# **Technical Specifications of Rotary Vacuum Evaporator**

### Rotary Evaporator

- 1. Manual quick action jack hand lifting for simple raising and lowering of the flask by hand case of
- 2. Rotavapor should have arm and handle for physically visualisation and movement.
- 3. Rotation speed up to 280 rpm or better with microprocessor control.
- 4. Shielded thermostatic bath.
- 5. Heating bath for temperature of 20-95 dec C with an accuracy of  $\pm 2$  deg C.
- 6. Digital bath temperature display of both set and actual temperature simultaneously.
- 7. Over-temperature protection power cut off when actual temperature exceeds set temperature or by rapid temperature increase.
- 8. Bath guidance Integrated in the Rotavapor® base allows to easily position the heating bath along the guidance (sideways) when various evaporating flasks are used.
- 9. Evaporating flask from 50-4000 ml can be used on the same joint adapter without additional connections.
- 10. Vertical Glass Assembly with high quality, inert 3.3 grade borosilicate glass with 2.1 mm inner wall thickness & Continuous Vapor Ducting.
- 11. Cooling surface of vertical glass assembly 1400 cm<sup>2</sup> or better.
- 12. 1-liter Evaporating Flask and 1 liter Receiving Flask should be provided in standard scope of supply.
- 13. Automatic overheat cut-off protection.
- 14. Lift extension Up to 100 mm allows use of bump traps and glass extenders.
- 15. Multifunctional Combi-Clip tool for evaporating flask fixation and removal as well as vapor duct release
- 16. Ingress Protection (IP) Class should be 20 or better.

## Vacuum Controller

- 1. Modular (not integrated) vacuum Controller with Digital display 4" Colour screen.
- 2. Measuring range: 1400-1 mbar.
- 3. Control range: 1100-1 mbar.
- 4. Measuring principle: capacitive, independent of gas type, absolute pressure gauge / sensor made from aluminum oxide-ceramic.
- 5. Measuring accuracy:  $\pm 2$  mbar ( $\pm 1$  digit) after calibration at constant temperature.
- 6. Hysteresis: Automatic or 1 500 mbar
- 7. Display: Digital, monochrome, 4.0 in
- 8. Protection class: IP20

## Vacuum Pump

- 1. Single stroke, 2 stages PTFE Chemically resistant Diaphragm Vacuum Pump with a flow rate of 1.5 m3 /h.
- 2. Ultimate vacuum less than 10 mbar ( $\pm$  2 mbar)
- 3. The pump should consume less electrical power and works under reduced stress so that overall maintenance costs will be reduced over the lifetime of the pump.

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#### Recirculating chiller

- 1. Temperature Range: -10° to +100°C
- 2. Temperature stability: +/- 0.02 K
- 3. Heating capacity: 2000 W
- 4. Cooling Capacity: 240 W
- 5. Water bath volume up to 6 Liters
- 6. Max. pressure 300 mbar
- 7. Flow rate 17 Lit/ min
- 8. Simple operation via new navigator with large full-text display
- 9. Temperature settings can be calibrated on each Real temperature adjustment system.
- 10. Auto-restart option after power breakdown.
- 11. Timer option with real-time clock.
- 12. Adjustable pump speeds for flow or bath agitation.
- 13. Safety class: 1 (NFL)
- 14. UPS: 3 KVA
- 15. Warranty: 3 years

#### **Important Note**

Vendor should clearly mention make and model, also enclose Catalogue/Data sheet of the Model quoted in support of the above-mentioned Specifications otherwise their bids will be rejected. No letter head justifications will be accepted.

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