

IR Oven (Far-infrared Heating)

Far infrared heating

DIR631

Operating temp. range +10~360°C

Making use of features of far infrared ray heater (IR heater), used for heat treatment of polymer materials.

■ Features

- Max. working temp. is 360°C.
- Easy operation with fixed temp., quick auto stop, auto stop and auto start functions.
- Exhaust damper allows quick exhaust and cooling of inside chamber. (manual)

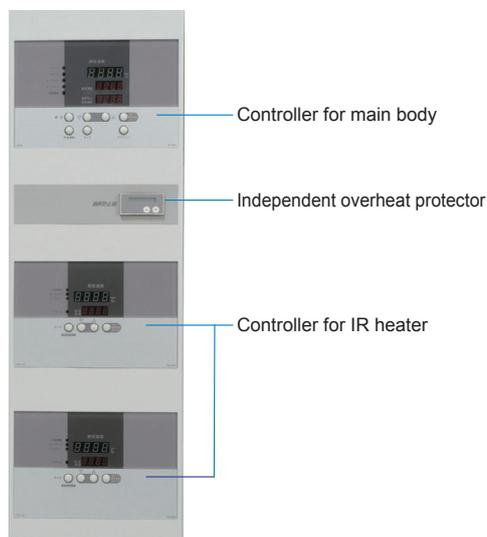
■ Safety

- Self-diagnosis circuit (abnormal temp. sensing, heater disconnection, auto overheat prevention, SSR short circuit), overheat protector, electric leakage breaker, key lock, etc.



216L
DIR631 (Stand : standard)

Control panel



Interior



■ Specifications

Product code	212430
Model	DIR631
Circulation method	IR radiation+Forced convection circulation and ventilation
Operating temperature range	Room temp. +10~360°C
Temp. fluctuation*1	2.0°C (at 360°C, when IR heater is off)
Temp. gradient*1	12°C (at 360°C, when IR heater is off)
Max. temp. reaching time*1	100 min (to 360°C, when IR heater is off)
Heater	Stainless pipe heater with fin, 3.75kW
IR heater	0.2kW×16pcs×2 sides of the top and the bottom, 6.4kW in total
Fan type / Motor	Axial fan / Condenser motor 20W
Sensor	Double K thermocouples×1 (for unit body temp. controller and overheat protector) K thermocouple×2 (for IR heater which is built in the center)
Cable port	I.D. 30mm (at back)
Additional mechanism	Exhaust damper (manual)
Control method	PID control
Operation functions	Fixed temp., Quick auto stop, Auto stop and auto start operation
Additional functions	Calibration offset, Key lock, power outage compensation, Door open&close detection
ELB	Electric leakage, Short circuit, Overcurrent protection
Overheat protector	Auto cut off the heater circuit when overheating
Self-diagnosis functions	Abnormal temp. sensing, Heater disconnection, Auto overheat prevention, SSR short circuit
Internal dimensions (W×D×H)	600×600×600mm
Internal capacity	216L
Effective dimensions (W×D×H)	600×600×200mm
External dimensions*2 (W×D×H)	1,200×780×1,000mm (1,200×780×1,790mm with stand)
Space between IR heaters	200mm
Weight	Approx. 230kg (Approx. 250kg with stand)
Power source 50/60Hz	3 Phase AC380V 18A
Shelf plate	Stainless steel wire shelf × 1 pc.
Shelf bracket	2 pcs.
Stand with casters	1 pc.

*1 Conditions: temperature and humidity: 23°C±5°C, 65%RH±20% (no load)

*2 Do not include protrusions.

The temp. fluctuation, temp. gradient and max. temp. reaching time when the IR heater is turned ON vary depending on the conditions of the heated object.