- **LIFT:**
  - Motorised lift, standard in all models.
  - Provision for manual lift in case of power failure.
  - Minimum height adjustable stopper.

- **SEAL & DRIVE:**
  - Proven PTFE / GLASS sealing mechanism.
  - Adjustable at any convenient angle.
  - 30 to 270 RPM.
  - Digital RPM indicator.

- **BATH:**
  - Oil cum Water Bath.
  - Independent safety cut-out set at 190°C.
  - Temperature range up to 180°C.
  - Clear bottom, easy to clean.
  - Efficient insulation. Inner & outer vessel of SS.
  - Evaporating flask: From 50 ml to 3000 ml.
  - PID controller with display for set & actual temp.
  - Replaceable heater.

- **GLASS SETS:**
  - Threaded safety on all utilities joint.
  - Continuous feed for higher volume distillations.
  - Options of six glass sets for different applications.
  - PTFE feed stopcock (unbreakable & interchangeable)

- Uniquely designed condenser support enables smooth and snug fitting of all Glassware sets.
- Effortless flask ejector. No more jammed flasks.

**CHOICE OF GLASS SETS**

- **(D) Diagonal**
  - Traditional Diagonal Condenser
  - For all standard and routine distillations
  - Optional vapour sensor can be attached
  - Continuous feed as standard

- **(V) Vertical**
  - Space saving vertical condenser
  - For all standard and routine distillations
  - Optional vapour sensor can be attached
  - Continuous feed as standard

- **(C) Cold Trap**
  - Cold trap condenser to be used with dry ice
  - For very low boiling solvents
  - Optional vapour sensor can be attached
  - Continuous feed as standard
  - No cooling water required

- **(E) Extra Cooling**
  - Vertical condenser with jacket and coil
  - Used for efficient cooling and recovery
  - Optional vapour sensor can be attached
  - Continuous feed as standard

- **(VR) Vertical With Reflux**
  - Vertical condenser with reflux valve
  - For standard distillations and reflux
  - Continuous feed as standard
  - Optional vapour sensor can be attached

- **(ER) Extra Cooling With Reflux**
  - Vertical condenser with jacket & coil with reflux valve
  - For more efficient cooling and recovery
  - For standard distillations and reflux
  - Continuous feed as standard
  - Optional vapour sensor can be attached
# TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SPECIFICATION</th>
<th>ITEM</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating bath dimensions</td>
<td>Ø 230 x 130 mm</td>
<td>Power supply</td>
<td>230 V, AC, 50 Hz</td>
</tr>
<tr>
<td>Volume of heating bath</td>
<td>4 lit. Approx.</td>
<td>Rotation speed</td>
<td>30 to 270 rpm</td>
</tr>
<tr>
<td>Bath heater capacity</td>
<td>1200 Watts</td>
<td>Rotation speed display</td>
<td>Yes</td>
</tr>
<tr>
<td>Heating bath controller</td>
<td>PID with display for set &amp; actual temp.</td>
<td>Lift</td>
<td>Motoreised</td>
</tr>
<tr>
<td>Bath temperature range</td>
<td>Ambient + 5 to 180°C</td>
<td>Manual lift (When power fails)</td>
<td>Yes</td>
</tr>
<tr>
<td>Temperature accuracy</td>
<td>± 2°C</td>
<td>Height adjustment</td>
<td>170 mm Approx.</td>
</tr>
<tr>
<td>Independent safety cutouts</td>
<td>@ 190 °C</td>
<td>Flask ejector</td>
<td>Yes</td>
</tr>
<tr>
<td>Heating bath material</td>
<td>SS 304</td>
<td>Condenser support</td>
<td>Yes</td>
</tr>
<tr>
<td>Min / Max flask size</td>
<td>50 ml / 3000 ml</td>
<td>Footprint</td>
<td>220 cm²</td>
</tr>
<tr>
<td>Cond. cooling area: D, V, VR</td>
<td>1200 cm²</td>
<td>Glass sets available</td>
<td>D, V, C, E, VR, ER</td>
</tr>
<tr>
<td>Cond. cooling area: C</td>
<td>580 cm² approx.</td>
<td>Threaded connectors for utilities</td>
<td>Yes</td>
</tr>
<tr>
<td>Cond. cooling area E, ER</td>
<td>2000 cm² approx.</td>
<td>Feed stopcock &amp; tube made of PTFE</td>
<td>Max 80% NC</td>
</tr>
<tr>
<td>Environmental conditions (Temp.)</td>
<td>10 to 40 °C</td>
<td>Environmental Conditions (% RH)</td>
<td></td>
</tr>
</tbody>
</table>

Please note: All the evaporators are supplied with one litre evaporating and receiving flasks as standard

## ROTEVA MAIN UNIT AND OPTIONAL ACCESSORIES ORDER INFORMATION

<table>
<thead>
<tr>
<th>MODEL</th>
<th>ITEM</th>
<th>APP. SHIPPING DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8763.RD0.000</td>
<td>Roteva- 63 series with Diagonal Glass Set (D)</td>
<td>CB: 28 kg / 44 kg / 0.486 m³</td>
</tr>
<tr>
<td>#8763.RV0.000</td>
<td>Roteva- 63 series with Vertical Glass Set (V)</td>
<td>WC: 28 kg / 72 kg / 0.535 m³</td>
</tr>
<tr>
<td>#8763.RC0.000</td>
<td>Roteva- 63 series with Cold Trap Glass Set (C)</td>
<td></td>
</tr>
<tr>
<td>#8763.RE0.000</td>
<td>Roteva- 63 series with Extra Cooling Glass Set (E)</td>
<td></td>
</tr>
<tr>
<td>#8763.RVR.000</td>
<td>Roteva- 63 series with Vertical with Reflux Set (VR)</td>
<td></td>
</tr>
<tr>
<td>#8763.RER.000</td>
<td>Roteva- 63 series with Extra Cooling with Reflux Set (ER)</td>
<td></td>
</tr>
<tr>
<td>#8911.DVS.199</td>
<td>Digital Vapour Sensor</td>
<td></td>
</tr>
<tr>
<td>#6990.X35.050</td>
<td>Float Balls Pack (for Water Bath)</td>
<td></td>
</tr>
<tr>
<td>#8717.0X0.000</td>
<td>Spare PTFE seal flask side</td>
<td></td>
</tr>
<tr>
<td>#8715.0X0.000</td>
<td>Spare VITON seal condenser side</td>
<td></td>
</tr>
<tr>
<td>#8780.0X0.000</td>
<td>Spare bath heater, 1200 watts</td>
<td></td>
</tr>
<tr>
<td>#1034.B-29.000</td>
<td>C clip, B-29</td>
<td></td>
</tr>
<tr>
<td>#3305.B-29.000</td>
<td>Clip Evaporating Flask S-35, SS</td>
<td></td>
</tr>
</tbody>
</table>

## VACUUM PUMP
- Oil free PTFE diaphragm type with separator - ideal for Rotary Vacuum Evaporation and all general laboratory use.
- Portable, handy, light weight, non messy & maintenance free.
- Free air displacement of 38 lit/min at atmospheric pressure.
- Ultimate vacuum of 30 mm of Hg. Use of a vacuum trap is highly recommended.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>APP. SHIPPING DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>#9075.CRP.030</td>
<td>Vacuum Pump- PTFE Diaphragm- 30 mm of Hg/ 38 lit/min</td>
<td>CB: 9 kg / 11 kg / 0.044 m³</td>
</tr>
</tbody>
</table>

## VACUUM CONTROLLER
- Enhance solvent recovery to more than 90%.
- Compatible with any laboratory vacuum source. Inert gas port for aeration.
- Evacuation: Fine tuning by a special valve for better control.
- Use of solvent trap is highly recommended (available as option).
- Control accuracy: ± 2 mm of Hg. Automatic barometric correction.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>RANGE</th>
<th>APP. SHIPPING DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8920.DVC.XHG</td>
<td>Vacuum Controller</td>
<td>0-760 mm of Hg</td>
<td>4.2 kg / 5.0 kg / 0.02 m³</td>
</tr>
</tbody>
</table>
**CELSIUS Scientific**

**VACUUM PUMP**
- Innovac-20 PTFE Diaphragm Vacuum Pumps are fully imported from UK.
- Fully chemical resistant to virtually all gases and solvent vapours.
- PTFE, Kalrez and PVDF are used for all wetted components, being the most chemically inert materials available.
- Innovac features a tough alloy case with unique "T-slot" rails for quick easy mounting of necessary attachments such as vapour traps or condensers.
- Thermal protection: 140°C and max ambient temperature: 40°C.
- Use of solvent trap is highly recommended (available as option).

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>CAPACITY</th>
<th>APP. SHIPPING DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovac-20</td>
<td>Vacuum Pump</td>
<td>20 lit / min / 8 mbar ultimate vacuum</td>
<td>9 kg / 10 kg / 0.31 m³</td>
</tr>
<tr>
<td>Innovac-40</td>
<td>Vacuum Pump</td>
<td>38 lit / min / 8 mbar ultimate vacuum</td>
<td>9 kg / 10 kg / 0.31 m³</td>
</tr>
</tbody>
</table>

**CHILLED WATER CIRCULATOR – 4L**
- **EQUITRON** Chilled Water Circulator is ideal for chilling and condensing operations for Rotary Vacuum Evaporator, Viscosity Tests, Spectrophotometry, Water Baths (upto 28 lit).
- Four sturdy castors for easy manoeuvrability.
- Hermetically sealed environment friendly CFC free compressor.
- Built-in coolant reservoir of approximately 4 litres.
- Built-in pump with capacity of 15 lit/min – at zero head.
- Built in Digital Temperature Controller – 1°C resolution.
- Supplied with two insulated silicone hose (1 met each) for external circulation.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>WATTAGE</th>
<th>APP. SHIPPING DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8502.ROT.000</td>
<td>Chilled Water Circulator</td>
<td>700W at 15°C</td>
<td>41 kg / 65 kg / 0.345 m³</td>
</tr>
</tbody>
</table>

**VACUUM TRAP**
- Used for trapping uncondensed solvent vapours prior to vacuum source and / or controller.
- Suitable for chilling with dry ice or any other cryogenic mixture.
- Highly recommended for all kinds of vacuum source & controllers.
- Made of Borosilicate glass.

<table>
<thead>
<tr>
<th>MODEL</th>
<th>DESCRIPTION</th>
<th>APP. SHIPPING DETAILS</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8841.CTO.000</td>
<td>Vacuum Trap</td>
<td>6 kg / 8 kg / 0.059 m³</td>
</tr>
</tbody>
</table>

**BUMPING / FOAMING TRAP**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CAPACITY</th>
<th>SOCKET</th>
<th>CONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>#8825.029.024</td>
<td>100 ml</td>
<td>29 / 32</td>
<td>24 / 29</td>
</tr>
<tr>
<td>#8825.029.029</td>
<td>100 ml</td>
<td>29 / 32</td>
<td>29 / 32</td>
</tr>
</tbody>
</table>
Applications:
  • The Ideal partner for all routine rotary vacuum evaporation’s at Universities, Colleges, Schools, small to mid size Companies, and as a standby unit.

EVATOR Advantages:
  • Spark-less drive unit AC motor with assured speed regulation - 50 to 250 RPM.
  • Flask sizes from 100 to 1000 ml.
  • Digital Temperature Controller for Water Bath up to 99°C.
  • PTFE / GLASS sealing mechanism.

Construction / Standard Features:
  • Smooth, adjustable, maintenance free and user friendly single lever manual lift.
  • Seamless Stainless Steel Round Bath inner vessel.
  • Vertical Glass Set with 1000 ml B29 Evaporating Flask & 1000 ml S35 Receiving Flask, B29 plastic C-Clip & S35 Ball Joint Clip.
  • Flask ejector for easy removal of evaporating flask.

ROTARY VACUUM EVAPORATOR

VACUUM REGULATOR – ANALOGUE

  • Use of a Vacuum Regulator with a suitable vacuum pump enhances solvent recoveries to above 90%.
  • Ideal partner for EVATOR.
  • Easy readout with large analogue dial; Range 0 to 760 mm/Hg.
  • Compatible with any laboratory vacuum source.

CHILLER – MANUAL

  • Cooling - manually by ice, fill up volume of 20 lit.
  • All water contact parts of inert material.
  • Continuously rated maintenance free motor with pumping capacity @ 9 lit/min at zero head.

TUBING SET

  • PVC tubings for water circulation of 3 met length - 2 nos.
  • Tap adapter - 1 no for connecting to normal tap.
  • NBR pipe for vacuum connection.

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CELSIUS

Scientific • Your lab connection •

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