

LABORATORY DRYING AIR OVEN

Technical Data Sheet

MODEL	MAX. TEMPERATURE	APPLICATION
FC-V250-250	250°C	Drying / Heating / Curing



1. General Specification

Parameter	Specification
Product Name	Laboratory / Industrial Drying Air Oven
Type	Forced Air Circulation Oven
Model	FC-V250-250
Maximum Temperature	250°C
Operating Temperature Range	Ambient +20°C to 250°C
Internal Chamber Size	600 W × 650 D × 700 H mm
External Dimensions	790 W × 800 D × 970 H mm
Internal Volume	Approx. 250 Litres
Door Type	Single Insulated Door
Loading Type	Front Loading
Power Supply	230 VAC, Single Phase, 50 Hz

2. Mechanical Construction

Parameter	Specification
Outer Body Material	Painted GI Sheet
Inner Chamber Material	SS304 Stainless Steel
Insulation Material	High-Density Mineral Wool

3. Heating System

Parameter	Specification
Heater Type	Stainless Steel Round Coil Heater
Number of Heaters	1 Nos
Total Heater Load	2500 W (2.5 kW)
Heater Control	SSR Controlled
Heater Location	Air Circulation Path

4. Air Circulation System

Parameter	Specification
Fan Type	Drying Air Circulation Fan
Quantity	1 No.
Motor Rating	30 W
Motor Supply	230 VAC, Single Phase
Connection	Direct
Operation	Continuous
Air Flow Method	Forced Recirculation

5. Temperature Control System

Parameter	Specification
Temperature Controller	Digital PID Controller
Temperature Sensor	K-Type Thermocouple
Control Method	PID + SSR Control
Auto-Tuning	Supported (AT Function)

6. Electrical Control Panel

Component	Specification
Main Power Switch	Provided
MCB	20 A, Single Pole
SSR	40 A, 1 No.
Power Indicator	Provided
Heating Indicator	Provided

7. Power Requirement

Parameter	Specification
Total Connected Load	Approx. 3 kW
Heater Load	2500 W
Fan Motor	30 W
Supply	230 VAC, Single Phase
Frequency	50 Hz

8. Door Specification

Parameter	Specification
Door Type	Single Hinged Insulated Door
Door Insulation	High-Density Mineral Wool
Inner Skin	SS304 Stainless Steel
Outer Skin	Powder-Coated GI Sheet
Locking	Handle Latch

9. Safety Features

- ✓ 20 A Single Pole MCB
- ✓ Digital PID Temperature Control
- ✓ K-Type Thermocouple Feedback
- ✓ SSR Heater Switching
- ✓ Mandatory Earthing
- ✓ Mineral Wool Insulation
- ✓ Forced Air Circulation

10. Performance

Parameter	Specification
Maximum Temperature	250°C
Air Circulation	Continuous Recirculation
Heating Method	Electrical Heating (SS Coil Heaters)
Cooling	Natural Cooling

Note: Specifications are subject to change without prior notice as part of continuous product improvement.