

ROTARY VACUUM EVAPORATOR

Roteva 3.0

User driven automation
for efficient evaporation



equitron® **Roteva**®

| | | |
|---------------|-------------|------|
| Water Bath | 60.6 | °C |
| SP: 60 | | |
| Rotation | 119 | rpm |
| SP: 120 | | |
| Vapour | 40.6 | °C |
| Vacuum | 1017 | mBar |
| SP: 1010 | On Off Ctrl | |
| Aeration | | |
| Process Timer | 00:10:00 | |
| Time Left | 00:05:55 | |
| Reverse Time | 00:02:00 | |

Start Solvents Settings Stop

Roteva®



Evaporation made easy.
Power and flexibility
tailored to your needs.



Quickly access system settings – all with the touch of a finger. Roteva 3.0 elevates the operations of your distillation process to a whole new level of performance with a touchscreen interface that allows control of all process parameters. With a focus on easing your everyday practical needs, it comes with an in-built solvent library enabling quick setting of related process parameters.

A completely redesigned and proven sealing mechanism and the PTFE feed cock are designed to withstand intensive use and guarantee years of operation for your Roteva.

Low maintenance and easy availability of components – reduces the downtime and cuts down on the lifecycle costs.



INTUITIVE TOUCHSCREEN OPERATION

The advanced touchscreen interface allows precise operation of all process parameters - heating temperature, rotation speed, vacuum, lift position and lift speed

Optional - integrated vacuum control and vapour temperature indicator



REVERSIBLE DIRECTION FOR UNIFORM EVAPORATION

The reversible rotation of the evaporating flask enables efficient and uniform evaporation



INSTANT ROTATION SPEED CONTROL

Instant adjustment of rotation speed with the Magic Knob



COMPREHENSIVE SOLVENT LIBRARY FOR THE MOST COMPLEX DISTILLATIONS

Start your operations with the touch of a finger with the in-built solvent library



| Sample Volume... | Search... |
|-----------------------------|-----------------|
| Tetrahydrofurane THF | Eva.R: 30 |
| C4H8O (72.1g/mol) | BP: 67 °C |
| Eva.E: - J/g | Vac: 355 mbar |
| Toluene | Eva.R: 80 ml/r |
| C7H8 (92.2g/mol) | BP: 111 °C |
| Eva.E: 427 J/g | Vac: 72 mbar |
| Trichloroethylene | Eva.R: 50 ml/r |
| C2HCl3 (131.3g/mol) | BP: 87 °C |
| Eva.E: 264 J/g | Vac: 182 mbar |
| Water | Eva.R: 15 ml/ml |
| H2O (18.0g/mol) | BP: 100 °C |
| Eva.E: 2261 J/g | Vac: 72 mbar |



INTUITIVE LIFT AUTOMATION

Set your parameters and Roteva will do the rest without any monitoring for fully unattended operation



SAFETY FIRST

- Safe & effortless lateral movement of heating bath
- Auto lift on elapse of process timer
- Auto lift on power failure
- Floating overshoot
- Over temperature
- Degree of Protection IP20
- Operating panel located at the base to prevent scalding from any splashing bath fluid and rotating flask
- Lift height adjustment limiter
- Seal life indicator and replacement alarm

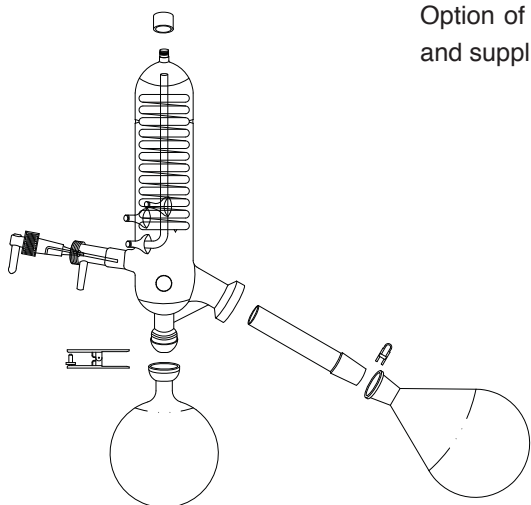


ROTEVA HEATING BATH

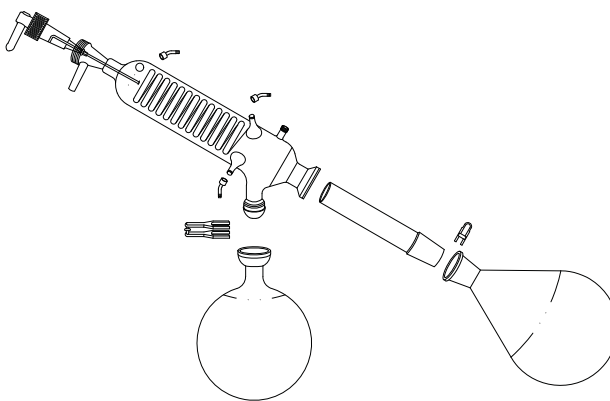
- Oval shaped for safer and convenient immersion of flask
- Temperature range of upto 200°C
- Two operating modes - water and oil - for accurate temperature control
- Effortless lateral movement of heating bath for adjusting according to flask size
- Process timer
- Reference scale for bath placement as per flask size to eliminate any ambiguities
- Optional Heating Bath for flask up to 5000 ml

GLASS SETS

Option of vertical and diagonal condenser with continuous feed as standard and supplied with 1 L Evaporating and Receiving Flask.



(V) Vertical Condenser



(D) Diagonal Condenser

FLASK OPTIONS

| CAPACITY / ITEM | EVAPORATING FLASK 'B-29' | RECEIVING FLASK 'S-35' |
|-----------------|--------------------------|------------------------|
| 50 ml | #S1315-05 | #S1316-05 |
| 100 ml | #S1315-10 | #S1316-10 |
| 250 ml | #S1315-15 | #S1316-15 |
| 500 ml | #S1315-20 | #S1316-20 |
| 1,000 ml | #S1315-25 | #S1316-25 |
| 2,000 ml | #S1315-30 | #S1316-30 |
| 3,000 ml | #S1315-35 | #S1316-35 |

OPTIONAL ACCESSORIES

equitron **xtemp** RECIRCULATING CHILLER (COOLER)

- Ideal for cooling applications in Rotary Evaporators
- Compact design and whisper quiet performance
- Designed for continuous operation
- Easy to read temperature screen with status and audio-visual alarms
- PID Temperature Control with a setting/display resolution of 0.1°C
- Built-in pump with capacity of 15 LPM
- Cooling capacity 400W at 20°C
- Temperature Range: -10°C to RT



VACUUM PUMP - VARIABLE 2 mbar (20 LPM)

- PTFE coated variable drive energy efficient diaphragm pump manufactured with German technology
- Digital Controller with display of actual and set values
- Supplied with solvent trap



VACUUM PUMP - PTFE COATED DIAPHRAGM 5 mbar (38 LPM) / 2 mbar (20 LPM)

- PTFE coated diaphragm pump manufactured with German technology
- Supplied with solvent trap



INTEGRATED VACUUM CONTROLLER

- Integrated vacuum controller provides you with the maximum capability for vacuum control and aeration
- Can be connected to any vacuum source



VAPOUR TEMPERATURE SENSOR

- For accurate monitoring of evaporation temperature

TECHNICAL SPECIFICATION

| Parameter | Specification | Parameter | Specification |
|---|--------------------------|------------------------------------|------------------------------|
| Lift | Motorised | Bath inner MOC | SS 1.4301 |
| Height Adjustment (mm) | 170 | Bath outer MOC | SS 1.4301 powder coated |
| Lift speed adjustment | Yes | Bath fill-up volume (L) | 5 |
| Stopper for minimum lift height | Yes | Max flask accommodation (ml) | 3000 / 5000 ¹ |
| Auto lift on power cut | Yes | Temp range (°C) | Ambient +5 to 200 |
| Rotation speed (rpm) | 20-280 | Bath control accuracy (°C) | ±1 (water), ±2 (oil) |
| Drive direction control | Bidirectional/Reversible | Setting/display resolution (°C) | 0.1 |
| Soft start | Available | Power connection | Integrated at back panel |
| Sealing mechanism | NBR – PTFE | Heater rating (W) | 1200 |
| Condenser | Vertical / Diagonal | Bath floating overshoot | Yes |
| Continuous feed | Yes | Bath absolute over temp cut-off | Yes |
| Condenser Cooling Area (cm ²) | 1200 | Bath - use independently | Yes ² |
| Feed stopcock material | PTFE | Max external dim (W x D x H in mm) | 407 x 494 x 615 ³ |
| Threaded connectors for utilities | Yes | Operating conditions | 5 to 35°C (at 80% RH) |
| Flask Ejector | Yes | Power supply | 230 VAC, 50/60 Hz |

¹ 5000 ml flask can be accommodated with optional heating bath

² With optional extended cable

³ With standard heating bath and vertical glass set

ORDERING INFORMATION

| MODEL | ITEM |
|-----------------|---|
| #8766.RV0.000 | ROTEVA 66 Series - with Vertical Condenser |
| #8766.RD0.000 | ROTEVA 66 Series - with Diagonal Condenser |
| #8610-0400-1040 | EQUITRON XTEMP Recirculating Chiller (Cooler) |
| #9072.002.VD | Vacuum Pump - Variable - 2 mbar / 20 LPM |
| #9072.002 | Vacuum Pump - PTFE Coated Diaphragm - 2 mbar / 20 LPM |
| #9072.005 | Vacuum Pump - PTFE Coated Diaphragm - 5 mbar / 38 LPM |
| #8950 | Vacuum Controller Module for ROTEVA 66 Series |
| #8940 | Vapour Sensor Module for ROTEVA 66 Series |
| #8485CB-BAS | Heating Bath - for 5000 ml flask |



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