

Rotary Evaporator

Highly Functional & Programmable

RE601 / 801

Evaporating/
receiving flask

1L(Standard)

Rotation speed

20~250rpm

Water / Oil bath temp. range

Water Bath
Room temperature +5~90°C

Oil Bath
Room temperature +10~180°C

Highly functional type

Standard equipped with motorized lift, vacuum regulator, vapor temperature display functions



Highly functional type with automatic distillation

Standard equipped with motorized lift, vacuum regulator, vapor temperature display and automatic distillation function



Common features of RE601 and RE801

- One touch electric lift for easy up and down movement
- Digital setting and display for motor speed (rpm), vacuum and vapor temperature
- Stable rotation at low and high speeds
- Unique durable vacuum seal suitable up to 2L flasks
- One touch operation for displaying and saving operating conditions
- Equipped with lift-up switch in the event of power outage
- Compact, fits into any fume hood
- Universal power supply: works with 100-240VAC

Unique features of RE801

- Automatic distillation
- Continuous bath control
- Data on 53 solvents installed as default

Features

Adjustable Rotary Joint



The rotary joint's locking position feature is adjustable up to 80 mm: useful when using evaporating flasks with varying capacities or when there is a need to shift the vacuum seal's contact position. (Patent No. 3220033)

Quick Release of Evaporating Flask



The evaporating flask can be released easily and quickly by turning the flask release nut.

Glass Condenser (prevents liquid stagnation)



The vertical condenser prevents liquid from stagnating. New condenser tubes (type A&B) are designed to increase cooling capacity with a 20% larger surface area. (Patent No. 4597021)

Control Panel



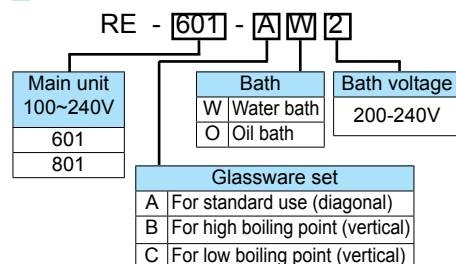
Rotation speed knob with digital display and a programmable vacuum regulator.

Specifications

Model	RE-601	RE801
Motor	DC brushless motor (for rotation)	
Controller	Vacuum regulator VR600	Vacuum regulator VR800
Rotation speed	20~250 (rpm)	
Lift stroke	130mm	
Setting range of vacuum	0~981hPa	
Measurable range of vacuum	0~1033hPa	
Resolution of vacuum	1hPa	
Setting range of hysteresis	1~50hPa	
Resolution of vapor temperature indicator	Selectable (either 1°C or 0.1°C)	
Readout of cooling water temperature	Depending on indicator (option)	
Resolution of cooling water temperature indicator	1°C or 0.1°C	
Operation modes	Free, fixed temperature, fixed temperature timer, descending, and descending timer	Free, fixed temperature, fixed temperature timer, descending, and descending timer, auto I (auto operation with continuous drying), and auto II (auto operation for distillation of single solvent)
Setting range of timer	1-999 minutes in increments/decrements of 1 minute for preset operations, 1-99 minutes for descending timer operations	
Memory	10 programs for each operation	
Data operation	N/A	53 kinds of solvent data
Speed (rpm) setting	Rotation: Control knob Vacuum adjustment: Key pad	
Safety measures (drive unit)	Circuit breaker, rotor for overload protection, manual adjustment of lift's lower limit, lift-up switch during power outage	
Safety measures (vacuum regulator)	Self-diagnostic functions, main unit / bath synchronized stop at malfunction, error display	
Synchronized control feature	Selection of automatic bath stop or automatic insulation	
Lifting feature	One-touch motorized lift system	
External dimension*	With Glassware A (mm)	828(W)×400(D)×727(H) (857(H)when raised)
	With Glassware B/C (mm)	643(W)×400(D)×727(H) (857(H)when raised)
Weight	~15.1kg (excluding the glassware and the water/oil bath)	
Power supply	Main unit (50/60Hz)	AC100~240V 1.5A

*External dimensions (excluding protrusions).

Set Guide



Set Selection Chart

Model	Glass-ware			Bath (100-120V)		Bath (200-240V)	
	A	B	C	Water bath BM500	Oil bath BO400	Water bath BM510	Oil bath BO410
RE-601-AW	●			●			
RE-601-AW2	●					●	
RE-601-AO	●				●		
RE-601-AO2	●						●
RE-601-BW	●	●				●	
RE-601-BW2	●					●	
RE-601-BO	●				●		
RE-601-BO2	●						●
RE-601-CW		●	●				
RE-601-CW2		●				●	
RE-601-CO		●			●		
RE-601-CO2		●					●
RE-801-AW	●			●			
RE-801-AW2	●					●	
RE-801-AO	●				●		
RE-801-AO2	●						●
RE-801-BW	●	●				●	
RE-801-BW2	●					●	
RE-801-BO	●				●		
RE-801-BO2	●						●
RE-801-CW		●	●				
RE-801-CW2		●				●	
RE-801-CO		●			●		
RE-801-CO2		●					●

Operational Accessories

Glassware Set

Product code	Set
255291	Set A (use with cooling water) The Standard glass set where condenser is tilted, suitable for standard distillation.
255292	Set B (use with cooling water) The condenser is set vertical, suitable for distillation of solvent with higher boiling points. When space is limited, the use of a vertical condenser set up is recommended
255293	Set C (use with dry ice) The cold finger glass condenser is set vertically, suitable for distillation of volatile or low boiling point solvents. When space is limited, the use of a vertical condenser set up is recommended

Bath Specifications

Product name	Water bath		Oil bath	
Model	BM500	BM510	BO400	BO410
Temp. control range	RT +5°C~90°C		RT +10°C~180°C	
Temp. setting range	0~100°C		0~180°C	
Temp. adjustment accuracy	±1.5°C (at agitation)		±2°C (at agitation)	
Temp. control system	PID control with microprocessor			
Temp. setting / display system	Digital setting by ▲/▼ keys			
Bath capacity	~4L			
External dimensions	W340 x D349 x H231 mm			
Weight	~5.5kg			
Power supply	AC100~120V 12.5~10.5A	AC200~240V 6.5~5.5A	AC100~120V 12.5~10.5A	AC200~240V 6.5~5.5A



BM500
The electric kettle style tank can be removed freely

Optional Accessories

Glassware



● Evaporating flask

Product code	Size	Capacity
LT00016206	29/42	2L
LT00016205	29/42	500ml
LT00016204	29/42	300ml
LT00016203	29/42	200ml
LT00016202	29/42	100ml



● Receiving flask

Product code	Size	Capacity
LT00016210	35/20	2L
LT00016180	35/20	500ml
LT00016209	35/20	300ml
LT00016208	35/20	200ml
LT00016207	35/20	100ml



● Joint

Product code	Description
RE200GT010	TS 29/42- 24/40
RE200GT012	TS 29/42- 29/42



● Trap ball

Product code	Description
RE200GT002	TS 29/42- 29/42
RE200GT003	TS 29/42- 24/40



● Steam Duct / Rotary Joint

Product code	Description
LT00016211ASSY (29/42)	with o-ring and nut

Connection method



Teflon seal

● Vacuum seal

Product code	Description
RE50040090 (standard)	Silicone rubber vacuum seal
ORE7042000	Teflon vacuum seal ORE70



● Hose connection parts and trap

Product code	Description
255284	Hose connection parts ORE30
255285	Trap with nozzle ORE40

Vacuum Pump



Model	DTC-22A	DTC-22B
Discharge rate	50Hz: 20L/min, 60Hz: 24L/min	
Ultimate pressure	1.0x10 ⁻³ Pa	
Motor	AC115V, Single phase 50W, 4P, with condenser-run thermal protection relay (automatic reset)	AC220V, Single phase
Rated current	1.20/1.32A (50/60Hz)	0.60/0.72A (50/60Hz)
Speed	1260 / 1580rpm	1275 / 1570rpm
Inlet and outlet piping	O.D.ø10 x I.D.ø6 (G1/4)	
Weight	7.1kg	
Air temperature	0~40°C	
Overall dimensions	W142 x L272 x H202 mm	
Product code	DTC22A115RERKIT	DTC22B220RERKIT
Components	DTC-22A Dry Vacuum Pump, 5' of 8mm ID Rubber Hose, Hose Clamp	DTC-22A Dry Vacuum Pump, 5' of 8mm ID Rubber Hose, Hose Clamp

Organic Solvent Recovery Unit



Model	RT200
Condenser	Hard glass
Solvent collecting flask	500mL hard glass S35/20
Flask clamp	For 35mm
Outer covering	Print coating finish made from cold rolling steel sheet
Door	Acrylic door
IN/OUT nipple connected to a cooling water hose	Outer diameter: 9mm
IN/OUT nipple connected to a vacuum water hose	Outer diameter: 6mm
External diameter	W260 x D400 x H428mm

RT200 extracts organic solvent substances from gas generated by the rotary evaporator during concentration work, and prevents the discharge of dangerous substances

Water Circulator (Chiller)



Model	CF302L-A / CF312L-A
Operating temp. range	-20°C~30°C
Temp. control accuracy	±1.0°C (≥ 0°C) ±1.5°C (< 0°C)
Cooling capacity	~420W at liquid temp 10°C ~280W at liquid temp -10°C
Temp. control	Refrigerator On/Off
Refrigerator, coolant	Air cooling 450W, R404A
External dimension (including protrusions)	205 x 396 x 535 mm (225 x 434 x 564 mm)
Water capacity	~3.9L (Liquid volume 3.5L)
Power source 60Hz	115V 7.5A / 220V 4A
Weight	~31kg

Complete set with optional accessories



Rotary Evaporator RE601BW
Vacuum pump DTC22
Organic solvent recovery unit RT200
Cooling water circulator CF302L-A
Stand with caster wheel 255282

Space Saving Design



Compact Rotary Evaporator, which can be neatly installed in a Fume Hood. The vertical condenser does not take up much space

Diaphragm Vacuum Pump

PG201/302・DTC41/60

Effective pumping speed (50/60 Hz)

20/24L/min
PG201

30L/min
PG302

40/46L/min
DTC41

60/70L/min
DTC60

Ultimate pressure

1000Pa

Chemical type diaphragm type, use PTFE parts resistant to corrosion resistance

Effective pumping speed 20/30L/min type

PG201/302

- It is excellent in corrosion resistance and is suitable for sucking gas containing organic solvent.
- The ultimate pressure has reached 1,000Pa while being compact and lightweight.
- Maintenance is easy.
- PG 302 is equipped with a DC motor, the flow rate setting from 15L to 30L is possible.*1 (special dedicated controller is required separately)
- PG 302 are multi-range compatible with AC 100V to 240V. (Power cable is required separately except for 100V)

*1 0~5 V (Input impedance : 100 kΩ signal input is required.)



PG201



PG302

Specifications

Product code	255158	255160
Model	PG201	PG302
Effective pumping speed (50/60 Hz)	20/24L/min	30L/min
Ultimate pressure	1200Pa	
Motor	AC100V, 50W, 4P Capacitor run	AC 100 to 240V Brushless DC motor with sensor
Full load current	1.3A	1.5A (100V) Intake pressure : Atmospheric pressure, Rotating speed : 1290 min ⁻¹
Inlet, outlet pipe diameter	O.D. 10mm × I.D. 6mm (G 1/4)	
Ambient temperature	0 to 40°C	5 to 40°C
Power source	AC115V/220V Single phase with step-down transformer	AC100 to 240V Single phase
External dimensions	W142×D272×H202mm	W142×D272×H202mm
Weight	Approx. 7.1kg	Approx. 5.5kg

Effective pumping speed 40/60L/min type

DTC41/60

- It is excellent in corrosion resistance and is suitable for sucking gas containing organic solvent.
- The ultimate pressure has reached 1,000Pa while being compact and lightweight.
- Maintenance is easy.



DTC41



DTC60

Specifications

Product code	242237	242238
Model	DTC41	DTC60
Effective pumping speed (50/60 Hz)	40/46L/min	60/70L/min
Ultimate pressure	1000Pa	
Motor	AC100V, 100W, 4P Capacitor run	AC100V, 200W, 4P Capacitor run
Full load current (50/60 Hz)	2.2A/2.3A	3.8A/3.9A
Inlet, outlet pipe diameter	O.D. 10mm × I.D. 6mm (G 1/4)	O.D. 14mm × I.D. 9mm (G 3/8)
Ambient temperature	0 to 40°C	
Power source	AC115V/220V Single phase with step-down transformer	AC115V/220V Single phase with step-down transformer
External dimensions	W155×D336.5×H217mm	W158×D340×H242mm
Weight	Approx. 10.3kg	Approx. 18kg

Specifications

Product code	221712	221713	221714	221715
Model	CF303-Y	CF313-B	CF313-Y	CF313-X
Circulation type	Closed circulation			
Circulating water	Tap water, nybrine (liquid temperature below 10°C)			
Operation temperature range	5°C to 35°C			
Performance	Temperature control range*1	-20°C to 30°C		
	Temperature adjustment accuracy*2	JTM K05±1.0°C (≥0°C) JTM K05±1.5°C (<0°C)		
	Temperature fluctuation*2	JIS 2.0°C (≥0°C) JIS 3.0°C (<0°C)		
	Cooling capacity*2	Approx. 450W at 10°C liquid temp. Approx. 330W at -10°C liquid temp.		
	Max. flow rate*3	Approx. 10 L/min (60Hz)	Approx. 9 L/min (50Hz)	Approx. 10 L/min (60Hz)
Configuration	Max. lift*3	Approx. 5.7m (60Hz)	Approx. 4.3m (50Hz)	Approx. 5.7m (60Hz)
	Temperature control	Refrigerator ON/OFF control		
	Temperature sensor	Pt100Ω		
	Temperature setting/display	White LED digital display, key input, minimum digit 1°C		
	Refrigerator and refrigerant	Air-cooling 450W, R452A		
Safety features	External circulation nozzle	One-touch connector (Flexible rotary L type) Top rear, 1 system		
	Water circulating pump	Magnet pump 15W (60Hz)	Magnet pump 15W (50Hz)	Magnet pump 20W (60Hz)
				Magnet pump 15W (50Hz)
		Overcurrent leakage breaker, temperature sensor abnormality, Temperature upper/lower limit warning, Temperature upper/lower limit abnormality, Refrigerator overload relay, Fan motor protection, Circulation pump protection, Refrigerator protection delay timer, Refrigeration high pressure switch		
	Other features	Drainage hose, Circulation port condensation water drainage hose, Intake port dustproof filter, Cooling operation switch, Circulation pump switch, Calibration offset, Power failure recovery function (selectable)		
Standard	Inner tank material	Stainless steel		
	Inner tank capacity	Approx. 3.9L (liquid volume 3.5L)		
	External dimensions (W×D×Hmm)	205×396×535 When including protrusions: (225×434×564)		
	Weight	Approx. 30 kg		
	Power source*4	AC115V 60Hz Single-phase	AC220V 50Hz Single-phase	AC220V 60Hz Single-phase
Accessories*5	Capacity	6.8A	3.8A	4A
				3.8A
		Two hose nozzles (for flexible hose connection), One condensation waterdrainage hose 1m (inner diameter ϕ12 mm), Two clamps for hose fixing		
		-	-	C-type conversion power plug

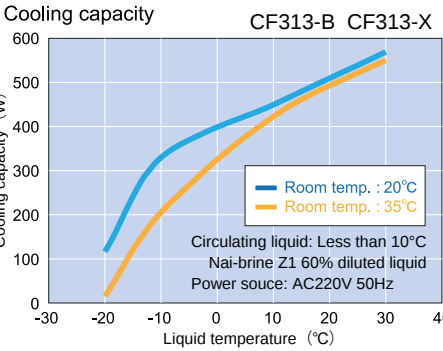
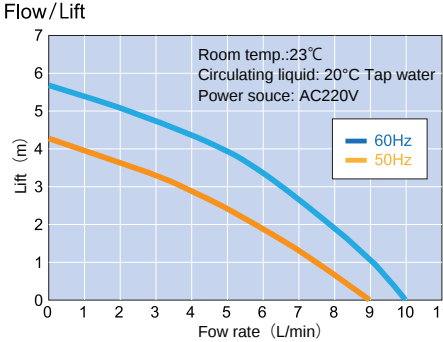
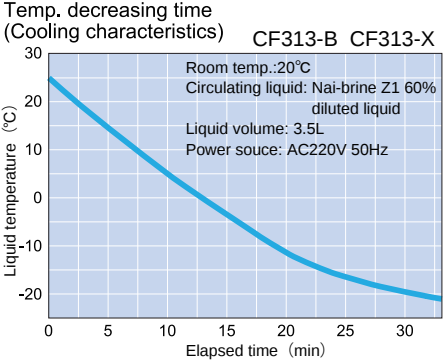
*1 This model is not equipped with the heating function. Depending on the ambient temperature and connection conditions, -20°C may not be reached.
*2 Ambient temperature: 20 °C, circulating volume: max. No external load
Varies depending on operating conditions such as room temperature, circulating volume, type of circulating fluid, external load, etc.
The cooling capacity, power supply voltage/frequency is as follows
CF303-Y: AC115V/60Hz, CF313-B and X: AC220V/50Hz, CF313-Y: AC220V/60Hz. Also, ±10% of the displayed capacity.
Temperature control accuracy is the standard value calculated using JTM K05 and temperature fluctuation is the standard value calculated using the JIS standard (Amended 2020).
*3 Capacity values are based on tap water at a liquid temperature of 20°C. *4 The length of the power cord is approximately 2m outside the unit. *5 Circulation insulated hose is not included.

Optional Items

No.	Product name	Specifications	Model	Product code
①	Heat insulated circulation hose	Inner diameter 9mm, ethylene propylene (soft) hose (2m) 2 pcs., clamps 4pcs.	OCF12	221581
②	Heat insulated circulation hose	High heat insulation, inner diameter 9mm, silicone (soft) hose (2m) 2pcs., clamps 4pcs.	OCF62	221599
③	Heat insulated circulation hose	Outer diameter 10mm, polyurethane (hard) tube (2m) 2pcs.	OCF78	281475
④	L shaped circulation nozzle	ϕ8mm R3/8 SUS304	OCF80	281476
⑤	L shaped circulation nozzle	ϕ10.5mm R3/8 SUS304	OCL30	221396
⑥	L shaped circulation nozzle	ϕ13mm R3/8 SUS304	OCL40	221397
⑦	L shaped circulation nozzle	ϕ16mm R3/8 SUS304	OCL50	221398
⑧	Flow control valve	R3/8	OCF82	281477
⑨	External linkage input terminal*2	Operation/stop by no-voltage A contact input	OCF96	281484
⑩	One touch connector	Straight one-touch connector R3/8×outer diameter ϕ10mm for hard tubes	OCF88	281480
⑪	One touch connector	L-shaped swivel type one-touch connector R3/8×outer diameter ϕ10mm for hard tubes	OCF90	281481
⑫	Strainer set	Y-type strainer (20 mesh, Rc3/8) +Outlet connection tube	OCF92	281482
⑬	Hose nozzle	Connection from outer diameter 10mm hard tube to inner diameter 9mm soft hose*3	OCF94	281483

*2 Please specify the external linkage input terminal when ordering the main unit. *3 Standard accessories

Performance Curve



SINCE 1889



Cooling Water Circulator
(Externally Closed Circulation)

CF303-Y
CF313-B/CF313-Y/CF313-X

Amazing Price, High Performance,
Design•Operability

Same size as the previous model, but
with even greater cooling capacity.

The dimensions are the same as the previous
model (CF302L) in a compact size, but the cooling
capacity has been further improved.

More environmentally friendly.

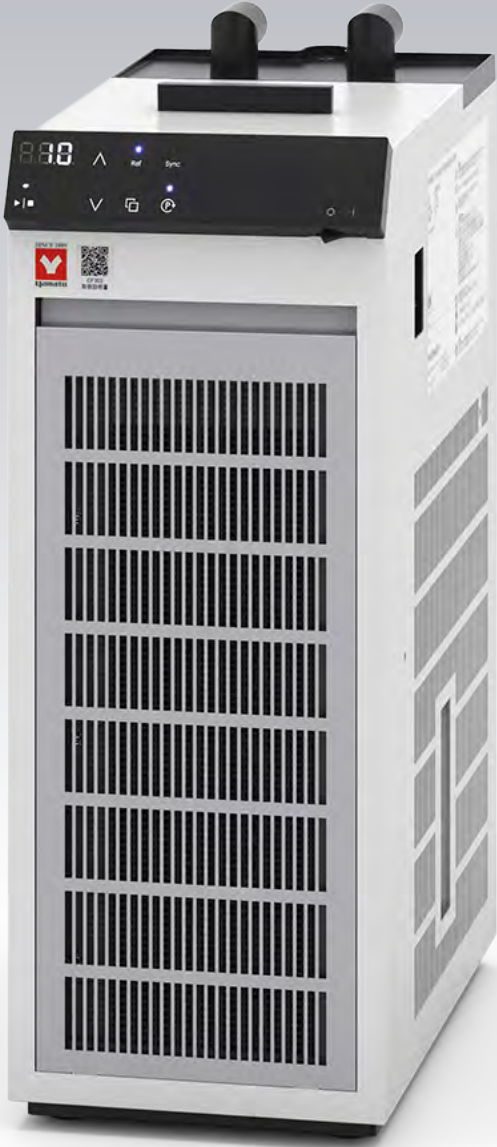
The type of refrigerant used in our refrigeration
equipment has been changed, making it more
environmentally friendly than ever before.

CF303-Y
CF313-B/CF313-Y/CF313-X

Improved cooling capacity further reduces GWP

GWP value: 2140

Temperature control range: -20°C to 30°C



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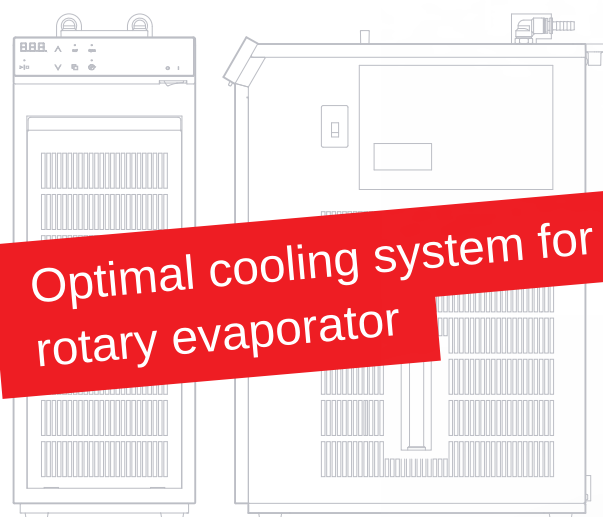
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Cooling Water Circulator

(Externally Closed Circulation)

CF303-Y/CF313-B/CF313-Y/CF313-X

Cooling of the heat generating parts by closed circulation in various applications such as research equipment, industrial machinery, analysis and measuring instruments!



Optimal cooling system for rotary evaporator

CF303-Y
CF313-B/CF313-Y/CF313-X

Temperature control range: -20°C to 30°C



Installed under the table



Installed on the table

Easy maintenance of the inlet filter

The front filter mounting plate is only fixed by a magnet, so it can be easily removed by pulling for cleaning. The sheet filter is easy to clean and remount.



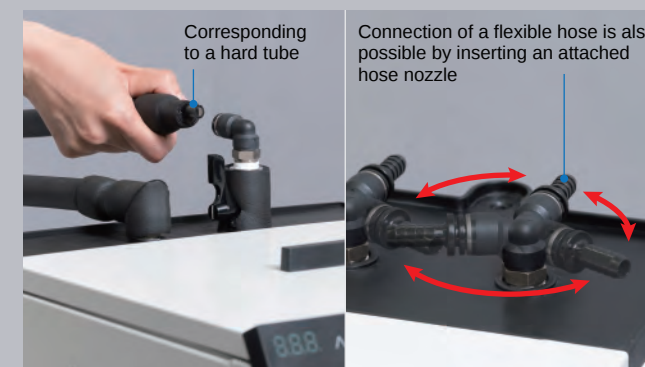
New user friendly controller

A new controller with high visibility and improved operability with a high brightness white LED is adopted. Switching between measured temperature display and set temperature display is possible. The design is simple and easy to use.



Stress-free circulation connection

Connection is completed by inserting a hard tube (outer diameter of ϕ 10mm) only. The connector part is rotatable, so it can be turned freely and does not apply stress to the hose. Connection to a flexible hoses such as silicone hose (inner diameter of ϕ 9mm) is also possible by inserting the supplied hose nozzle.



Safe drainage of condensation water

A drain for condensation water is provided near the connector on the upper rear side. Connect the provided drainage hose and utilize it to drain condensation water.

