

# 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



RE-601-AW (Glassware A)

RE-601-BW (Glassware B)

RE-601-CW (Glassware C)

### Highly functional type with automatic distillation

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



RE-801-AW (Glassware A)

RE-801-BW (Glassware B)

RE-801-CW (Glassware C)

#### 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



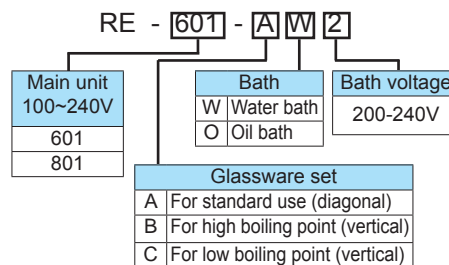
Rotation speed knob with digital display and a programmable vacuum regulator.

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



Optional Standard

#### ● Vacuum seal

Product code	Description
RE50040090 (standard)	Silicone rubber vacuum seal <i>updated color: white</i>
ORE7042000	Teflon vacuum seal ORE70 (red) optional



#### ● 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 <sup>3</sup> Pa	
Motor	AC115V, Single phase	AC220V, Single phase
	50W, 4P, with condenser-run thermal protection relay (automatic reset)	
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	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 177mm
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

### Complete set with optional accessories



Rotary Evaporator RE601BW  
Vacuum pump DTC22  
Organic solvent recovery unit RT200  
Cooling water circulator CF301  
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