

Rotary Evaporator

Highly efficient standard rotary evaporator with manual lift

RE202/212

Evaporating /
receiving flask

1L (Standard)

Rotation speed
control range

5~315 rpm

Water bath / oil bath
temp. range

RT +10~90°C / RT +10~180°C



Features

5~315 rpm rotation speed range

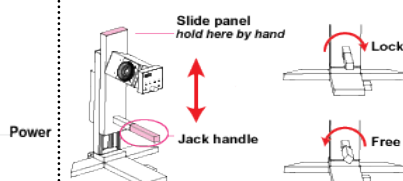
Turning the encoder dial slowly increases or decreases the value by 1, turning it quickly changes the value by 10. Selectable rotation mode (forward, reverse, auto reverse) RPM display brightness can be adjusted in 8 levels.



Convenient height adjustment

Slide panel employs a spring-loaded jack to lift up. Easily twist the handle counterclockwise, adjust, lock and release. Maximum height is 200mm.

Panel jumps up when releasing jack's lock without glassware mounted. Be sure to hold top of the slide panel by hand whenever releasing the lock.



Set inversion function

Glassware and bath can be set in either side, left or right, depending on user's dominant hand and installation location. Three units of Glassware B (with vertical condenser) can be installed in a standard fume hood.



Uniquely designed glass condenser

This prevents liquid stagnation and backflow improving durability of vacuum seal

When using ketone or other solvents, standard vacuum seal swells. It is recommended to use PTFE vacuum seal.



Condenser is fastened tightly

Yamato adopts a condenser bracket screwed firmly to the motor box. It does not loosen or rattle even when jack moves up and down.

Vertical condenser (Glassware B) is used in conjunction with the condenser bracket.



Cables are stored neatly, simply and smartly

The AC adapter holder at the back of the main unit helps to keep in place the AC adapter and excess cables. Rear cover keeps dust and liquid off the cables and organized wiring is achieved when unit is placed inside a laboratory bench and fume hood.



Two types of baths

Option for water and oil bath. Large capacity 5L bath with 240mm I.D. and a full complement of safety functions such as automatic overheat prevention and temp. upper limit difference.



Condenser insulation kit

This insulating material is used to suppress condensation on the surface of the condenser. Standard attached to Glassware A and B.



Specifications

Model		RE202/212 (Main Unit)	RE202A/212A (Glassware A)	RE202B/212B (Glassware B)
Performance *1	Operating ambient temp. range	5~35°C		
	Speed range	5~315 rpm *3		
	Evaporation capacity	---	Up to 23 ml/min	
Functions	RPM display	Digital display / Encoder dial setting		
	Rotation mode	Forward/Reverse/Auto reverse		
	Spring-loaded jack	Manual balance (Max. height 200 mm, stepless regulation, one-touch lock)		
Configuration	Rotary motor	DC brushless (simple servo)		
	Condenser retention	Retaining bracket for vertical condenser (condenser type B)		
Safety functions		DC motor: Motor overload protection, overvoltage, low voltage, rotation speed sensor error AC adapter: Short circuit in internal circuit, overcurrent protection, overvoltage protection		
Standard	Cooling condenser	---	Double corrugated tube (cooling surface: 0.143 m ²)	Double corrugated tube (cooling surface: 0.143 m ²)
		---	Suction port: GL-14 (lower), Φ10 nozzle	Suction Port: GL-14 (upper), Φ10 nozzle
		---	Cooling port: GL14 (two places in lower part), two φ10 nozzles	
	Compatible evaporation flask	0-2000ml for TS24. Use optional reducer to attach small flasks.		
	Compatible receiving flask	100-2000 ml		
	External dimensions *2 (W x D x H)	375 × 324 × 445	719 × 324 × 534	529 × 324 × 745
	Overall dimensions *2 (including bath) (W x D x H)	---	744 × 365 × 534	554 × 365 × 745
	Power rating	RE202: 100-115 VAC single phase 1A RE212: 200-230 VAC single phase 1A		
	Power cable	Approx. 2.0 m with inlet plug		
Weight	Approx. 7.0 kg	Approx. 9.0 kg (including RE unit)		
Accessories		Main unit: AC adapter (1), power cable (1), bath guide (1), rear cover (1), single-sided tape fastener roll (1), double-sided tape, fastener roll (1), condenser bracket (1), hex wrench (1), Instruction manual (1), warranty card (1)		
		Glass set: Cooling condenser (type A/B)(1), rotary joint (1), evaporation flask (1), receiving flask (1), ball joint clamp (1), flask clip (1), vacuum seal (1), condenser insulation kit (1), flask removal tool		

*1 Performance data above based on 23 ±5 °C room temperature, 65%RH ±20% humidity, and no process load.

*2 Dimensions excludes protrusions.

*3 Applicable rotation speed range and sample volume depend on the capacity of evaporation flask.

Operational Accessories

Glassware Set

Product code	Set
RG202A	Set A (use with chiller) Traditional glass set where condenser is tilted diagonally
RG202B	Set B (use with chiller) Standard glass set where condenser is set vertically, suitable for limited space

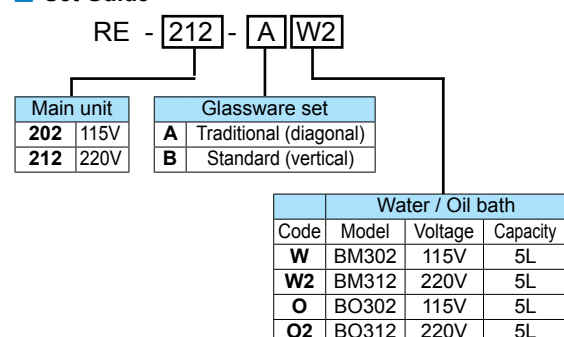
Bath Specifications

Product name	Water bath		Oil bath	
Model	BM302-A	BM312-A	BO302-A	BO312-A
Temp. control range *1	RT +10°C~90°C		RT +10°C~180°C	
Temp. control accuracy *1	±1.0°C		±1.5°C (water), ±2°C (oil)	
Safety features	Automatic overheat prevention, independent overheat prevention (fixed temp.), temperature upper limit error, overcurrent protection fuse			
Other features	Calibration offset, overshoot alert, auto resume (selectable), 2A service outlet (for AC100~115V)			
Bath capacity	~5L			
Internal dimensions	Φ240 x H119 mm			
External dimensions *2	Φ262(max depth 286mm) x H240 mm			
Weight	~4.5kg			
Power supply (fuse capacity)	AC100~115V 10~12A (15A)	AC200~230V 5~6A (10A)	AC100~115V 10~12A (15A)	AC200~230V 5~6A (10A)

*1 Performance data above based on 220 VAC ±5% supplied power, 23 ±5 °C ambient, 65%RH. ±20% humidity, and no process load. Temp accuracy measured in JTM K05.

*2 Dimensions excludes protrusions.

Set Guide



Set Selection Chart

Model	Glassware		Water Bath		Oil Bath	
	A	B	BM302	BM312	BO302	BO312
RE-202-AW	●		●			
RE-202-BW		●	●			
RE-202-AO	●				●	
RE-202-BO		●			●	
RE-212-AW2	●			●		
RE-212-BW2		●		●		
RE-212-AO2	●					●
RE-212-BO2		●				●

Optional Accessories

Glassware



Evaporating flask
Size: 24/40

Product code	Capacity
255713	2L
255712	1L*
255711	500ml
255710	300ml
255709	200ml
255708	100ml

Size: 29/38

Product code	Capacity
255706	2L
255705	1L
255704	500ml
255703	300ml
255702	200ml
255701	100ml



Receiving flask
Size 35/20

Product code	Capacity
255719	2L
255718	1L*
255717	500ml
255716	300ml
255715	200ml
255714	100ml

*Standard



Rotary joint
RG202A

Product code	Size	Type
255720	29/38 L284mm	Standard
255722	24/40 L286mm	Standard*
255724	29/38 L284mm	Transparent
255726	24/40 L286mm	Transparent

RG202B

Product code	Size	Type
255721	29/38 L208mm	Standard
255723	24/40 L210mm	Standard*
255725	29/38 L208mm	Transparent
255727	24/40 L210mm	Transparent



Rotary joint different diameter

Product code	Description
255732	24/40 → 24/40 L105mm
255733	24/40 → 19/38 L103mm
255734	24/40 → 15/25 L90mm
255728	29/38 → 29/38 L106mm
255729	29/38 → 24/40 L108mm
255731	29/38 → 15/25 L105mm
255730	29/38 → 19/38 L105mm



FKM vacuum seal

Product code	Description
255740	Standard



PTFE vacuum seal

Product code	Description
255741	Recommended for ketone and other solvents

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



CF302L keeps water in the condenser at a stable low temp. which increases evaporation rate and maximizes solvent collection.

Easy maintenance of air intake filter
User-friendly controller
Convenient drainage of waste water
Compact

Vacuum Pump



Model	DTC-22A	DTC-22B
Discharge rate	50Hz: 20L/min, 60Hz: 24L/min	
Ultimate pressure	1.0x10 ⁻³ 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	
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

Complete set with optional accessories



Rotary Evaporator RE-202-BWA
Vacuum pump DTC22A
Water circulator (chiller) CF302L-A

Space Saving Design



Compact rotary evaporator which can be neatly installed in a fume hood.
Vertical condenser (Glassware B) does not take up much space.