



## Heating And Cooling Circulator FM-HCC-A100

### Overview

Heating and Cooling Circulator FM-HCC-A100 ensures dynamic temperature regulation from -45 °C to 250 °C, with PLC integration for precise management. It has a 7-inch touch screen panel for real-time data monitoring, system adjustments and seamless data export. Its fully closed circulation system prevents contamination extending equipment lifespan. Our Heating and Cooling Circulator is ideal for industrial applications requiring stable thermal control.

### Specifications :

Temperature range	-45 °C to 250 °C
Control mode	Feedback PID+LNEYA special dynamic control calculation, PLC controller
Temperature control	Process temperature control mode/jacket temperature control mode
Temperature difference	Set or control the temperature difference between jacket oil and raw material process
Program editor	20 programs, each program can edit 40 steps
Communication protocol	MODBUS RTU protocol, RS485 interface, Ethernet interface
Temperature feedback	The temperature of three points: the inlet and outlet of thermal fluid, material temperature in reactor (required external temperature sensor)
Process temperature feedback	PT100
Jacket temperature accuracy	-0.5 °C
Process temperature accuracy	-1 °C
Heating power	5.5kw
Cooling capacity	250 °C - 5.5kw 20 °C - 5.5kw 0 °C - 5kw -20 °C - 2.3kw -35 °C - 0.9kw
Flow pressure	1.2 L/min bar
Circulation pump	Magnetic drive pump
Compressor	Tecumseh/Emerson Copeland/Carlyle
Expansion valve	Electronic expansion valve
Evaporator	Plate heat exchanger
Operation panel	7-inch colour touch screen, show temperature curve\EXCEL data output
Safety protection	Self-diagnosis function; freezer overload protection; high pressure switch, overload relay, thermal protection device, high temperature protection and temperature fault protection.
Closed circulation system	The whole system is full closed circulation, there is no oil mist at high temperature and no water vapour at low temperature, pressure do not rise up when system is running. The system will supply oil automatically at low temperature.
Refrigerant	R-404A/R507C
Connection size	ZG3/4
Cooling water	20 °C 1400L/H 105 B4bar
Case material	Cold rolled steel powder coating (standard colour 7035)
Dimension (L×B×H)	45×70×60 cm
Power supply	380V 50Hz, 7kw
weight	180kg

### Features :

- Self-diagnosis protection
- High accuracy PT100 sensor
- Magnetic drive pump
- PID feedback control

### Applications :

Fison's Heating and Cooling Circulator can be widely used in reactor systems, distillation processes and semiconductor industries to ensure stable temperature control.

### Accessories :

- Socket Quartet 1/2 inch faucet

### Accessories Optional :

- Insulated pipe Bypass component Heat transfer oil