

# Rotary Evaporator

Basic with motorized lift and digital setting

## RE301

Evaporating/  
Receiving flask

1L(Standard)

Rotation speed

20~250rpm

Temperature range

Water Bath  
Room temperature +5~90°C

Oil Bath  
Room temperature +10~180°C



RE-301-AW  
(Glassware A)

RE-301-BW  
(Glassware B)

RE-301-CW  
(Glassware C)

- One touch electric lift for easy up and down movement
- The evaporator's motor speed (rpm) is digitally set and displayed
- Unique durable vacuum seal suitable up to 2L flasks
- Stable rotation at low and high speeds
- Equipped with lift up switch in case of power outage
- Removable bath for easy cleaning and water replacement, with the option for water or oil bath
- Compact design fits into any fume hood
- Universal power supply: works with 100~240VAC

### 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.



#### Motorized Lift

Standard for all models and can be easily raised or lowered by a simple switch operation



#### Glass Condenser

Unique designed glass condenser to prevent liquid stagnation and backflow and increase cooling capacity with a 20% larger surface area to enable faster distillation. (Patent No. 4597021)



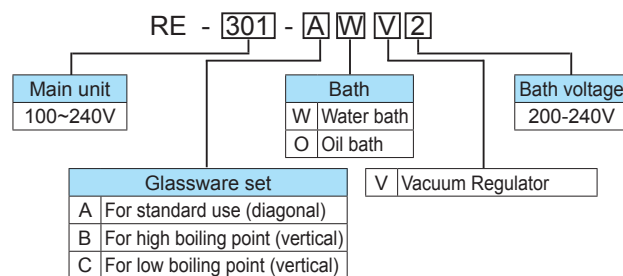
#### Control Panel

Rotation speed knob with digital display indication

### Specifications

Model		RE301
Motor		DC brushless motor
Rotation speed		20~250 (rpm)
Lift stroke		130mm
Rotational speed setting		Control knob (digital indication)
Safety function (main unit)		Manual-setting lower limit, motor overload
Lifting feature		Motorized lifting system
External dimension	With Glassware A (mm)	828(W)× 400(D)×586(H) (716 when raised)
	With Glassware B/C (mm)	643(W)× 400(D)×727(H) (857 when raised)
Weight		~14.1kg (excluding glassware and water/oil bath)
Power supply	Main unit(50/60Hz)	AC100~240V 1.5A(excluding water/oil bath)

### Set Guide



### Set Selection Chart

Model	Glassware			Bath (100~120V AC)		Bath (200~240V AC)		Vacuum regulator
	A	B	C	Water bath	Oil bath	Water bath	Oil bath	
RE-301-AW	●			●				
RE-301-AW2	●					●		
RE-301-AO	●				●			
RE-301-AO2	●						●	
RE-301-AWV	●			●				●
RE-301-AWV2	●					●		●
RE-301-AOV	●				●			●
RE-301-AOV2	●						●	●
RE-301-BW		●		●				
RE-301-BW2		●				●		
RE-301-BO		●			●			
RE-301-BO2		●					●	
RE-301-BWV		●		●				●
RE-301-BWV2		●				●		●
RE-301-BOV		●			●			●
RE-301-BOV2		●					●	●
RE-301-CW			●	●				
RE-301-CW2			●			●		
RE-301-CO			●		●			
RE-301-CO2			●				●	
RE-301-CWV			●	●				●
RE-301-CWV2			●			●		●
RE-301-COV			●		●			●
RE-301-COV2			●				●	●

## Operational Accessories

### Glassware Set

Product code	Set
255291	Set A (use with cooling water) The Standard glass set where condenser is diagonally, 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



BM500  
The electric kettle style tank can be removed freely

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 10.5~12.5A	AC200~240V 5.5~6.5A	AC100~120V 10.5~12.5A	AC200~240V 5.5~6.5A

## 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



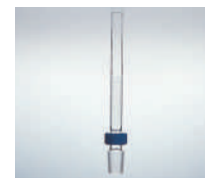
Joint

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

### 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*D400*H428mm

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

### Vacuum Pump



Model	DTC-22A	DTC-22B
Discharge rate	50Hz: 20L/min, 60Hz: 24L/min	
Ultimate pressure	1.0x10 <sup>-3</sup> Pa	
Motor	AC115, Single phase 50W, 4P, with condenser-run thermal protection relay (automatic reset)	AC220, 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. Φ10 x I.D. Φ6 (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

### Cooling Water Circulator (Chiller)



Model	CF301
Operating temp. range	-20°C~Room temp.
Temp. control accuracy	±2°C
Cooling capacity	~450W(387Kcal/h)at Liquid temp. 10°C ~360W(309Kcal/h)at Liquid temp. 0°C ~270W(232Kcal/h)at Liquid temp. -10°C
Temp. control	Refrigerator On/Off Control
Refrigerator, coolant	Air cooling 450W, R404A
Water bath dimension	151 x 151 x 177
Water capacity	~4L (Liquid amount 3L)
Power source	AC100 ~ AC240
Weight	~50kg

CF301 keeps water in the condenser at a stable low temperature which increases evaporation rate and maximizes solvent collection. Use with glassware A or B

### Vacuum Regulator



Model	VR300
Setting range of vacuum	0~981hPa
Measurable range of vacuum	0~1033hPa
Resolution of vacuum	1hPa
Setting range of hysteresis	1~50hPa
Operation modes	Free, fixed temperature, fixed temperature timer, descending and descending timer
Setting range of timer	Fixed operation 1~999min Descending operation 1~99min
Safety features	Self-diagnosis, alarm