

# 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



- 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)

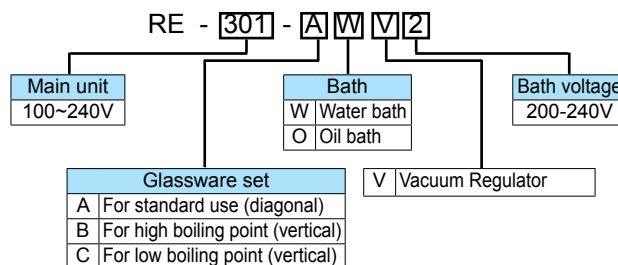


● **Control Panel**  
Rotation speed knob with digital display indication

### 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)<br>Standard glass set where condenser is set diagonally, suitable for standard distillation.   |
| 255292       | Set B (use with cooling water)<br>The condenser is set vertically, 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)<br>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<br>12.5~10.5A        | AC200~240V<br>6.5~5.5A | AC100~120V<br>12.5~10.5A | AC200~240V<br>6.5~5.5A |

## 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 |

### Water Circulator (Chiller)



| Model                                      | CF302L-A / CF312L-A                                     |
|--|---|
| Operating temp. range                      | -20°C~30°C  |
| Temp. control accuracy                     | ±1.0°C (≥ 0°C)<br>±1.5°C (< 0°C)                        |
| Cooling capacity                           | ~420W at liquid temp 10°C<br>~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<br>(225 x 434 x 564 mm)              |
| Water capacity                             | ~3.9L (Liquid volume 3.5L)                              |
| Power source 60Hz                          | 115V 7.5A / 220V 4A                                     |
| Weight                                     | ~31kg   |

### 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<br>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 |

### 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 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<br>Descending operation 1~99min                          |
| Safety features             | Self-diagnosis, alarm   |