

UCAN[®]

Humidifiers

General Catalogue

Made in Japan.

Innovative Humidifier

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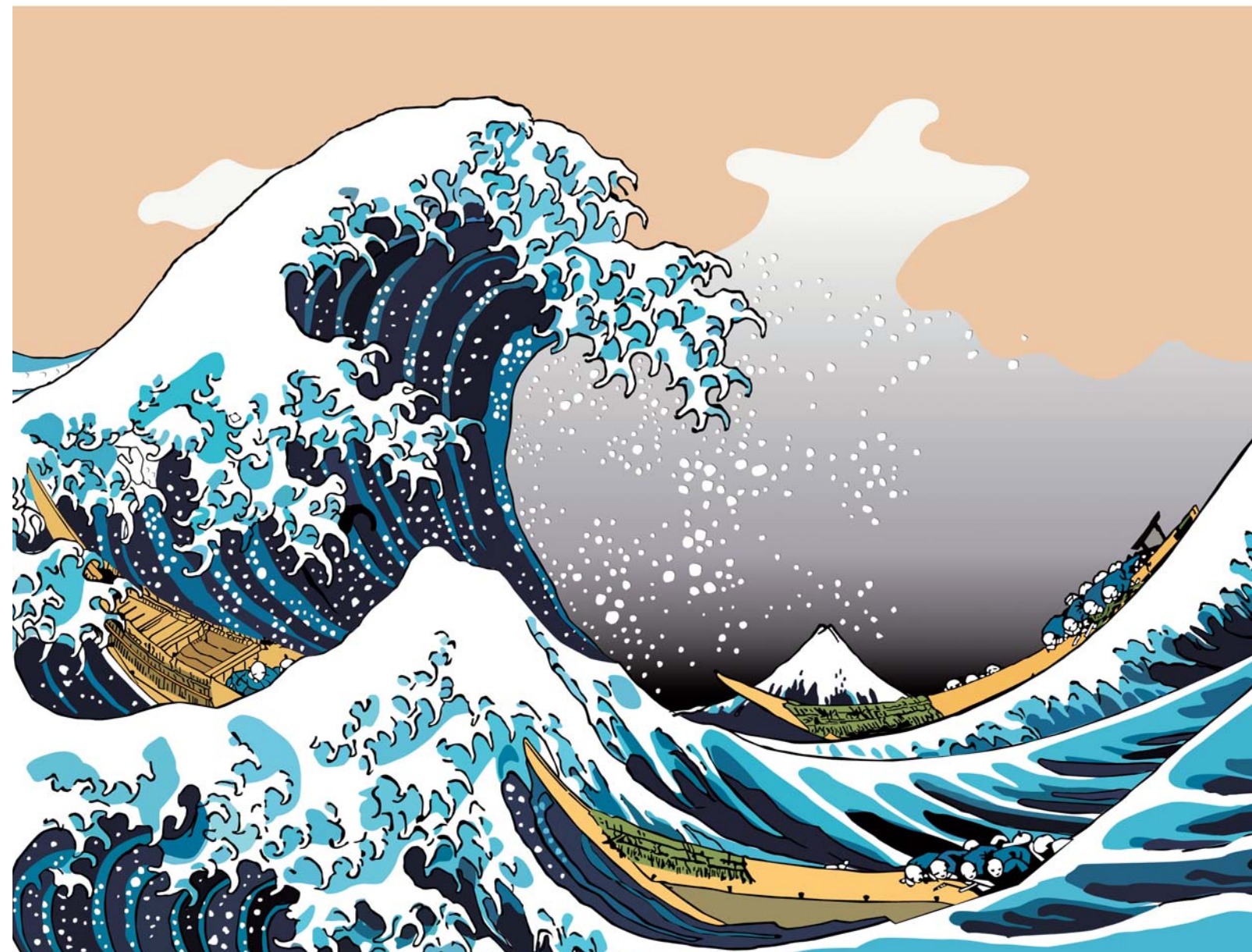


REGISTERED ORGANIZATION
No.1524-ISO9001
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JAB
CM002

UCAN humidifier - made in JAPAN





PTC Steam Humidifier
UC-TJ1000C



PTC Steam Humidifier
Humidasduo HD-M2200



PTC Steam Humidifier
UP-X Series



PTC Steam Humidifier
UP-XCD Series



Resistive Steam Humidifier
MAGY UC-MGS Series



Evaporative Humidifier
UC-EM1 / EU1



Evaporative Humidifier
DELTA X Series



Ultrasonic Humidifier
FT-F UVSV Series



Ultrasonic Humidifier
FT-N UVSV Series



Ultrasonic Humidifier
TAKAO FT-42DHUV-ULO



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



Ultrasonic Humidifier
KIRIPET FT-M43



Ultrasonic Humidifier
FT-P / PD UVSV Series



Ultrasonic Humidifier
FT-W41 / W41S UVSV

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Proportional Control System



Phase Control System
UCR unit



Time Sharing Control System
USS unit



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



PTC steam humidifier

UC-TJ1000C CE

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 remote controller with a built-in humidistat. 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 humidifier units individually. It commands each unit to decide ON/OFF operation and high/low of 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 steam capacity by 2 steps (High or Low), 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

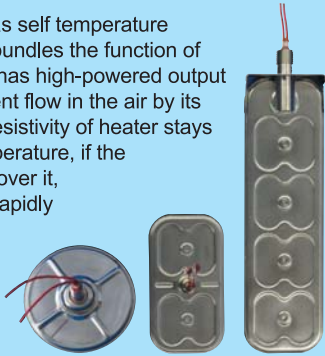
- Hospitals ● Elder care facilities ● Schools
- Office buildings ● Public buildings
- Hotels ● Commerce facilities, etc



UCAN Technology
- Power of PTC immersion heater

No worry about fire breaking out even if in the waterless operation.

PTC immersion heater has self temperature controlled system which bundles the function of heater and thermostat. It has high-powered output in the water but little current flow in the air by its self-controlled system. Resistivity of heater stays constant to a certain temperature, if the heater temperature rises over it, the resistivity will rise up rapidly (reach Curie point) and control the current flow.

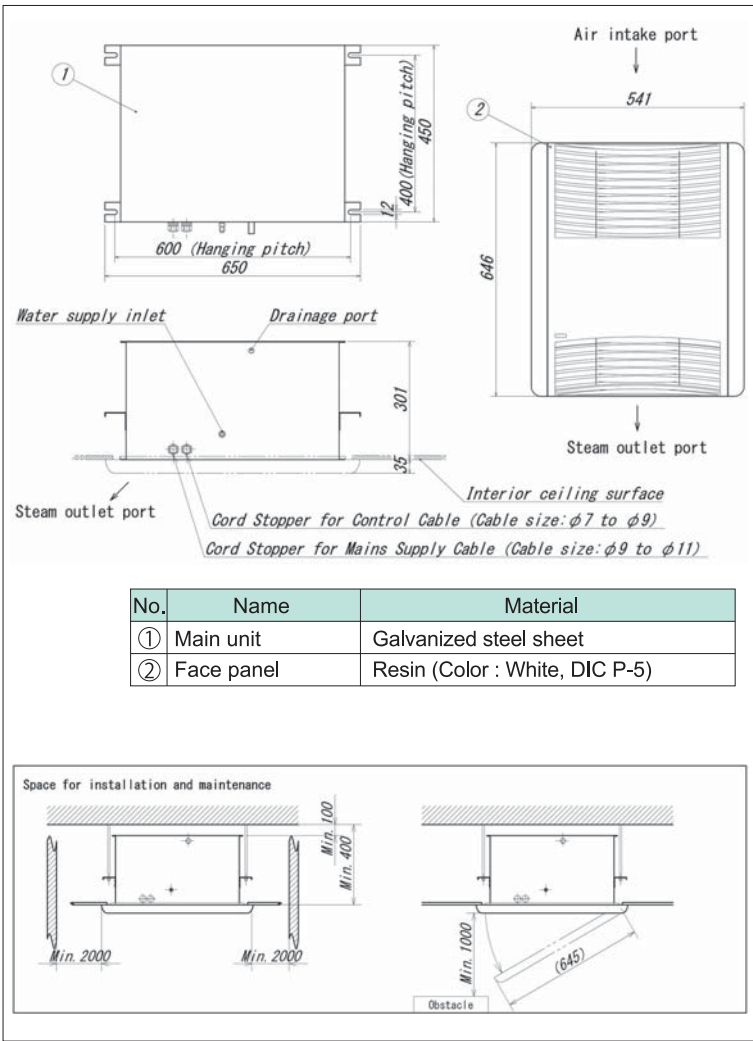


Specifications

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 (m³ / h)	120.0...240.0	
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 / cm²)	
Control system	On / Off control	
LED indicator lamp (Main unit)	Power supply, Operation, Abnormal alarm	
Remote controller	Operation, Air volume(High /Low), 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 L : Low

Standard Dimensions(mm)



PTC steam humidifier

Humidasduo
HD-M2200

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-M2200

Features

- Mobile with wheels.
- It humidifies room of 320m³ by just 1 unit.
- 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 8 hours continuous humidification.

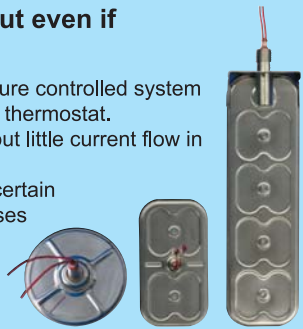
Applications

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

UCAN Technology - Power of PTC immersion heater

No worry about fire breaking out even if in the waterless operation.

PTC immersion heater has self temperature controlled system which bundles the function of heater and thermostat. It has high-powered output in the water but little current flow in the air by its self-controlled system. Resistivity of heater stays constant to a certain temperature, if the heater temperature rises over it, the resistivity will rise up rapidly (reach Curie point) and control the current flow.



Hospital

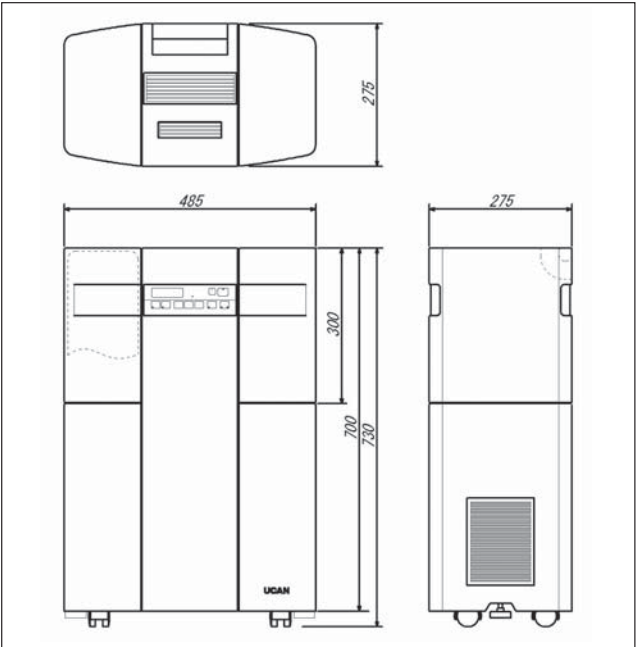


Lobby



Display space

Standard Dimensions(mm)



UP-X6000

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

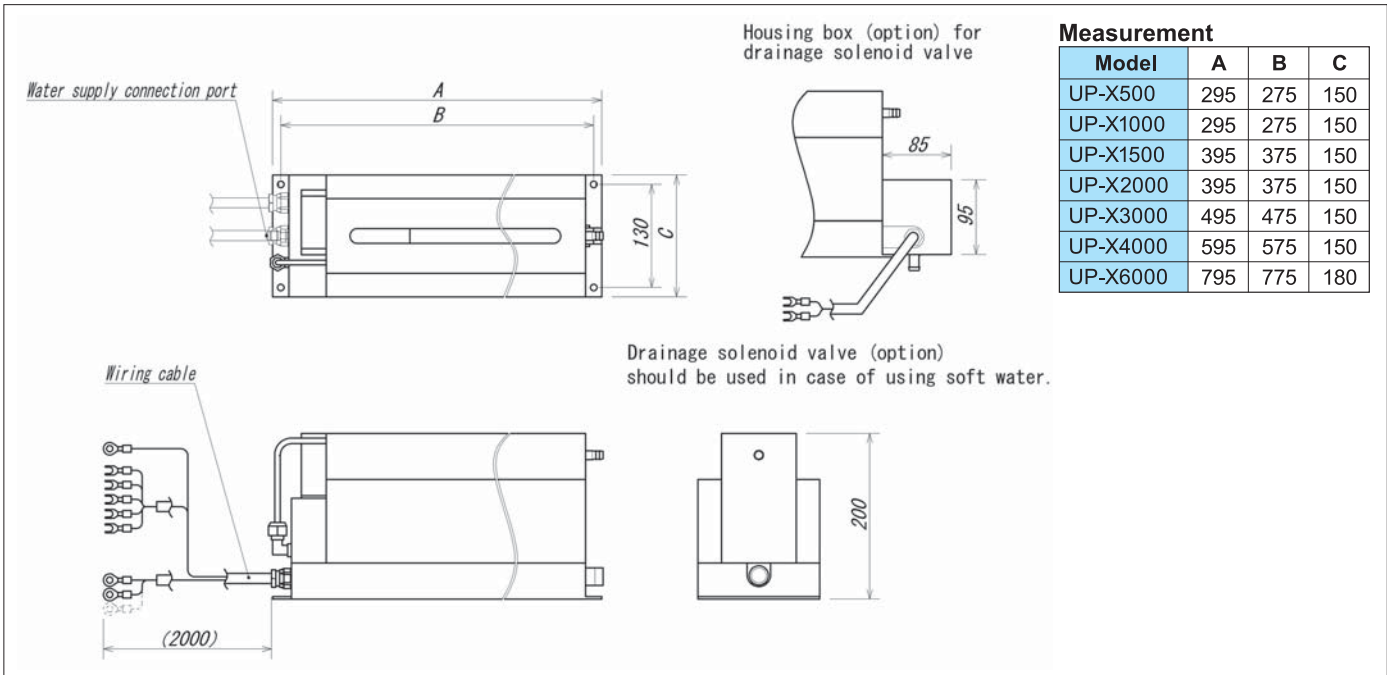
- Use of high safety, long life PTC immersion heater.
- 7 models are available according to the steam capacities from 0.5...7.2 kg/h.
- Simple construction hardly cause failure and facilitates the maintenance work.
- It designed compactly that can be used at a small place.
- It operates by interlocking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

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	1ϕ 2W AC230V* 50 / 60Hz						3ϕ 3W 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
Unit	1.5						3.0
Control panel							
Ambient condition	[Temperature] Main unit : 1...40°C(No freezing), Control panel : Max.40°C [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.



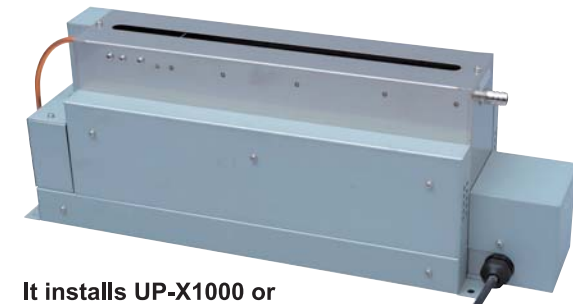
PTC steam humidifier

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.

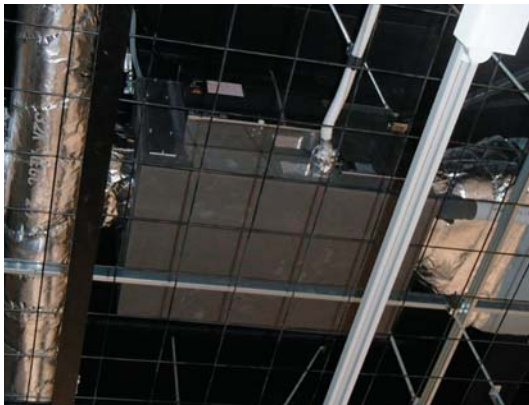
Comfortable.
High safety.
Easy to operate.



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.

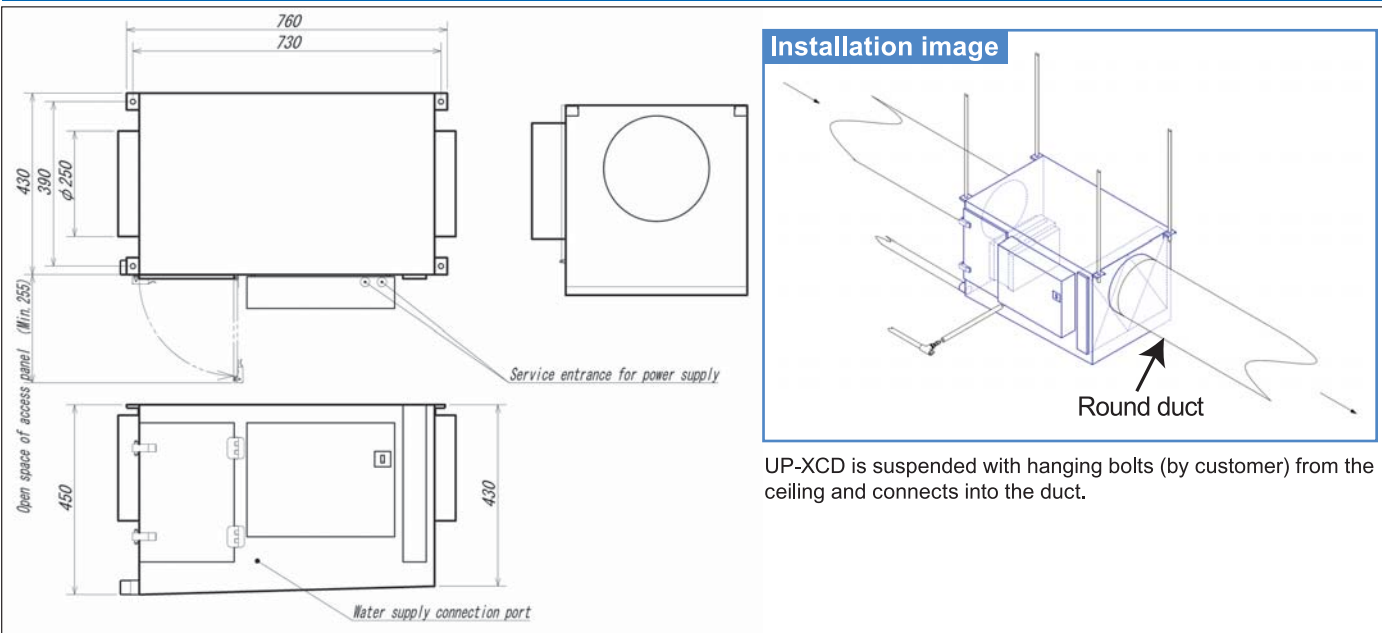


UP-XCD connected into the duct.

Applications

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

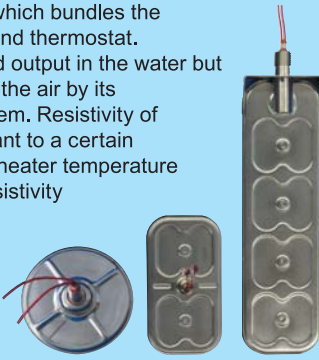
Standard Dimensions(mm)



UCAN Technology
- Power of PTC immersion heater

No worry about fire breaking out even if in the waterless operation.

PTC immersion heater has self temperature controlled system which bundles the function of heater and thermostat. It has high-powered output in the water but little current flow in the air by its self-controlled system. Resistivity of heater stays constant to a certain temperature, if the heater temperature rises over it, the resistivity will rise up rapidly (reach Curie point) and control the current flow.



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/cm ²)	
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.



Resistive steam humidifier

ELECTRIC STEAM HUMIDIFIER
MAGY®

For Commercial, Industrial, Institutional, and Residential Applications

UC-MGS Series

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

Features

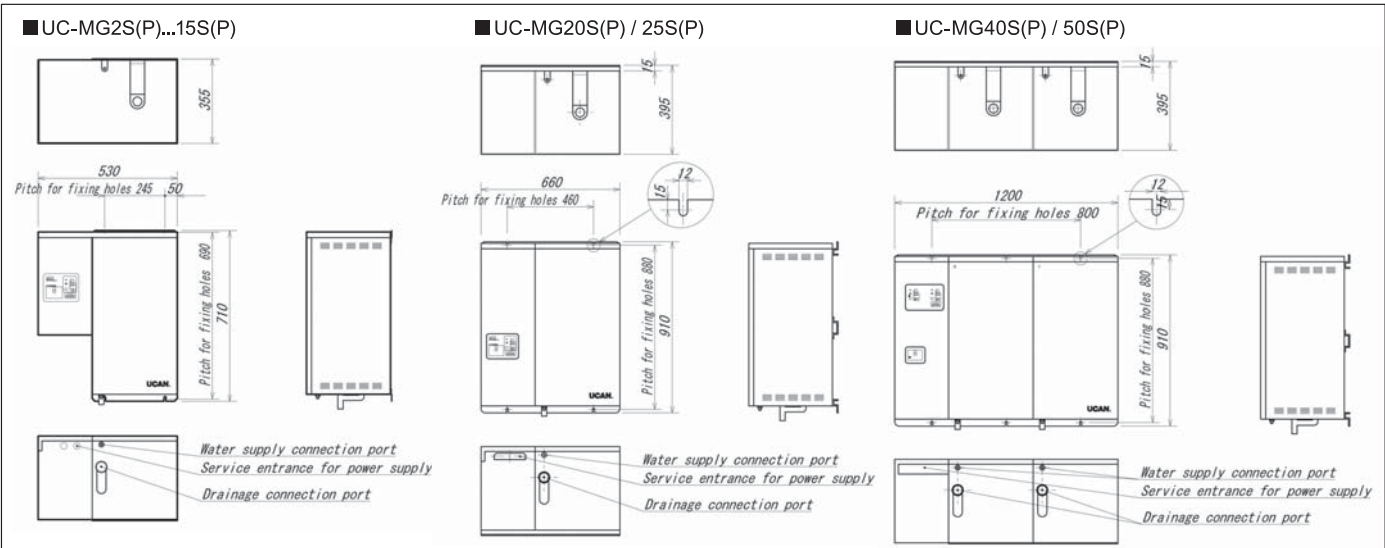
- Differently from electrode steam humidifier, proportional control system can be obtained by the stable current value.
- Removable bottom plate is designed to remove by only 20 seconds. Scales can be cleaned instantly.
- Equipped the device to prevent accumulation of minerals with regular drainage system.
- Water shut-off valve (option) is available to stop supplying water when the water supply valve is broken and water level sensor detects the overflow.
- Water leakage sensor (option) can be installed.
- Even ultra-pure water can be used.
- Long life sheath heater made of super alloy incoloy is used.

Applications

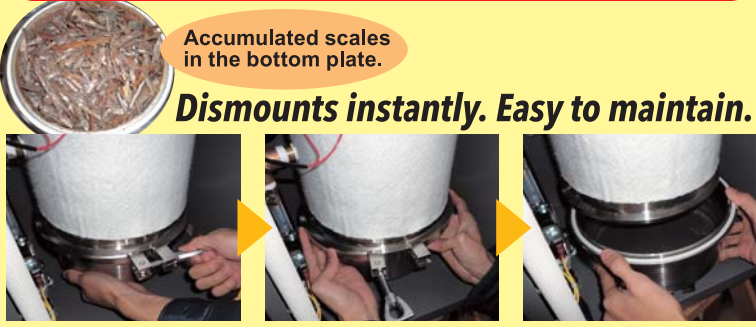
- Clean rooms
- Office buildings
- Hospitals
- Factories
- Bedrock baths etc.



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.



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



Installation example: Connected into the duct

Specifications

Models UC-MG (P):Proportional Control		2S(P)	4S(P)	6S(P)	8S(P)	12S(P)	15S(P)	20S(P)	25S(P)	40S(P)	50S(P)
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)		5.2	10.2	15.3	20.3	30.3	37.9	50.4	63.0	100.6	125.7
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 AC230V 50 / 60Hz									
Weight(kg)	Dry	38.0			41.0			77.0		145.0	
	Operating	45.0			54.0			103.0		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		Float valve water supply system									
Water supply pressure		0.03...0.3MPa (0.3...3.0kgf / cm ²)									
Main body water supply inlet		ϕ 6.35 flare									
Drainage connection port		O.D ϕ22.23									
Ambient condition		Ambient temperature : 1...40℃ (No freezing), Max.70%RH									
Control	ON-OFF	Two position control (input through no-voltage contactor)									
	Proportional control	Time-sharing control system through SSR Current input 4...20mA (ambient temperature at 23℃ , input impedance 200Ω)									
External signal (output from no-voltage contactor)		Operation, Blanket warning (Depletion of water, Overflow, Over-heating), 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(L=1500 with hose band, 1 pc)】, Operational manual(1 set) *UC-MG40S(P) and MG50S(P) double the quantity in 【】 brackets.									

*1kW=1.25kg/h
*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. We recommend the customer to use purified water by R.O device.
*Sheath heater is consumable parts.



Evaporative humidifier

UC-EM1 / UC-EU1

UC-EM1 UC-EU1

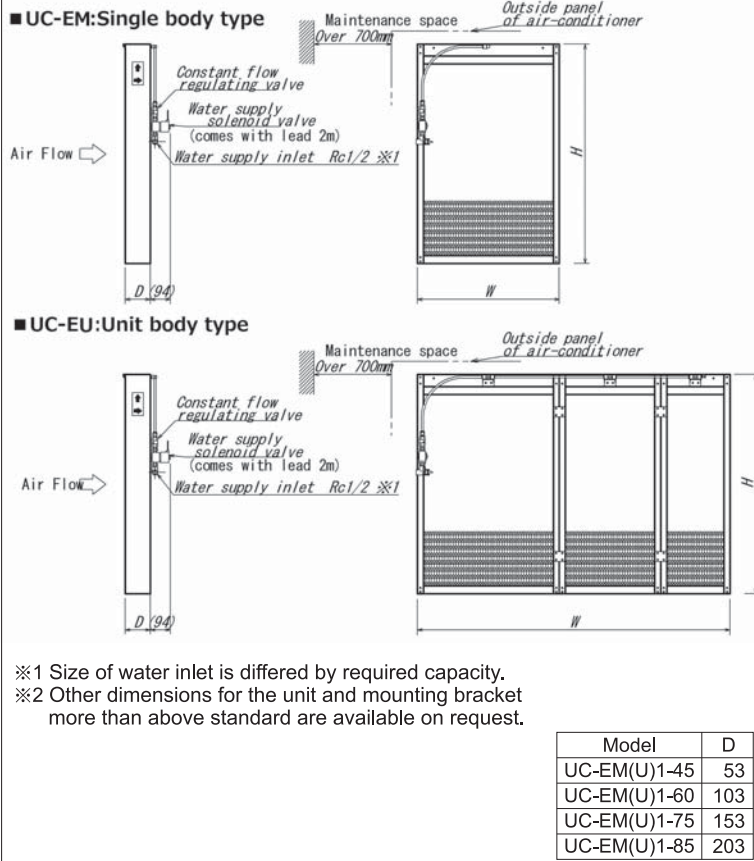
Water flows down the elements made of high absorbent polymeric fiber and is caused to evaporate by the air flow from an A/C fan. Applicable saturation efficiency is 35...85%. It makes clean humidification and works cooling effect in the room to release high sensible heat. Simple structure and small number 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 element has high saturation efficiency by unique development structure.
- Element structure 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.

Standard Dimensions(mm)



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.



UC-EU1 type installed into AHU.

UCAN Technology
- High quality element UC-CORE



It is made of high absorbent polymeric fiber.
To keep high shape intensity, the structure is honeycomb laminated and adhesive composition.
Pollution free materials which complied with national food sanitation law are used and any harmful substances designated by RoHS are not included.
It passed the mold resistance test, the anti-bacteria test for textile products and the flame resistance test domestically.
There is no porus in the element, even if the odor is adhered to the surface of element, it will be released easily.
It is disposable as general garbage.

Specifications

Model	UC-E○1-45	UC-E○1-60	UC-E○1-75	UC-E○1-85
Applicable saturation efficiency	≤35...45%	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
Element material	High absorbent polymeric fiber (Honeycomb laminated, adhesive composition structure)			
Element's heat resisting temperature	120 °C			
Element's combustibility	Passed JIS-1091 (Flame resistance test)			
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		
	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	1φ 2W 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.



UC-ΔX101C

Evaporative humidifier

DELTA X Series
UC- ΔX101C / ΔX102C / ΔX103C

Ceiling-installed cassette type evaporative humidifier available in 2.0...2.5 kg/h capacities.
Water flows down the evaporative element through the distribution pipe and evaporates by blowing air from the fan. It converts indoor sensible heat generated from IT devices and room lights, etc. into the latent heat and then makes the humidified air.
Designed to maintain easily for both constructors and users.

Easy to operate.
Hygienic.
Energy saving.

DELTA X Series

Advanced user-friendliness and enhanced potential.

Delta X series integrates state-of-the-arts technologies to deliver highest comfort and usability for a user.



Standard model, UC-ΔX101C

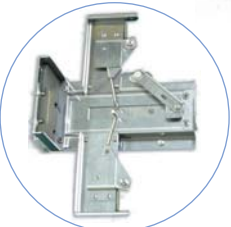
Six advantages of Delta X Series

Element ejector

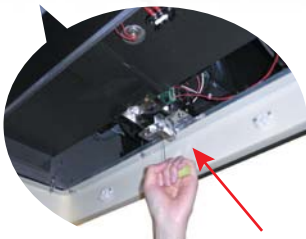
Delta X is designed to replace the evaporative element in just a minute with element ejector. Usually evaporative element needs to be cleaned at regular intervals, however it is very difficult to do periodically if the reservoir and the element cannot be taken off handily. Generally it takes time to replace it. Differently from traditional pattern, Delta X's element ejector makes it possible to reduce the amount of time dramatically. All it takes is to open the panel and just pull the ejector handle. You can replace the element easily, safely and instantly.

Replacement of Evaporative Element

1 Remove the used element. 2 Set the new element.



▲ Structure of Element ejector



Ejector handle

Automatic-cleaning system

In case the unit has not been operated in the off-season, water accumulated in the water supply piping is more likely to go rotten. It would cause bad odor and make the element dirty after the water is supplied. To prevent the pollution, Delta X drains the accumulated water in the piping for a given time and repeats this process when the unit restarts. Then water passes the element to clean it and the unit starts humidifying operation.

Safety water supply system

Delta X is equipped with water shut-off valve to prevent an unexpected overflow accident. It stops supplying water immediately if detects the abnormality in the water supply system.

Built-in drainage pump

Drainage pump is already incorporated in the main unit. There is no need for the works of installation, piping and wiring for drainage pump at the site and so it helps shortening the work execution time.

Spreads moist comfort entirely

Delta X's face panel is designed to blow the air parallel to the ceiling and flow evenly into the room so every person in the room will enjoy the humidified air without feeling cold wind.

Remote controller with a built-in humidistat -Smart Remote Controller UC-610A



UC-610A

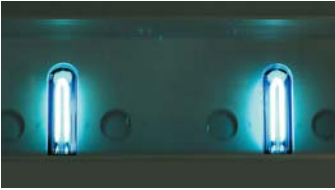
Operation of Delta X is controlled by remote controller. It has already built in a humidistat. Thus it eliminates the complicated work such as wiring and installation work at the site when a humidistat is necessary afterward.

1 remote controller can control max. 9 units of Delta X's operation individually. It commands each humidifier unit to decide ON/OFF operation and high/low of air volume, set the desired humidity, etc. It controls humidifier efficiently and contributes to energy saving. (Please see the product brochure of smart remote controller UC-610A for the details.)

In addition to the standard model, we offer other two models.

Water recycling type UC-ΔX102

It saves water and cost. Once water passed through the element, water is circulated by the pump and falls in drops again into the element. UV lamp is mounted into the water reservoir to sterilize the circulated water. It drains old water and supplies new water regularly to keep the hygiene water system. Time for drainage is alterable.



UV lamp

Power boost type UC-ΔX103

It mounts PTC immersion heater (500W) and UV lamp in the water reservoir. PTC immersion heater warms water and increases the humidity output approx. 0.5kg/h. UV lamp works in the same way as ΔX102.



PTC immersion heater

Applications

- Office buildings ● Schools ● Hospitals ● Public buildings ● Computer rooms ● Elder care facilities ● Art museums ● Hotels ● Commerce facilities, etc



Hospital



Office building



School

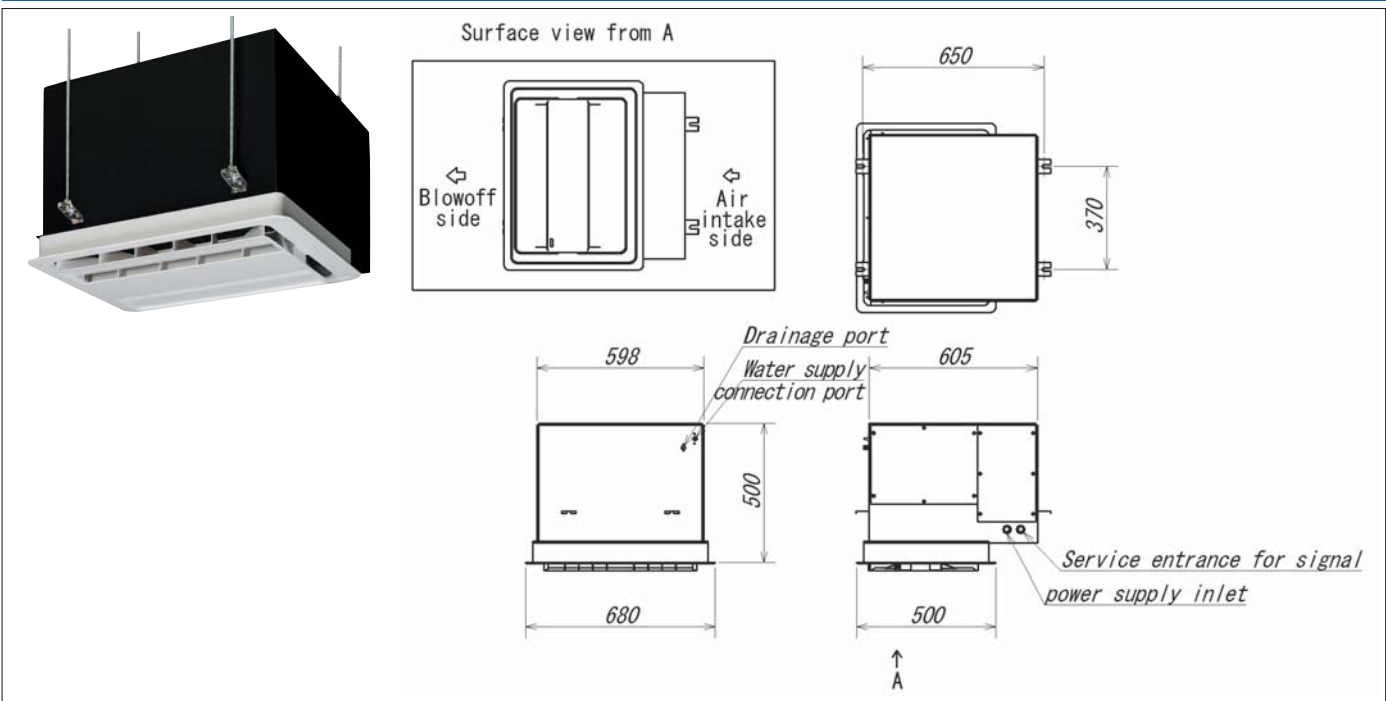
UCAN Technology - High quality element UC-CORE

It is made of high absorbent polymeric fiber. To keep high shape intensity, the structure is honeycomb laminated and adhesive composition. Pollution free materials which complied with national food sanitation law are used and any harmful substances designated by RoHS are not included. It passed the mold resistance test, the anti-bacteria test for textile products and the flame resistance test domestically. There is no porus in the element, even if the odor is adhered to the surface of element, it will be released easily. It is disposable as general garbage.

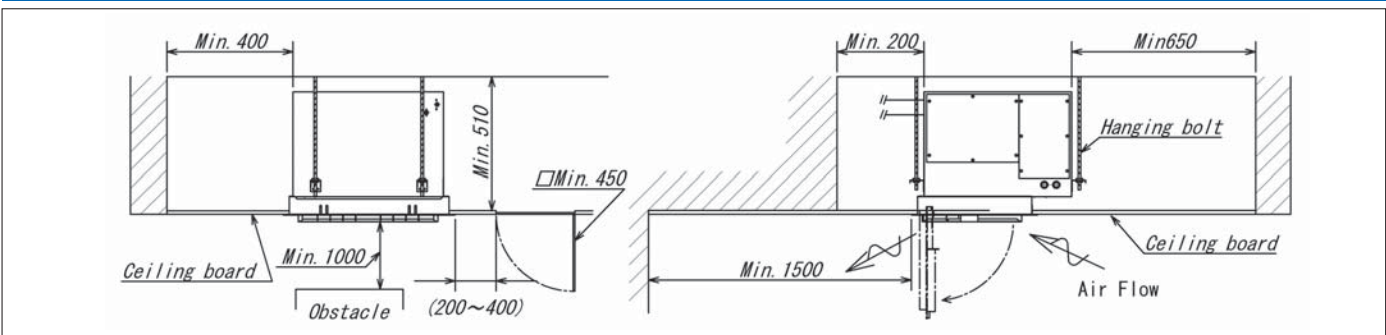


UC-CORE

Standard Dimensions(mm)



Space for installation and maintenance(mm)



Specifications^{*1}

Model		UC-ΔX101C	UC-ΔX102C	UC-ΔX103C
Type		Standard	Water recycling	Power boost
Standard equipment	Element ejector	○	○	○
	Drainage pump	○	○	○
	UV lamp	×	○	○
	PTC immersion heater	×	×	○
Capacity	FAN Air volume (High)	2.0 kg / h (50 / 60Hz)		2.0 kg / h (50 / 60Hz) *When PTC immersion heater works: 2.5 kg / h (50 / 60Hz)
	FAN Air volume (Low)	1.2 / 1.0 kg / h (50 / 60Hz)		1.2 / 1.0 kg / h (50 / 60Hz) *When PTC immersion heater works: 1.7 / 1.5 kg / h (50 / 60Hz)
Ability condition	FAN Air volume (High)	570 m ³ / h (50 / 60Hz) Temperature and relative humidity of suction air : 23°C, 40%RH		
	FAN Air volume (Low)	345 m ³ / h (50Hz) 300 m ³ / h (60Hz) Temperature and relative humidity of suction air : 23°C, 40%RH		
Power supply		AC200V (50 / 60Hz)		
Rated power consumption	FAN Air volume (High)	100 / 118W (50 / 60Hz)	103 / 120W (50 / 60Hz)	103 / 120W (50 / 60Hz) *When PTC immersion heater works: 603 / 620W (50 / 60Hz)
	FAN Air volume (Low)	81 / 80W (50 / 60Hz)	82 / 83W (50 / 60Hz)	82 / 83W (50 / 60Hz) *When PTC immersion heater works: 582 / 583W (50 / 60Hz)
Operating sound (measured at anechoic room)		FAN Air volume (High) : 40.1 / 42.7 dB (50 / 60Hz) FAN Air volume (Low) : 29.5 / 26.5 dB (50 / 60Hz) Ambient condition : 25°C, 45%RH, Background noise : Max.7dB		
Weight		Dry : 40 kg Operating : 47 kg *Face panel is included.		
Ambient conditions	Temperature and relative humidity	5...40°C (No freezing) Max.80%RH		
	Temperature of suction air	5...40°C		
	Water quality	Tap water (Water quality standards for drinking water must be kept.)		
	Water pressure	0.08 MPa...0.5 MPa		



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.



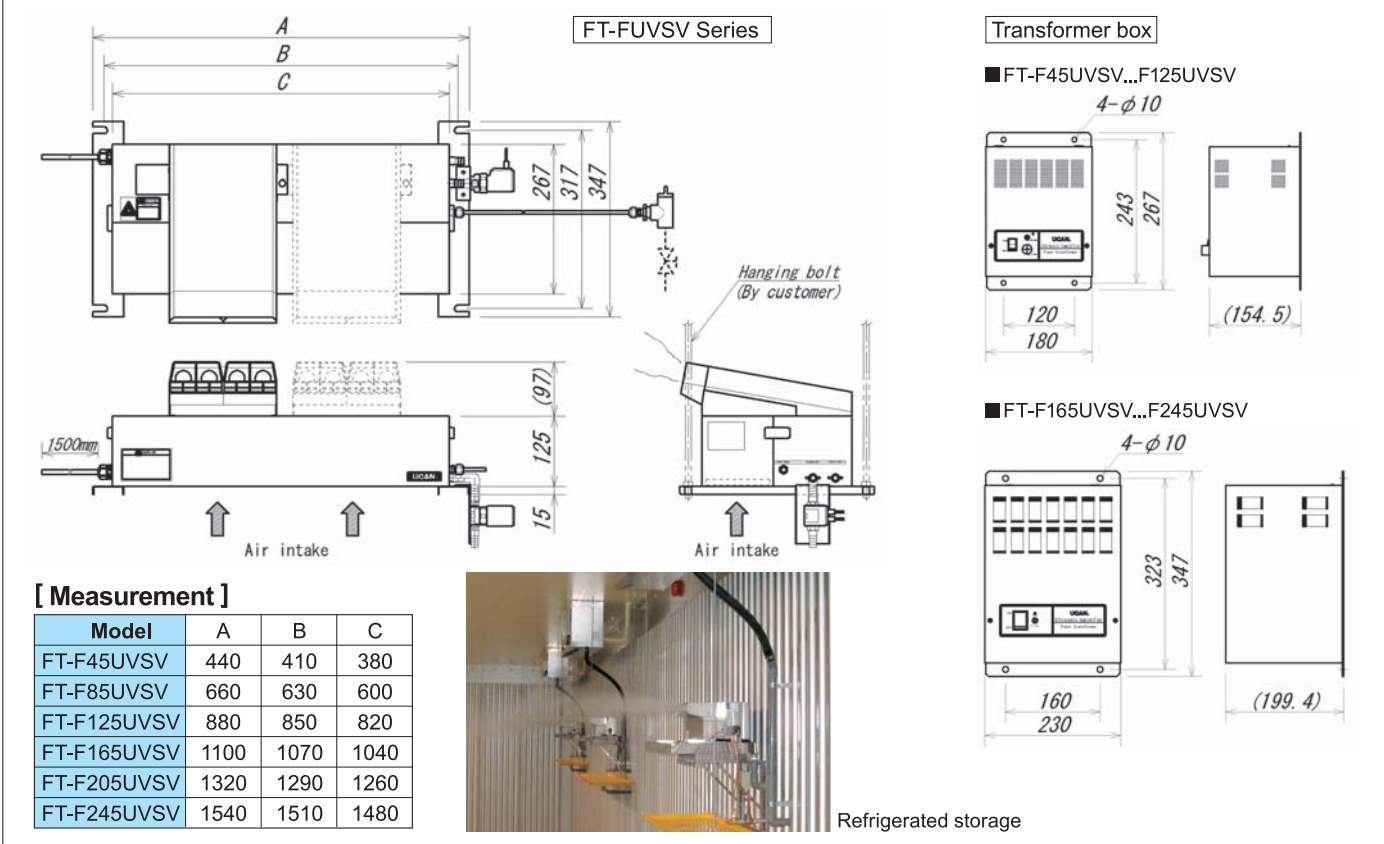
Features

- 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.



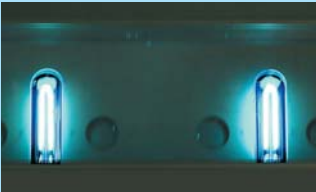
Specification

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 (m³ / 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 / 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℃), 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 (1pc), Operational manual (1 set)						

UCAN Technology
- Power of UV lamp

Sterilizes the water without harming the human body.

The germicidal ray kills various kinds of bacteria and viruses by directly affecting DNA and RNA and sterilizes the water in the reservoir. Since no chemical substance is used in sterilization, the mist has no effect on the human body.



Ultrasonic humidifier

TAKAO
FT-42DHUV-ULO

Available in 2.5 L/h (CE compliance 2.0 L/h) capacity designed for CA (Controlled atmosphere) or ULO (Ultra low oxygen) storages which people cannot enter during the operating period. Complements for the storages to preserve the products fresh longer.

For CA and ULO storages.
To keep the green products fresh for a long time.

Features

- Unit is installed outside of storage to snap to maintain without switching off the refrigerator.
- Unit is air-tightened structure, it shuts off the external air to keep the composition of atmosphere in the storage.
- Insulation design to prevent condensation.
- Comes equipped with germicidal device by UV lamp and drainage solenoid valve to enhance the hygiene humidification.

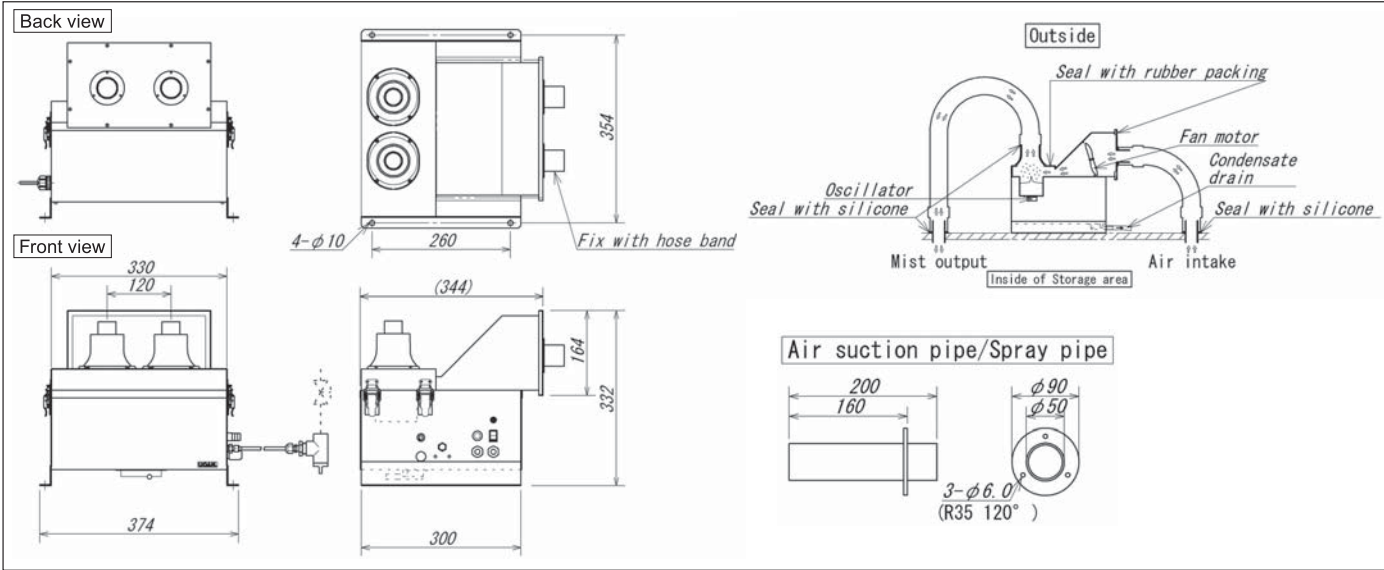
Applications

- CA and ULO storages for green goods such as apples, oranges, pears, grapes, etc
- Various chilling temperature storages



CA storage for apples

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

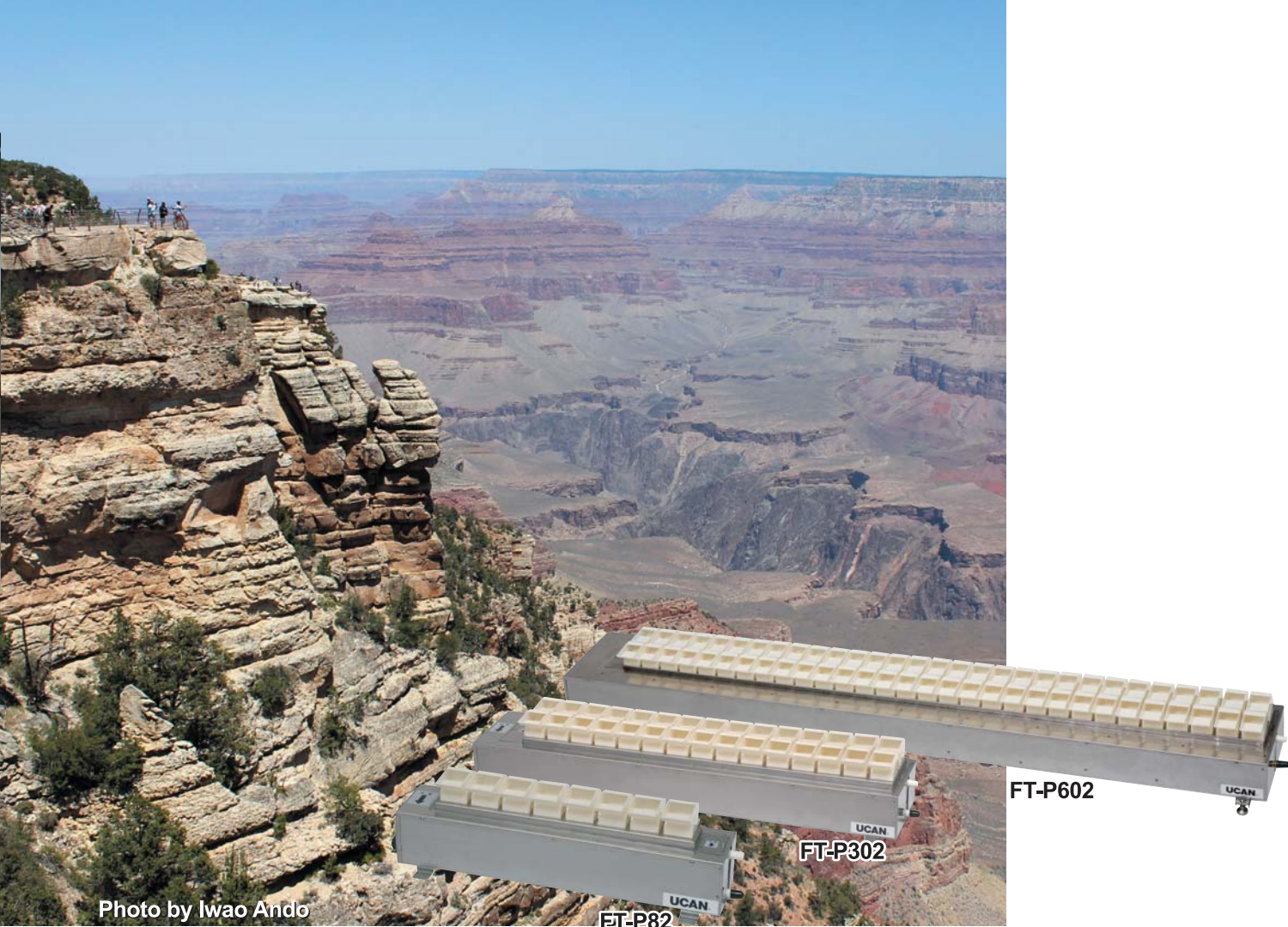
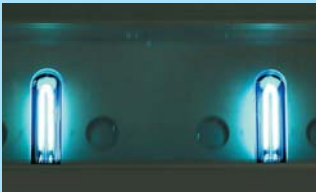


Specifications

Model	TAKAO FT-42DHUV-ULO
Capacity (L / h)	2.5 (2.0 for CE)
Power supply	1ϕ 2W AC230V*
Power consumption (VA)	246
No. of oscillators (pcs)	4
Weight (kg)	15.5
Air volume (m³ / min)	6.6 / 7.4 (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	Control contact for On / Off control
Ambient condition	5...40℃ (No freezing), Max.90%RH
Air supply condition	-5...50℃ (No freezing), Max.99%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℃), Surge filter
Standard accessories	Strainer (RC1/2, 1pc), Water supply tube (ϕ6.0 L=1000, 1pc), Drainage hose ((ϕ12 x ϕ16) L=1000, 1pc), Condensate drain hose ((ϕ10 x ϕ12) L=1000, 1pc), Spray pipe (ϕ50 L=200, 2pcs), Air suction pipe (ϕ50 L=200, 2pcs), Duct hose (ϕ50 L=1000, 4pcs), Hose band (ϕ58, 6pcs), Spare fuse (1 pcs), Operational manual (1 set)

UCAN Technology
- Power of UV lamp
Sterilizes the water without
harming the human body.

The germicidal ray kills various kinds of bacteria and viruses by directly affecting DNA and RNA and sterilizes the water in the reservoir. Since no chemical substance is used in sterilization, the mist has no effect on the human body.



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.

FT-P UVSV / PD UVSV Series

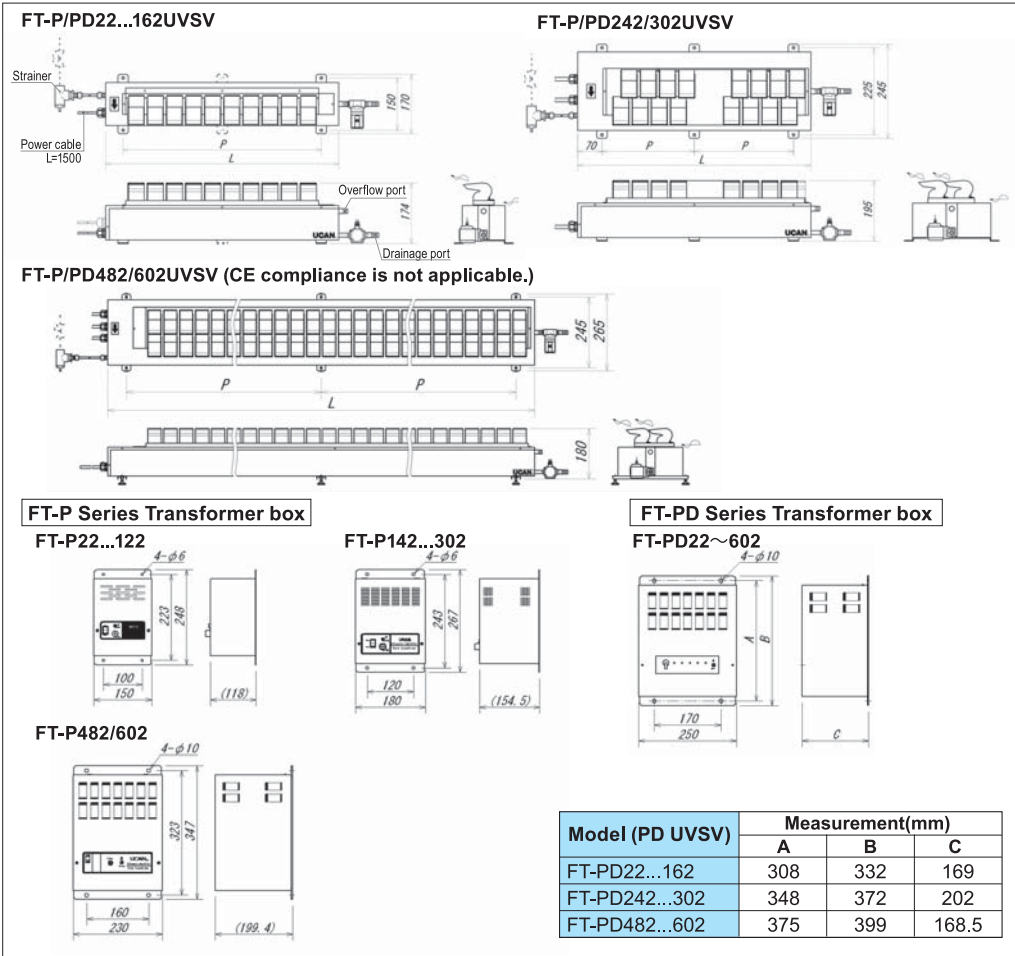
Features

- 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.

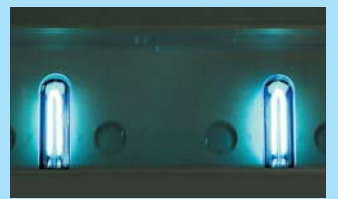


Model	Measurement	
	L	P
FT-P/PD22 UVSV	230	130
FT-P/PD42 UVSV	340	240
FT-P/PD62 UVSV	450	350
FT-P/PD82 UVSV	560	460
FT-P/PD102 UVSV	670	285(×2)
FT-P/PD122 UVSV	780	340(×2)
FT-P/PD142 UVSV	890	395(×2)
FT-P/PD162 UVSV	1000	450(×2)
FT-P/PD242 UVSV	780	340
FT-P/PD302 UVSV	945	423
FT-P/PD482 UVSV	1480	690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

UCAN Technology - Power of UV lamp

Sterilizes the water without harming the human body.

The germicidal ray kills various kinds of bacteria and viruses by directly affecting DNA and RNA and sterilizes the water in the reservoir. Since no chemical substance is used in sterilization, the mist has no effect on the human body.



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 / 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											
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)											



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.

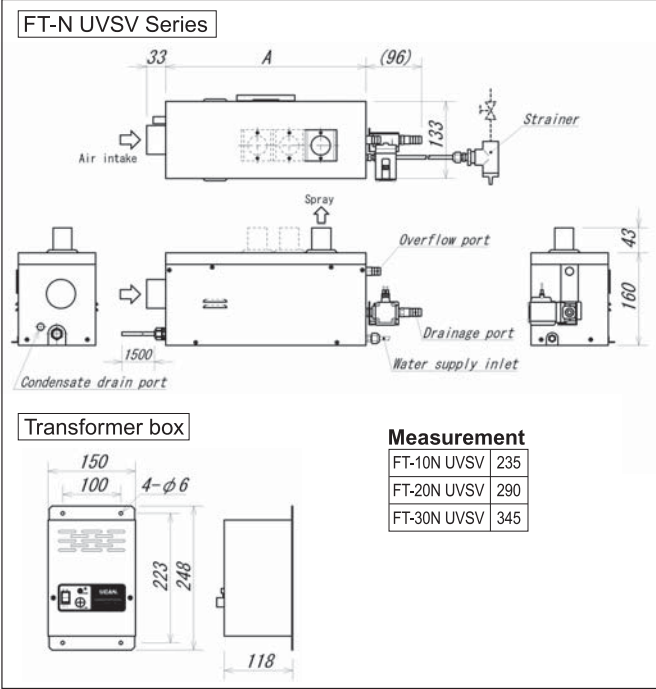
Features

- 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

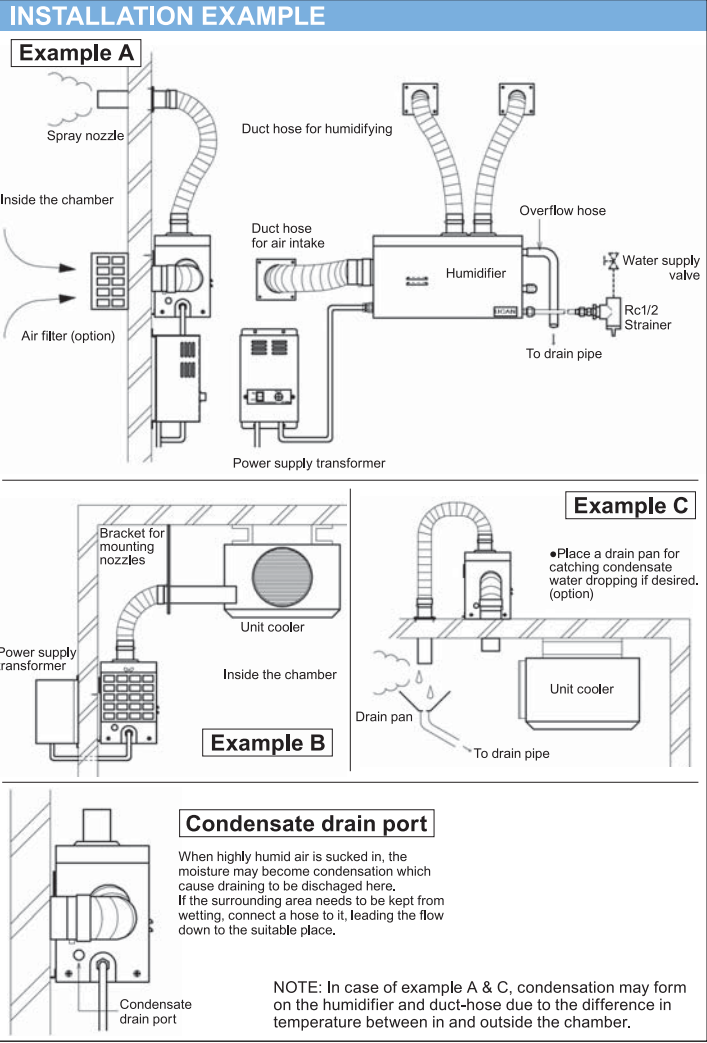
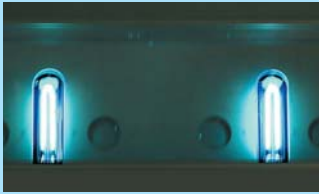
- Refrigerated storages for fruits and vegetables
- Wine cellars
- Food processing machineries
- Storages for cut flowers
- Mushroom culture
- Small-sized air conditioning units

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



UCAN Technology - Power of UV lamp
Sterilizes the water without harming
the human body.

The germicidal ray kills various kinds of bacteria and viruses by directly affecting DNA and RNA and sterilizes the water in the reservoir. Since no chemical substance is used in sterilization, the mist has no effect on the human body.



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 (m ³ / 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/m) 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 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				
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)		

* Other power supply types are available on request.



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.

Air filter protects the unit from dust.



Open showcase for vegetables

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

SC1 types are equipped with a remote controller that makes to spray the mist at stepless level.

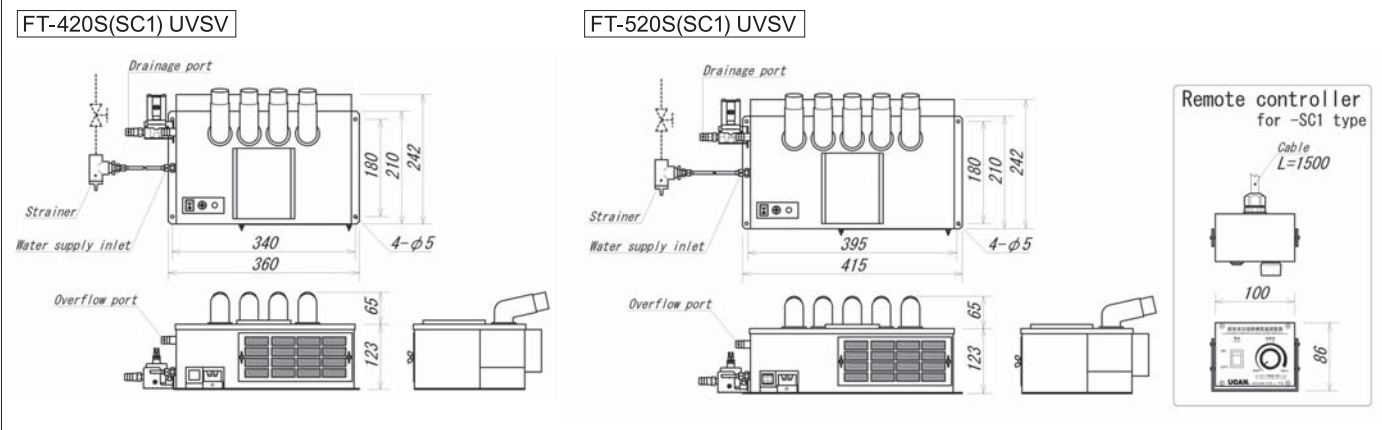


Salad bar



Open showcase for fresh fishes

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



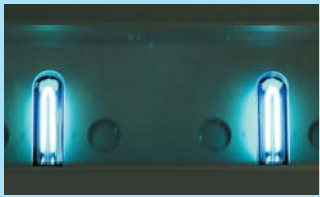
Specifications

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)			

UCAN Technology - Power of UV lamp

Sterilizes the water without harming the human body.

The germicidal ray kills various kinds of bacteria and viruses by directly affecting DNA and RNA and sterilizes the water in the reservoir. Since no chemical substance is used in sterilization, the mist has no effect on the human body.



Ultrasonic humidifier

KIRIPET
FT-M43

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.

Features

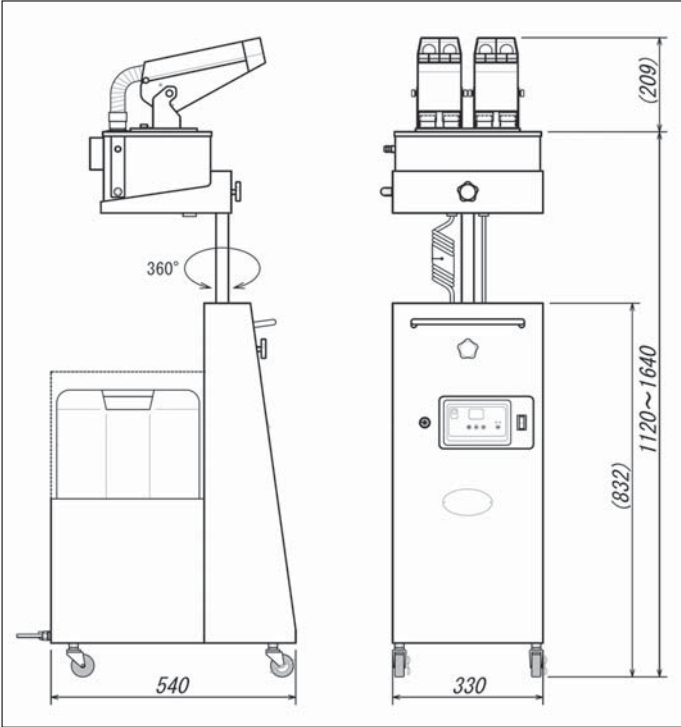
- Portable type with wheels, no piping work needed.
- Booster fans spread the mist extensively and make it mix into the air quickly.
- Height of unit can be adjusted precisely with adjuster.
- Comes with 2 large-sized water tanks (13L × 2pcs). One time filling gives 8 hours continuous humidification.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



KIRIPET FT-M43

Standard Dimensions(mm)

Drawings for CE Compliance, please contact us.



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



Garment factory



Restaurant

UCAN Technology - Power of UV lamp

Sterilizes the water without harming the human body.

The germicidal ray kills various kinds of bacteria and viruses by directly affecting DNA and RNA and sterilizes the water in the reservoir. Since no chemical substance is used in sterilization, the mist has no effect on the human body.



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 (m³ /min) [50/60Hz]	Primary side : 0.5 / 0.6 Booster side : 0.9 × 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 xϕ16) 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.

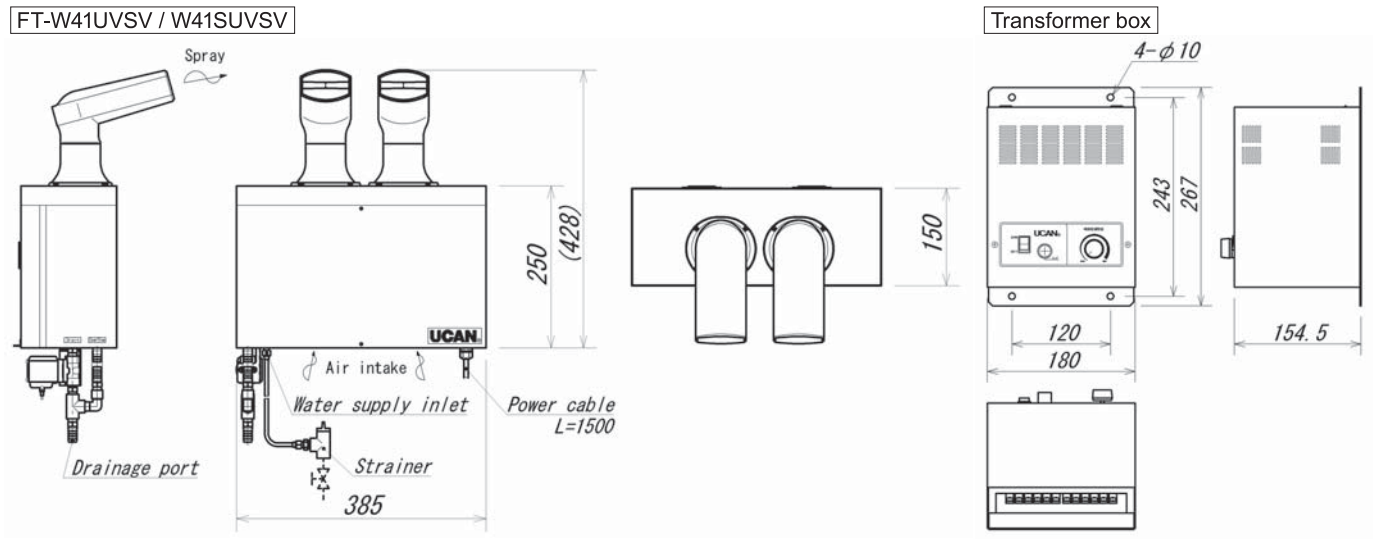
Features

- 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.
- Spray nozzle controller to adjust the mist output.
- Easy to install on the site.

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

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



Specifications

Model	FT-W41UVSV	FT-W41SUVSV
Capacity (L / h)	2.4	1.7
Power supply	1φ 2W 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 (m³ / 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 / cm²)	
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)	

UCAN Technology - Power of UV lamp

Sterilizes the water without harming the human body.

The germicidal ray kills various kinds of bacteria and viruses by directly affecting DNA and RNA and sterilizes the water in the reservoir. Since no chemical substance is used in sterilization, the mist has no effect on the human body.

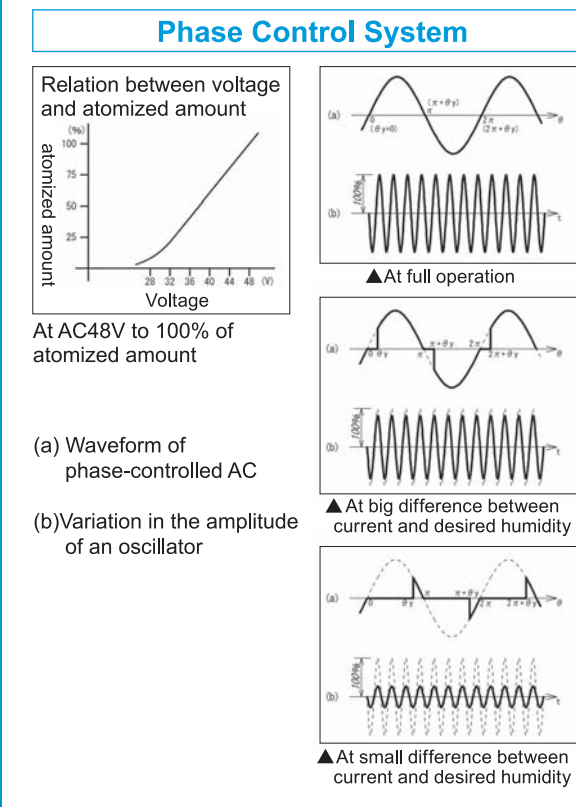


Proportional control system

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.



Phase Control System UCR-unit

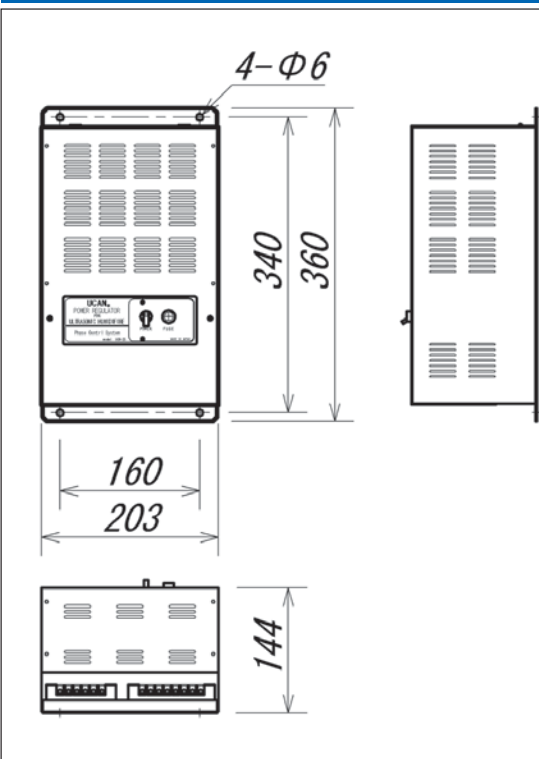
Features

- 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)



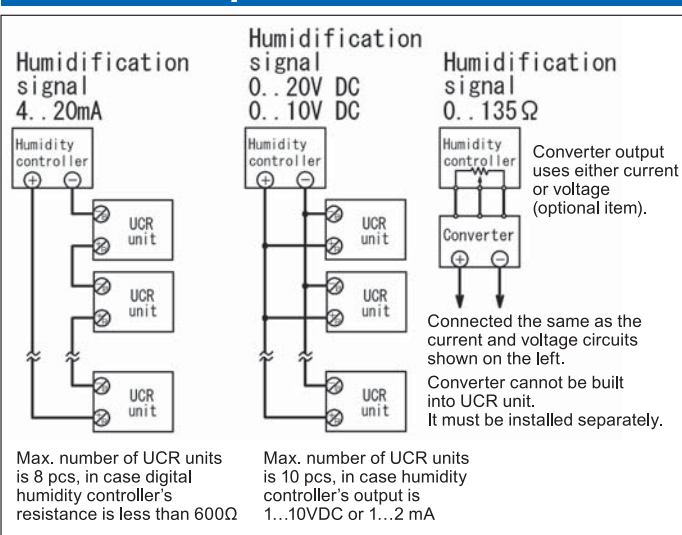
Specifications

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°C, 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)

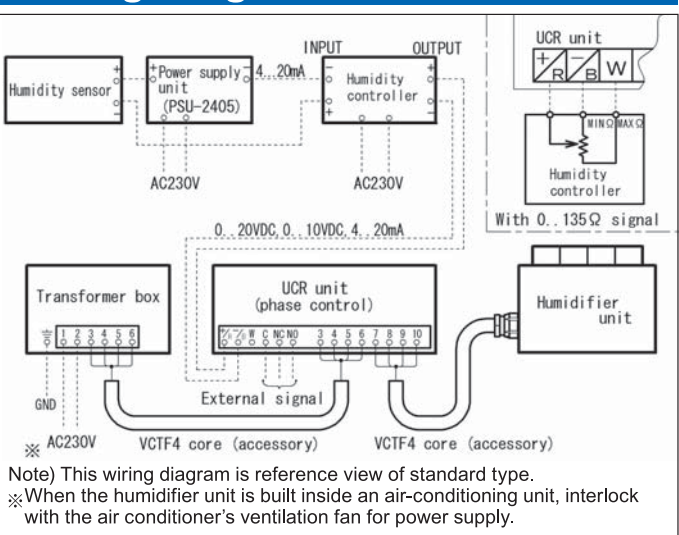
Electric Current by the Models

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



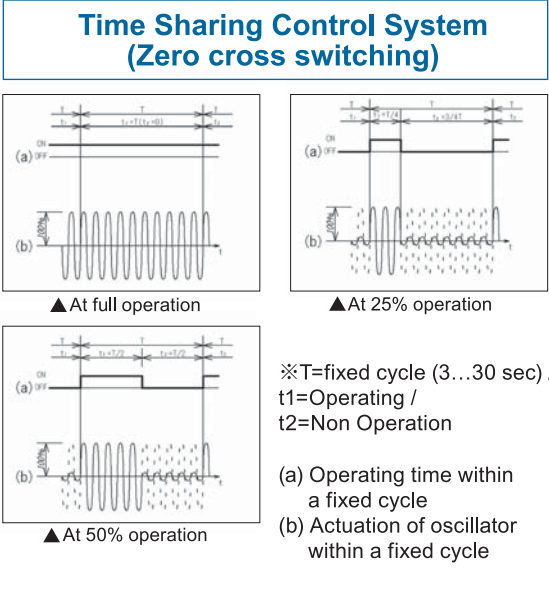
Wiring Diagram



Proportional control system

Time Sharing Control System USS-unit

Proportional control is accomplished by repeating On/Off switching within a fixed cycle by operating signals to cause the variation of time ratio of atomizing in an ultrasonic humidifier unit.



Features

- USS unit uses zero cross switching system.
 - It is available for almost UCAN ultrasonic humidifier models.
 - It repeats On/Off operation within a fixed cycle and proportionally controls the atomization rate of the ultrasonic humidifier.
 - Lower price compared to UCR unit.
- Input signals :** 3...30VDC pulse signal or 4...20mA(SD)

Necessary equipments for time sharing control system

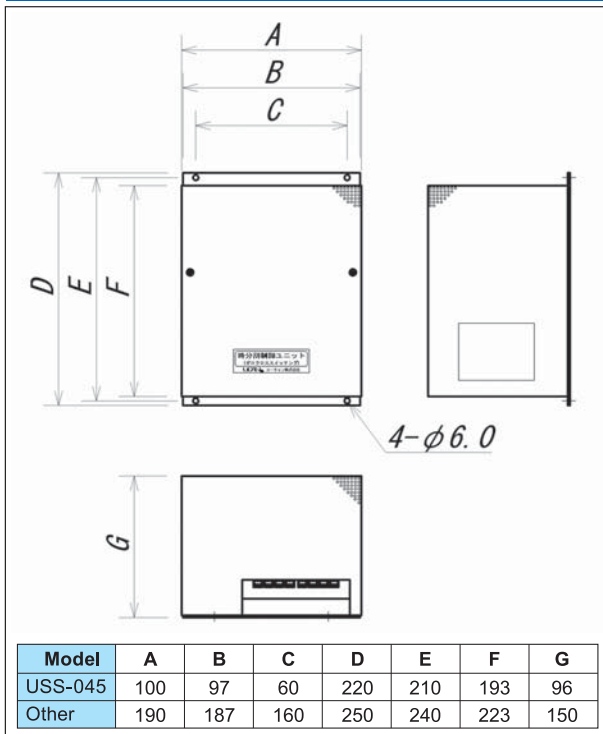
- An ultrasonic humidifier, a USS unit, a DC power supply unit and a digital humidity controller, and a humidity sensor.
- NOTE: Humidity sensor and humidity controller are local procured parts.



USS-045(SD), USS-115(SD), USS-045 USS-240(SD)

Select a humidity controller that output of pulse specification is within 3...30V.
For DC4...20mA output, choose a USS unit (SD type) equipped with a SSR driver (optional).

Standard Dimensions(mm)



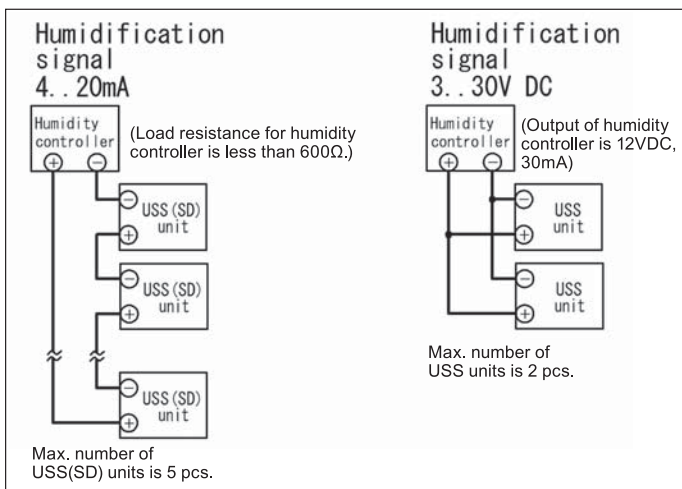
Specifications

Model	USS-045, 115, 240 input 3...30VDC pulse USS-045SD, 115SD, 240SD input 4...20mA	
Power supply	AC48V (50 / 60Hz)	
Frequency	50 / 60Hz	
Humidification signal (Special note for 4...20mA spec. usage)	Setting of pulse about 3...15 sec. with TIME volume. (Min. set at factory) Power adjustment possible 0...100% with OUT, ADJ, volume. (Max. set at factory)	
Ambient condition	1...40℃ , Max.90% RH (No dew condensation)	
Weight	USS-045	0.9kg
	USS-115, 240	2.0kg
	USS-045SD, 115SD, 240SD	2.4kg
Standard accessories	VCTF cable (1800mm, 1pc), Tapping screw for installation (4 pcs), Operational manual (1set)	

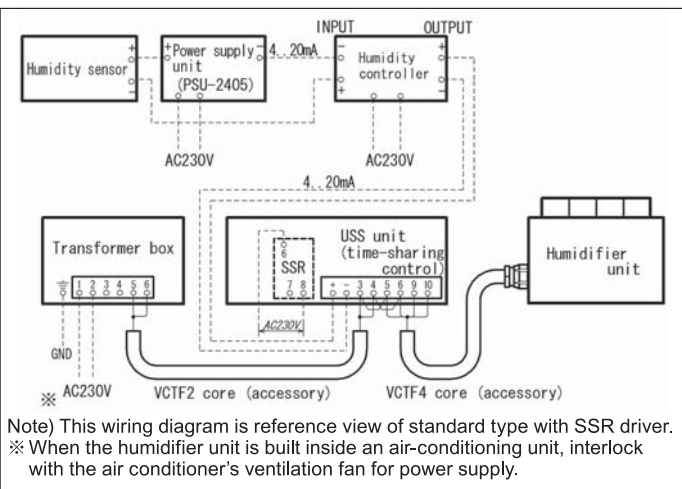
Electric Current by the Models

Model	Max. allowable current (A)	Max. of Oscillators (sets)
USS-045(SD)	4.5	4
USS-115(SD)	11.5	16
USS-240(SD)	24.0	30

Use of Multiple Number of USS units



Wiring Diagram



Vacuum-suction drainage system

Drainsweeper™
JUMBO / MEDIUM / QUARTER
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.
- 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.
- Electrical components are not used thus the unit does not emit a sound and there is no risk of breakdown or fire disaster.
- Installation is extremely simple and easy. It reduces the construction cost by shortening the work period.
- There are S-type (1 vacuum pump) and W-type (2 vacuum pumps). W-type pumps are designed to operate alternately.

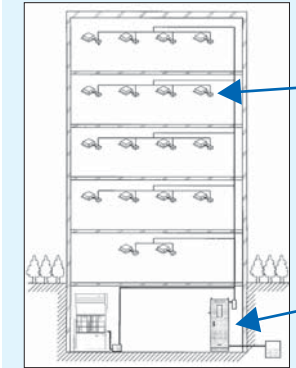
Drainsweeper can handle the drainage from several tens of A/C by just single unit.

Max. applicable amount of A/C per 1 Drainsweeper :

- JUMBO - 80 units
- MEDIUM - 40 units
- QUARTER - 25 units

Drainsweeper UC-PL Series

Installation Image



Drainage receiving tank incorporated into cassette type A/C.

Exhausted drainage is stored in the drainage receiving tank. When the drainage reached the specified water level, the suction valve opens automatically and the drainage is sucked into the Drainsweeper unit.

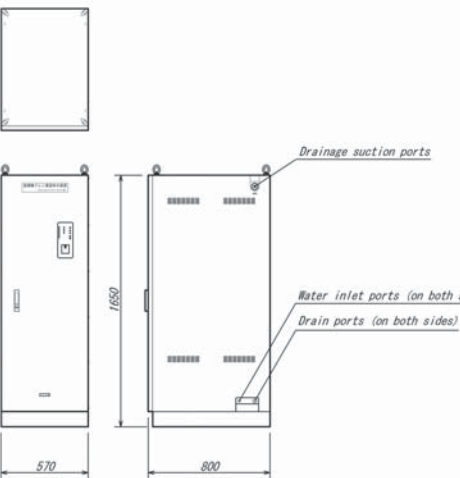


Drainsweeper

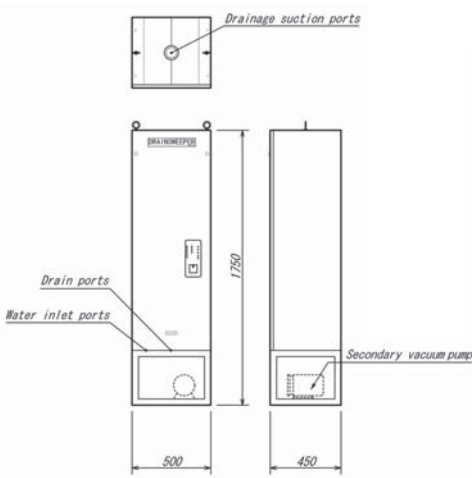
It is installed in the lower part of a building such as underground machine room. Only single unit can handle the exhausted drain from several tens of air conditioner.

Standard Dimensions(mm)

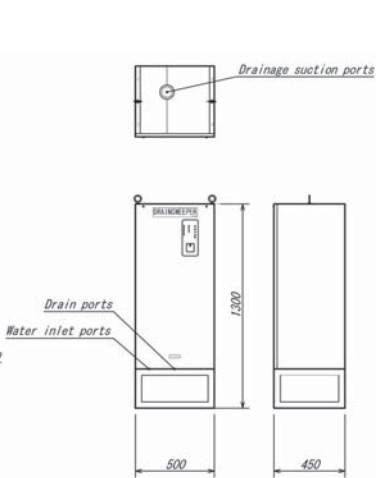
Drainsweeper JUMBO (UC-PL240S/PL240W)



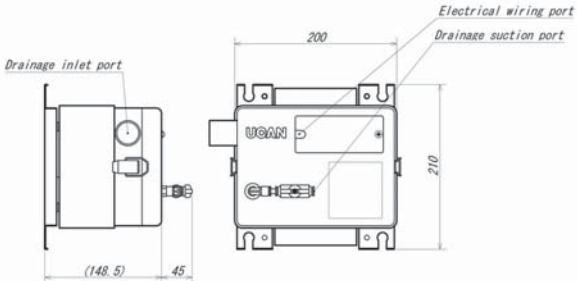
Drainsweeper MEDIUM (UC-PL140S/PL140W)



Drainsweeper QUARTER (UC-PL90S/PL90W)



Drainage receiving tank(DVU-3N-8)



*Secondary vacuum pump of JUMBO and QUARTER is mounted into inside the main unit.

Specifications

Model UC-	PL240S	PL240W	PL140S	PL140W	PL90S	PL90W
Max. condensate drainage capacity (L/h)	240		140		90	
Regular drainage capacity (L/h)	168		98		63	
Operating vacuum pressure	-0.073...-0.079MPa					
Power supply	3φ 3W AC200V 50 / 60Hz			1φ 2W AC200V 50 / 60Hz		
Rated power (kW)	0.78	1.53	0.43	0.83	0.43	0.83
Water supply pressure	0.08...0.5MPa					
Water supply volume	Min.3 L / min	Min.3 L / min at normal Min.6 L / min when the vacuum turns down	Min.3 L / min	Min.3 L / min at normal Min.6 L / min when the vacuum turns down	Min.3 L / min	Min.3 L / min at normal Min.6 L / min when the vacuum turns down
Water supply connection	All water supply connection works must be followed according to the each local involved.					
Automatic alternating operation	without	with	without	with	without	with
External signal	Blanked warning (output from no-voltage contactor)					
Noise (measured distance:1m)	68dB			55dB		
Operating weight (kg)	162	183	120	135	83	101
Ambient condition	5...40℃ (No freezing), Max.90%RH (No condensation)					
Safety equipment	Overcurrent protection by breaker					
Standard accessories	Cartridge filter CFB-512 (1pc), Operational manual (1set)					

Proportional Control Accessories and Optional Products

Proportional Control Accessories

DC power supply (PSU-2405)



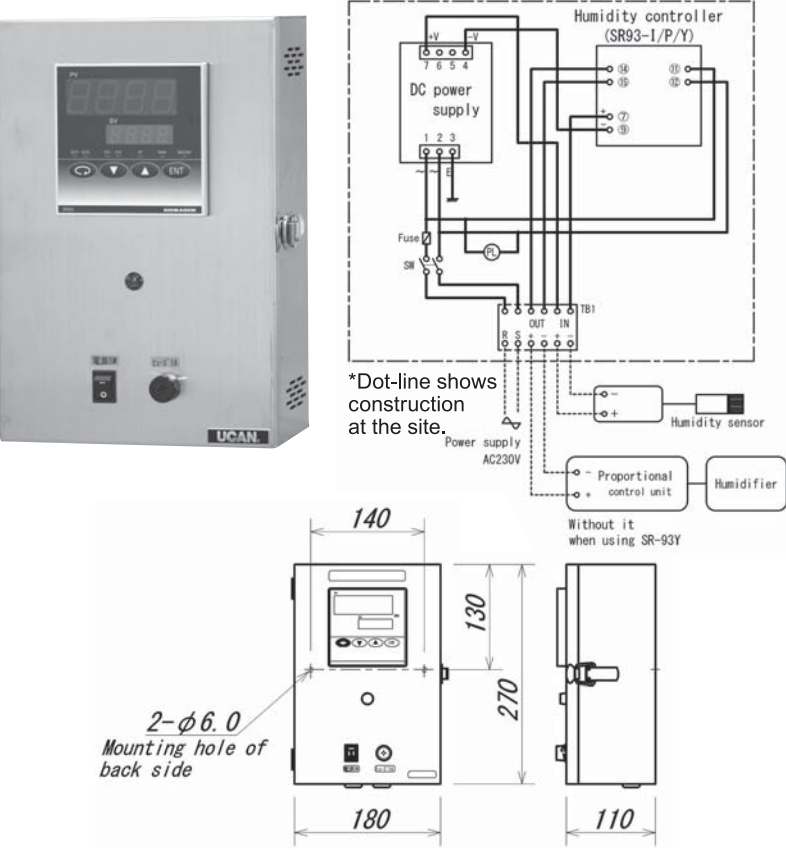
It converts AC to DC to operate the system of humidity sensor and humidistat.

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℃ Ambient humidity 20...90% RH (No condensation)
Weight	1.0kg

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

Housing for humidity controller (CB-11R/CB-11S)

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. 2 types are available, CB-11R for phase control and CB-11S for time sharing control. It is also possible to assemble On/Off control SR93-Y.



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



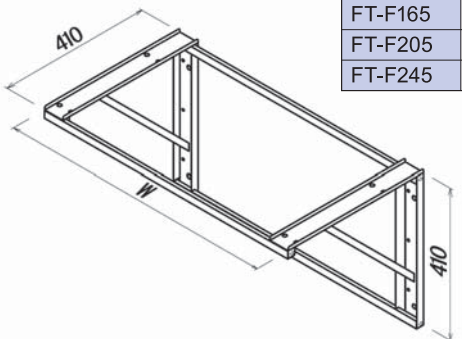
It is used for FT-NUVSV Series. It removes dust particles from intake air.

Parts and Components

Mounting bracket for humidifier

■BK-F for FT-FUVSV series
■BK-SV for drainage solenoid valve

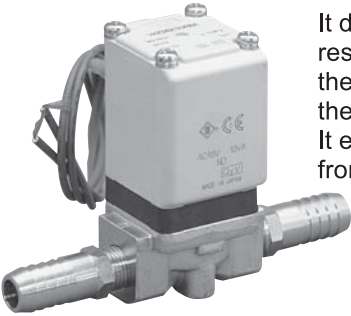
Model	W measurement
FT-F45	445
FT-F85	665
FT-F125	885
FT-F165	1105
FT-F205	1325
FT-F245	1545



◀BK-F

It is used to mount FT-F UVSV unit to the wall.
Material : Stainless Steel

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

For hanging from ceiling

For mounting bracket



▲ Installation example
Please contact us for the details.

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

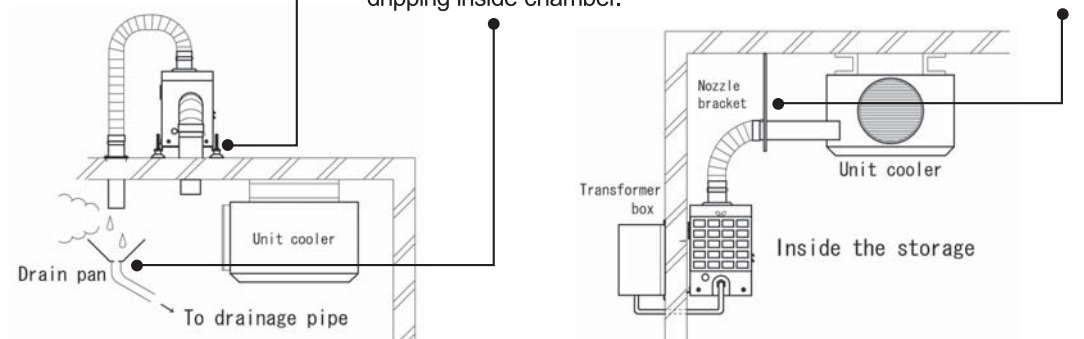
Drain pan (DP-500 / DP-1000)

Nozzle bracket (BK-1)

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

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.

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



Unit cooler

Drain pan

To drainage pipe

Nozzle bracket

Unit cooler

Transformer box

Inside the storage

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 caluculated value of capacity.
 - Consult us in case of selecting the humidifier for the plase where requires particular favorable circum- stances 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 condi- tioner.
 - If not, the unit continues to operate even after shutting off the fan for air conditioner, hence condensa- tion occurs in the air conditioner or inside the duct which cause water leaking and damage of facili- ties 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.
9. The oscillators for the Ultrasonic Humidifiers.
The sheathed heater for Resistive Steam Humidifiers.
The PTC (Positive Temperature Coefficient) immersion heater for 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

