ALMANAC LIFE SCIENCE INDIA PVT. LTD.

(Regd. Under Ministry of Corporate Affair, Registrar of Companies Delhi)

ROTARY EVAPORATOR ALS-RE100





DESCRIPTION

Our ALS-Rotary Evaporator is a vital instrument in chemical laboratories, designed to efficiently and gently remove solvents from samples through controlled evaporation. It operates under reduced pressure, which lowers the boiling point of solvents, allowing for their removal at lower temperatures and thereby protecting thermally sensitive compounds. The application are in Chemical & Pharmaceutical Industry, Food & Beverage Industry, Cannabis & Botanical Extracts, Environmental & Analytical Laboratories and Materials Science & Nanotechnology.

FEATURES

Clear LCD Temperature Display

The rotary evaporator features a clear LCD that provides accurate and immediate temperature readings during operation. This precise monitoring allows users to maintain optimal conditions and quickly adjust settings for consistent performance.

Brushless DC Motor

The device is powered by a DC brushless motor, known for its high efficiency, smooth performance, and low maintenance requirements. This motor type contributes to reduced noise levels and enhanced durability, ensuring reliable long-term operation in the laboratory.

Reversible Direction of Rotation of Sample Flask

The reversible rotation feature of the sample flask ensures that the contents are evenly exposed to the heating surface, promoting uniform temperature distribution and efficient evaporation. This capability not only improves the consistency of the sample processing but also enhances overall experimental reproducibility and performance.

Permissible Ambient Temperature Range (5°C to 40°C)

The device is engineered to operate reliably within an ambient temperature range of 5°C to 40°C, ensuring effective performance in varied laboratory environments. This flexibility minimizes thermal stress on the equipment and maintains operational stability even under fluctuating environmental conditions.

Optimal Function in High Humidity (Up to 80% Relative Humidity)

Designed to perform optimally in environments with relative humidity levels up to 80%, the evaporator is well-suited for use in humid laboratory settings. This capability reduces the risk of moisture-related issues, such as condensation or corrosion, thereby ensuring consistent and dependable operation.

Material of Construction (MOC)

The rotary evaporator is constructed using Mild Steel (MS) powder-coated metallic sheets, providing a robust, cost-effective, and corrosion-resistant framework. Borosilicate IP20/IP21 grade glass is employed for its excellent chemical resistance and thermal stability, ensuring the safe handling of various solvents and chemicals during operation.



CONTROLLER FEATURES

- **Up/Down Key (Height Adjustment):** These keys, control the vertical movement of the rotary evaporator's main assembly or the flask above the heating bath.
- **Speed Button and Knob (Maximum 280 rpm):** Rotating this knob sets the rotational speed of the flask, with a maximum of 280 rpm.
- **Temperature Button and Knob (Maximum 180°C):** Pressing the temperature button activates temperature setting mode, after which the knob can be rotated to the desired temperature, up to 180°C.
- **Timer Button (Maximum 999 Minutes):** This button allows the user to set a specific duration for the evaporation process, up to 999 minutes.
- **Interval Button (Reversible Rotation):** By pressing the interval button, you can define how often the direction of the flask rotation will reverse (e.g. every 5 seconds). Alternating clockwise and counterclockwise rotations helps distribute heat more uniformly, particularly useful for samples that may settle or require thorough agitation.

| TECHNICAL SPECIFICATION | |
|------------------------------|--|
| Model No. | ALS-RE100 |
| Motor Type | Brushless DC motor |
| Speed Range | 20-280 rpm |
| Display | LCD (speed, temperature, time) |
| Clockwise and Anti-clockwise | Yes |
| Heating Temperature Range | Room temp. to 180°C |
| Control Accuracy | ±1°C |
| Heating Power | 1300 W |
| Stroke Displacement | Automatic 150 mm |
| Timer | Yes |
| Time Setting Range | 1-999 min |
| Dimension [DxWxH] | $465 \times 457 \times 583 \text{ mm}$ |
| Weight | 15 kg |
| Additional Weight | 2.8 kg |
| Protection Class | IP20/IP21 |
| USB Interface | Yes |
| Voltage/Frequency | 100-120/200-240V 50/60 Hz |
| Power | 1400 W |