Heating Circulator

RT 200°C /300°C

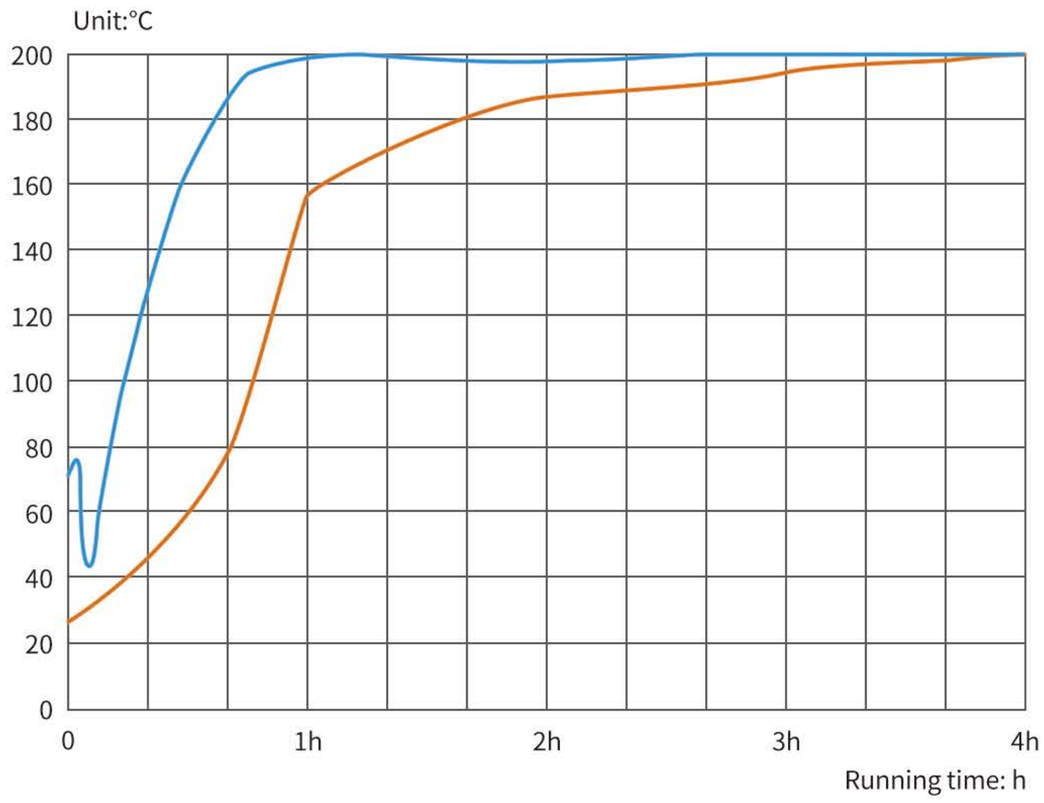
How It Works

It consists of a closed heating system, a circulation system, a temperature control system and a safety protection system. The heating element is usually a resistance wire that converts electrical energy into thermal energy. The heating tank is usually made of stainless steel, which is corrosion-resistant and has good thermal conductivity. The circulation pump promotes the circulation of the working medium, and the pipeline ensures that the medium circulates along the set path to achieve heat transfer. The safety protection system includes over-temperature, pressure and leakage protection devices.

Features

- An exhaust valve is provided to immediately discharge the gas that overflows when the temperature rises.
- For Class IIB explosive environments, the equipment can use EXdIIBT4Gb grade explosion-proof products.
- Optional water-cooled models; the highest customizable temperature is 300°C.

Test Curve



UC-6A Equipped With
20L Double Jacket Reactor Heating Case

(16L of material is filled in the kettle)

- Circulation outlet temperature rise curve
- Material heating curve

Model Description

UC 9 A

- A — The maximum heating temperature is 200°C
- 9 — Heating power
- UC — Product Code

UC 60 B

- B — The maximum heating temperature is 300°C
- 60 — Heating power
- UC — Product Code

Suggested Match

20L stainless steel reactor

UC-3A

20L Crystallization reactor

Circulation Tube

Foam silicone insulation hose

Stainless steel circulation pipe

Parameters

Product model	UC-3A	UC-6A	UC-9A	UC-15A	UC-20A	UC-24A	UC-36A	UC-60A
Temp. range	RT~200°C；±1°C							
Voltage	220V~50Hz	Electricity single phase or three phase -220V/380V/480V~50/60HZ						
Total power (kW)	3.2	6.3	9.5	15.5	21	25	38	63
Heating method	Electric heating							
Temp. Sensor	PT100							
Security protection	Equipped with over-temperature protection, thermal overload protection, over-current protection, leakage protection							
Tank volume (L)	10	10	24	24	24	42	70	110
Heating power (kW)	3	6	9	15	20	24	36	60
Pump power(W)	250	250	370	750	750	750	1500	2200
Rated flow (L/min)	35L	35L	42L	120L	120L	120L	200L	315L
Loop interface(DN)	15	20	20	25	25	25	25	32
Cooling Type	Natural cooling (customizable air cooling or water cooling)							
Circulatory system	Fully enclosed system, no oil mist at high temperature and no moisture absorption at low temperature							
Machine size (mm)	700*570*800	700*570*800	700*570*800	750*620*1000	750*620*1000	780*680*1160	1000*800*1210	1200*800*1510
PLC Customized	Control system	Siemens S7-200 smart PLC						
	Programming	Can write 5 programs, each with up to 40 steps						
	Control model	The material temp. and equipment outlet temperature can be switched independently						
	Communication protocol	Modbus RTU protocol RS485 interface (optional RS232 Ethernet)						
	Operation panel	7-inch Siemens color touch screen (optional 10 inch)						
	Data export	Support for USB data export, can export temperature data in TXT format						
Installation List	Two sets of valves, one roll of Thread seal tape/two stainless steel insulation hoses/one operation manual							

Parameters

Product model	UC-3B	UC-6B	UC-9B	UC-15B	UC-20B	UC-24B	UC-36B	UC-60B
Temp. range	RT~300°C；±1°C							
Voltage	220V~50Hz	Electricity single phase or three phase -220V/380V/480V~50/60HZ						
Total power (kW)	3.5	6.5	9.5	15.5	21	25	38	63
Heating method	Electric heating							
Temp. Sensor	PT100							
Security protection	Equipped with over-temperature protection, thermal overload protection, over-current protection, leakage protection							
Tank volume (L)	10	10	24	24	24	42	70	110
Heating power (kW)	3	6	9	15	20	24	36	60
Pump power(W)	370	370	370	750	750	750	1500	2200
Rated flow (L/min)	30L	30L	30L	45L	45L	45L	100L	110L
Loop interface(DN)	15	20	20	25	25	25	25	32
Cooling Type	Natural cooling (customizable air cooling or water cooling)							
Circulatory system	Fully enclosed system, no oil mist at high temperature and no moisture absorption at low temperature							
Machine size (mm)	700*570*800	700*570*800	700*570*800	750*620*1000	750*620*1000	780*680*1160	1000*800*1210	1200*800*1510
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