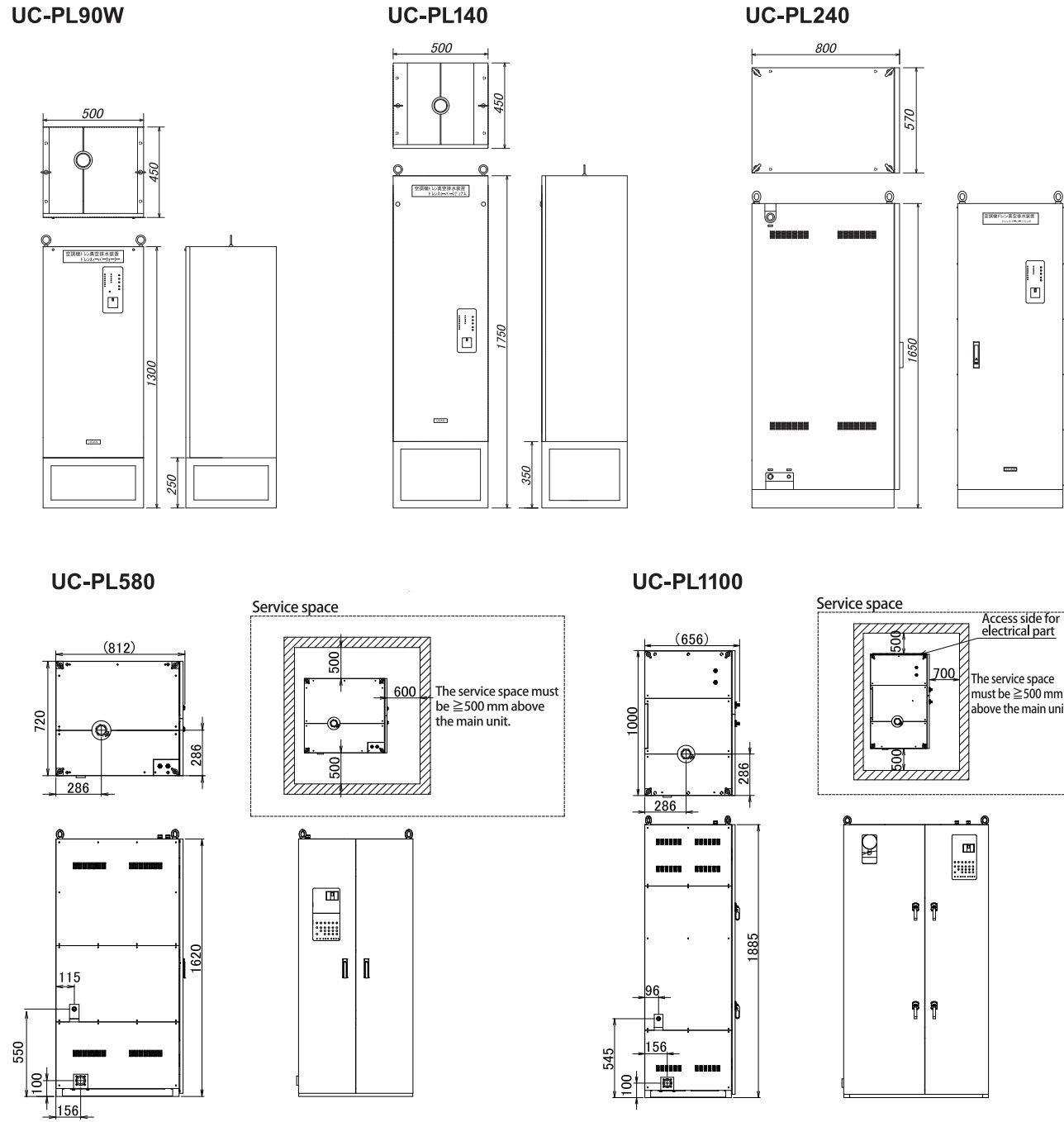


Image of the tank's installation on a cassette type A/C



Standard Dimensions

Standard Dimensions(mm)



Standard Specifications

Model	UC-PL90W	UC-PL140W	UC-PL240W	UC-PL580	UC-PL1100
Regular discharge capacity (L/h)	63	90	168	400	770
Power supply	1 ϕ2W AC200V (50 / 60Hz)				
Rated power (kW)	0.43 kw (0.83 kW at vacuum down)		0.78 kw (1.53 kW at vacuum down)	0.8 kw (1.6 kW at vacuum down)	1.6 kw
Operating vacuum pressure	-0.073 MPa...0.079 MPa				
Water supply pressure	0.08 MPa...0.5 MPa				
Water supply volume	Below 3 ℓ / min at normal, Below 6 ℓ / min at vacuum down				Min.6 ℓ / min
Operation sound	55dB		68dB		
Operating weight(kg)	101 kg	135 kg	183 kg	275 kg	370 kg
External signal	Blanket warning (output from no-voltage contactor)				
Safety equipment	Overcurrent protection				
Ambient condition	5...40°C (No freezing), Max.90%RH (No condensation)				
Standard accessories	Cartridge filter				

Propotional Control Accessories

DC power supply (PSU-2406)



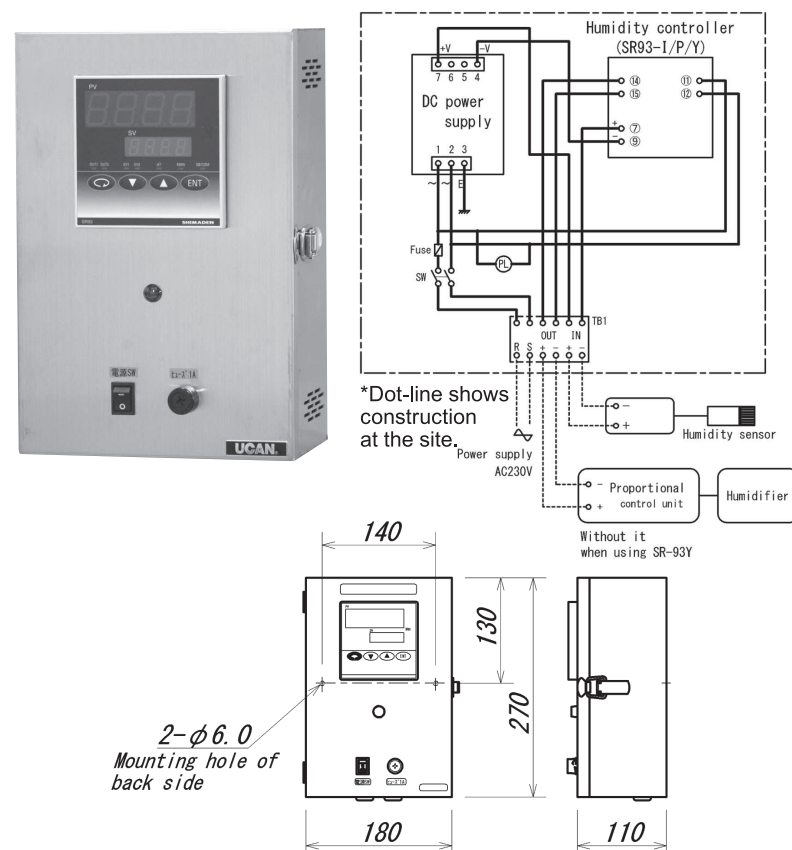
It converts AC to DC to operate the system of humidity sensor and humidistat.

Input voltage		AC85V...AC264V
Input inrush current		for 230V Max.40A
Output rated voltage		DC24V
Output rated amperage		0.5A
Protecting circuit		Protection for overcurrent and overvoltage (at 105% rated amperage)
Condition of usage	Ambient temperature	0...50 °C
	Ambient humidity	20...90% RH (No condensation)
Weight		1.0kg

* All illustrations of drawings which showing in CB-11R and Mouting bracket for humidifier were in the unit of mm.

Housing for humidity controller (CB-11R)

Humidity controller and DC power supply source are in house made of all stainless steel, and wiring is so easy construction at the site. Just wiring to humidity sensor and proportional control.



Optional Products

Parts and Components

Timer ETU-10



It can set the desired time of operation and shut-off. (by the hour, minute or second) Contact rating : 5A (AC250V)

Strainer S-100M



It removes dirt particles from inside of water supply pipe line. 80 mesh

Optional transformer box

◆With a built-in timer

Time of operation and shut-down can be set by the hour, minute and second.



◆With air volume control

It can regulate the mist volume at the stepless level.



Air filter AF-123N

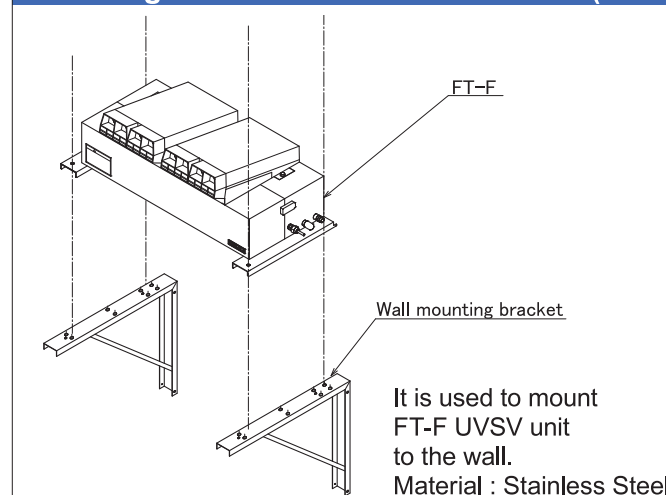


It is used for FT-NUVSV Series. It removes dust particles from intake air.

Optional Products

Parts and Components

Mounting bracket for FT-FUVSV Series (BK-F)



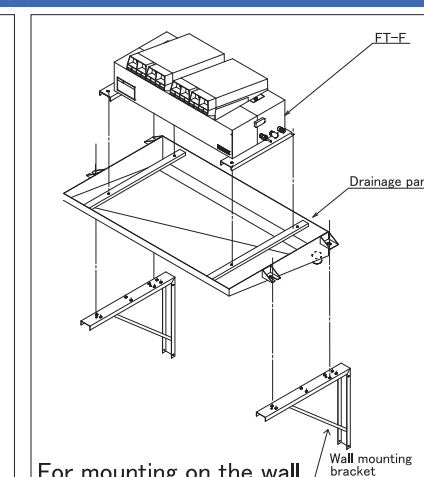
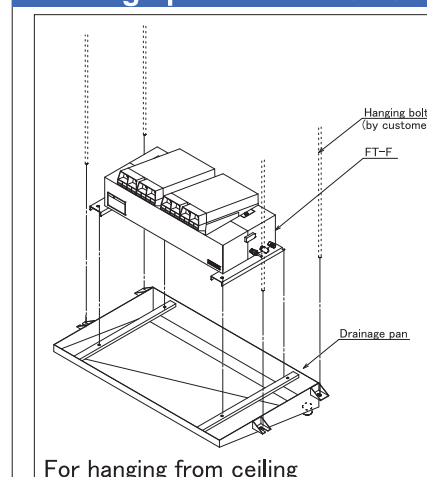
Drainage solenoid valve



It drains from the water reservoir automatically when the humidifier shuts down the power supply. It eliminates residual water from the reservoir to prevent the contamination from growing.

Model	UC-SV
Structure	2-port solenoid valve
Valve	Normal open
Fluid temperature	1...60 °C
Power supply	AC48V, 100V, 200V
Power consumption	10VA
Diameter of pipe connection	Rc 1/4

Drainage pan for FT-FUVSV Series



▲ Installation example
It can be used with the wall-mounting bracket (BK-F).

Mounting bracket for humidifier unit (BK-2...BK-3)



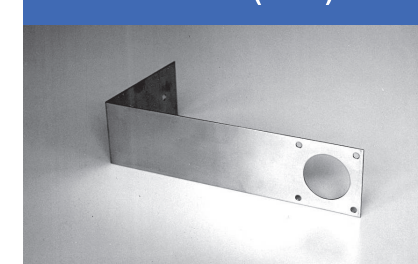
For installing a humidifier unit on the top of prefabricated structure. Rubber suction pads included.

Drain pan (DP-500 / DP-1000)

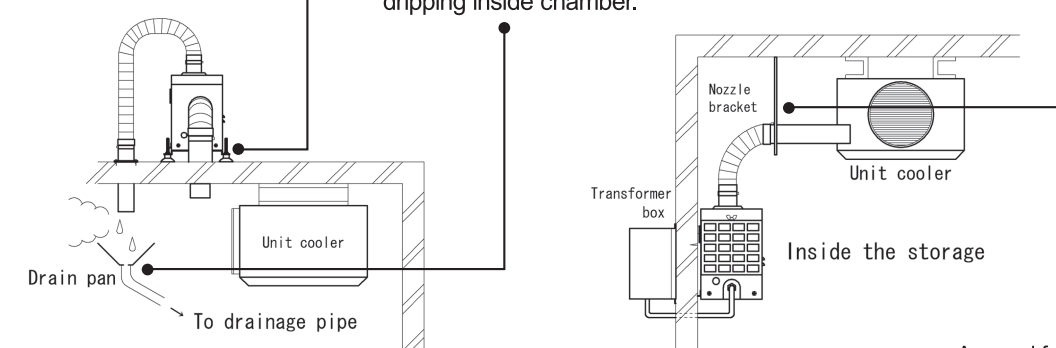


With the unit installed on the top of a structure, a drain pan is placed beneath the nozzle to prevent droplets from dripping inside chamber.

Nozzle bracket (BK-1)



With the unit installed on the wall of a structure, brackets are used to suspend the nozzle from the ceiling.



As used for FT-NUVSV Series.

Caution for Safety and Installation

◆ The Selection of Product

- Please read our catalogue and technical data carefully to select the suitable unit.
- When selecting the type and the number of the unit, take 20% or more safety margin than calculated value of capacity.
- Consult us in case of selecting the humidifier for the place where requires particular favorable circumstances like hospital, elderly nursing home, etc.

◆ Location for Setting Up

- Do not install or locate the unit where dusty or oily smoke-filled place, the possibility of combustible gas leak, flammable place.
- Do not install or locate the unit in any place receiving direct sunlight, or be exposed to the weather.

◆ Installation of Product

- Be sure to interlock with the air conditioner in case installing either the unit or nozzle into air conditioner.
If not, the unit continues to operate even after shutting off the fan for air conditioner, hence condensation occurs in the air conditioner or inside the duct which cause water leaking and damage of facilities and properties.
- Set up drain pan and drainage piping if there is a risk of water leakage.

◆ Water Supply

- Tap water, clean water, or treated water (pure, or soft water) should be used, and do not mix in poison materials.

◆ Water Supply Connection

- All water supply connection works must be followed according to each local regulations involved.
- Water supply pressure should be 0.03...0.5MPa.
In case the pressure exceed more than 0.5MPa, the pressure reducing valve (local supply) should be installed before the line of strainer to avoid damaging the unit and causing water leaking.
In case the pressure is under 0.5 MPa, please note that it may prevent the normal operation.
Note : Required water supply pressure is different by the type of the humidifier.
At the risk of being water hammer, install the water hammer prevention.

◆ Installation at Cold Area

- Insulation work should be required to prevent freezing the water supply tube.

◆ Before Using

- Every person working with UCAN products have to read and understand the installation and operation manuals before carrying out installation works to install and operate the units safely and correctly.

◆ Personnel Qualification

- Operation and installation should be carried out only by well trained and sufficiently qualified person authorized by the owner and manufacture for safety and preventing the accident.

◆ Special Notes for Using Ultrasonic Humidifiers

- Clean the water reservoir every 3 days when the unit is on service.
- If the mist is used for fresh food stuff or any living things, cleaning should be done daily.
- Drain off all water inside the water reservoir if the unit do not service for more than 3 days to prevent bacteria from growing.
- Do not suck in the mist, it might affect the health if the mist is contaminated.

Warranty

UCAN warrants to the original first customer that the products will be free from defects in material and workmanship for only the period of 12 months from the date of delivery from the UCAN factory.

If any UCAN product is proven to be defective in the material or workmanship by UCAN during above applicable warranty period, UCAN only will repair or supply replacement for the defective product at free of charge. And only after having informed by UCAN, the customer can return the defective parts to UCAN without any charge, the costs for transport of the parts to be repaired shall be born by UCAN.

In case of replaced or repaired the goods, the original warranty period shall be kept.

UCAN shall not be liable for under any circumstance :

1. If all actions described in UCAN ' s installation and operation manuals do not carry out even by well trained and sufficiently qualified personnel authorized by the owner.
2. If the customer do not follow UCAN' s installation and operation manuals.
3. If the products have been modified, or altered without written agreement with UCAN.
4. Under circumstances of any direct, indirect, incidental, consequential damages, or damages for injury occurrence to person or property, loss of business or information, loss of profit or production interruption in relation to the manufacture or use of the products.
5. Any damage or malfunction due to act of providence such as earthquakes or fires.
6. Any damage or malfunction during transportation or transfer such as dropping the product after the purchase.
7. Any damage or malfunction caused by other source not directly caused by UCAN products.
8. Any damage or malfunction caused by mishandling or unauthorized repairing jobs.

The following goods used for UCAN products are consumable parts and they' re not covered by the warranty.

Oscillators for ultrasonic humidifiers.

UV lamp for ultrasonic humidifiers.

Media for evaporative humidifiers.

Sheathed heaters for resistive steam humidifiers.

PTC (Positive Temperature Coefficient) immersion heater for PTC steam humidifiers.

UCAN shall not be liable for any cost or expense whatever either direct or indirect costs for removal, re-installation for any defective product and installation for the replacement.

By purchasing UCAN products, the purchaser understands and agrees the terms and conditions of this warranty.

Psychrometric Chart

