

# UC-300-A38-F

## Hermetic Heating Circulator

Lab1st UC series is a hermetic heating circulator with a temperature range from room temperature to 200°C/300°C. The machine adopts electric heating mode, through the circulation pump output heat conduction fluid to heat the materials in the supporting reaction vessel. It is widely used in laboratory, pharmaceutical chemical industry, petrochemical industry and other high temperature environment.

## Features

Expansion tank design with stable system pressure

The water cooling function will only be turned on when cooling is needed to save water resources

Adopt full hermetic circulation system to prolong the service life of heat conduction fluid

Equipped with exhaust valve that can immediately exclude the overflow of gas due to the temperature rise of the system medium

With over-temperature alarm, overload protection and over-current protection function

The circulation system is made of stainless steel to prevent corrosion and pollution and prolong the operation cycle



## Parameters

Model	UC-300-A38-F
—— TECHNICAL DATA ——	
Design Temperature [°C]	RT-300°C ;±1°C
Ambient Temperature [°C]	5-30°C
Optimum Ambient Humidity	45-80%RH
Heating Method	Electrical heating
Cooling Method	Water Cooling
Water Cooling Condenser	Plate heat exchanger
Temperature Sensor	PT100
Safety	Self-diagnosis; Pressure switch; Overload and overheating protection
—— ELECTRICAL REQUIREMENTS ——	
Voltage	220/380/480V
Phase	3P
Frequency [HZ]	50/60
Total power [kW]	38
Heating power [kW]	36
—— COOLING CAPACITY [KW] ——	
300°C	25

200°C	20
100°C	8.5
——CIRCULATION PUMP——	
Type	Magnetic centrifugal pump
Brand	Aolank
Power [w]	1500
Pressure [bar]	1.5
Rated Flow [L/min]	100
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	70
Circulation Interface	DN25
Cooling Interface	DN25
——ACCESSORIES——	
Valve Specification   QTY	N/A
Tube Specification   QTY	N/A
Adapter Specification   QTY	DN25 Flange   4
——WEIGHT   DIMENSION——	
Unit Weight	170
Unit Dimension [mm]	1000×800×1210

## Packages

W (mm)	CBM (m3)
D (mm)	Weight (kg)
H (mm)	

\* Technical details and dimensions are subject to change. No liability is accepted for errors or omissions. Illustrations can deviate from the original.

# UC-300-A60-F

## Hermetic Heating Circulator

Lab1st UC series is a hermetic heating circulator with a temperature range from room temperature to 200°C/300°C. The machine adopts electric heating mode, through the circulation pump output heat conduction fluid to heat the materials in the supporting reaction vessel. It is widely used in laboratory, pharmaceutical chemical industry, petrochemical industry and other high temperature environment.

## Features

Expansion tank design with stable system pressure

The water cooling function will only be turned on when cooling is needed to save water resources

Adopt full hermetic circulation system to prolong the service life of heat conduction fluid

Equipped with exhaust valve that can immediately exclude the overflow of gas due to the temperature rise of the system medium

With over-temperature alarm, overload protection and over-current protection function

The circulation system is made of stainless steel to prevent corrosion and pollution and prolong the operation cycle



## Parameters

Model	UC-300-A60-F
—— TECHNICAL DATA ——	
Design Temperature [°C]	RT-300°C ;±1°C
Ambient Temperature [°C]	5-30°C
Optimum Ambient Humidity	45-80%RH
Heating Method	Electrical heating
Cooling Method	Water Cooling
Water Cooling Condenser	Plate heat exchanger
Temperature sensor	PT100
Safety	Self-diagnosis; Pressure switch; Overload and overheating protection
—— ELECTRICAL REQUIREMENTS ——	
Voltage	220/380/480V
Phase	3P
Frequency [HZ]	50/60
Total power [kW]	63
Heating power [kW]	60
—— COOLING CAPACITY [KW] ——	
300°C	25

200°C	20
100°C	8.5
——CIRCULATION PUMP——	
Type	Magnetic centrifugal pump
Brand	Aolank
Power [w]	2200
Pressure [bar]	2.2
Rated Flow [L/min]	110
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	110
Circulation Interface	DN32
Cooling Interface	DN32
——ACCESSORIES——	
Valve Specification   QTY	N/A
Tube Specification   QTY	N/A
Adapter Specification   QTY	DN32 Flange   4
——WEIGHT   DIMENSION——	
Unit Weight	285
Unit Dimension [mm]	1200×800×1510

## Packages

W (mm)	CBM (m3)
D (mm)	Weight (kg)
H (mm)	

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# UC-300-A90-F

## Hermetic Heating Circulator

Lab1st UC series is a hermetic heating circulator with a temperature range from room temperature to 200°C/300°C. The machine adopts electric heating mode, through the circulation pump output heat conduction fluid to heat the materials in the supporting reaction vessel. It is widely used in laboratory, pharmaceutical chemical industry, petrochemical industry and other high temperature environment.

## Features

Expansion tank design with stable system pressure

The water cooling function will only be turned on when cooling is needed to save water resources

Adopt full hermetic circulation system to prolong the service life of heat conduction fluid

Equipped with exhaust valve that can immediately exclude the overflow of gas due to the temperature rise of the system medium

With over-temperature alarm, overload protection and over-current protection function

The circulation system is made of stainless steel to prevent corrosion and pollution and prolong the operation cycle



## Parameters

Model	UC-300-A90-F
—— TECHNICAL DATA ——	
Design Temperature [°C]	RT-300°C ;±1°C
Ambient Temperature [°C]	5-30°C
Optimum Ambient Humidity	45-80%RH
Heating Method	Electrical heating
Cooling Method	Water Cooling
Water Cooling Condenser	Plate heat exchanger
Temperature Sensor	PT100
Safety	Self-diagnosis; Pressure switch; Overload and overheating protection
—— ELECTRICAL REQUIREMENTS ——	
Voltage	220/380/480V
Phase	3P
Frequency [HZ]	50/60
Total power [kW]	93
Heating power [kW]	90
—— COOLING CAPACITY [KW] ——	
300°C	25

200°C	20
100°C	8.5
——CIRCULATION PUMP——	
Type	Magnetic centrifugal pump
Brand	Aolank
Power [w]	3000
Pressure [bar]	2.2
Rated Flow [L/min]	150
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	170
Circulation Interface	DN32
Cooling Interface	DN32
——ACCESSORIES——	
Valve Specification   QTY	N/A
Tube Specification   QTY	N/A
Adapter Specification   QTY	DN32 Flange   4
——WEIGHT   DIMENSION——	
Unit Weight	330
Unit Dimension [mm]	1200×800×1510

## Packages

W (mm)	CBM (m3)
D (mm)	Weight (kg)
H (mm)	

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# UC-300-A120-F

## Hermetic Heating Circulator

Lab1st UC series is a hermetic heating circulator with a temperature range from room temperature to 200°C/300°C. The machine adopts electric heating mode, through the circulation pump output heat conduction fluid to heat the materials in the supporting reaction vessel. It is widely used in laboratory, pharmaceutical chemical industry, petrochemical industry and other high temperature environment.

## Features

Expansion tank design with stable system pressure

The water cooling function will only be turned on when cooling is needed to save water resources

Adopt full hermetic circulation system to prolong the service life of heat conduction fluid

Equipped with exhaust valve that can immediately exclude the overflow of gas due to the temperature rise of the system medium

With over-temperature alarm, overload protection and over-current protection function

The circulation system is made of stainless steel to prevent corrosion and pollution and prolong the operation cycle



## Parameters

Model	UC-300-A120-F
—— TECHNICAL DATA ——	
Design Temperature [°C]	RT-300°C ;±1°C
Ambient Temperature [°C]	5-30°C
Optimum Ambient Humidity	45-80%RH
Heating Method	Electrical heating
Cooling Method	Water Cooling
Water Cooling Condenser	Plate heat exchanger
Temperature sensor	PT100
Safety	Self-diagnosis; Pressure switch; Overload and overheating protection
—— ELECTRICAL REQUIREMENTS ——	
Voltage	220/380/480V
Phase	3P
Frequency [HZ]	50/60
Total power [kW]	124
Heating power [kW]	120
—— COOLING CAPACITY [KW] ——	
300°C	25

200°C	20
100°C	8.5
——CIRCULATION PUMP——	
Type	Magnetic centrifugal pump
Brand	Aolank
Power [w]	4000
Pressure [bar]	2.5
Rated Flow [L/min]	400
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	220
Circulation Interface	DN40
Cooling Interface	DN40
——ACCESSORIES——	
Valve Specification   QTY	N/A
Tube Specification   QTY	N/A
Adapter Specification   QTY	DN40 Flange   4
——WEIGHT   DIMENSION——	
Unit Weight	460
Unit Dimension [mm]	1200×800×1510

## Packages

W (mm)	CBM (m3)
D (mm)	Weight (kg)
H (mm)	

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# UC-300-A150-F

## Hermetic Heating Circulator

Lab1st UC series is a hermetic heating circulator with a temperature range from room temperature to 200°C/300°C. The machine adopts electric heating mode, through the circulation pump output heat conduction fluid to heat the materials in the supporting reaction vessel. It is widely used in laboratory, pharmaceutical chemical industry, petrochemical industry and other high temperature environment.

## Features

Expansion tank design with stable system pressure

The water cooling function will only be turned on when cooling is needed to save water resources

Adopt full hermetic circulation system to prolong the service life of heat conduction fluid

Equipped with exhaust valve that can immediately exclude the overflow of gas due to the temperature rise of the system medium

With over-temperature alarm, overload protection and over-current protection function

The circulation system is made of stainless steel to prevent corrosion and pollution and prolong the operation cycle



## Parameters

Model	UC-300-A150-F
—— TECHNICAL DATA ——	
Design Temperature [°C]	RT-300°C ;±1°C
Ambient Temperature [°C]	5-30°C
Optimum Ambient Humidity	45-80%RH
Heating Method	Electrical heating
Cooling Method	Water Cooling
Water Cooling Condenser	Plate heat exchanger
Temperature sensor	PT100
Safety	Self-diagnosis; Pressure switch; Overload and overheating protection
—— ELECTRICAL REQUIREMENTS ——	
Voltage	220/380/480V
Phase	3P
Frequency [HZ]	50/60
Total power [kW]	154
Heating power [kW]	150
—— COOLING CAPACITY [KW] ——	
300°C	25

200°C	20
100°C	8.5
——CIRCULATION PUMP——	
Type	Magnetic centrifugal pump
Brand	Aolank
Power [w]	4000
Pressure [bar]	2.5
Rated Flow [L/min]	400
——EXTERNAL CIRCULATION——	
Expansion Tank Volume [L]	220
Circulation Interface	DN40
Cooling Interface	DN40
——ACCESSORIES——	
Valve Specification   QTY	N/A
Tube Specification   QTY	N/A
Adapter Specification   QTY	DN40 Flange   4
——WEIGHT   DIMENSION——	
Unit Weight	550
Unit Dimension [mm]	1200×800×1510

## Packages

W (mm)	CBM (m3)
D (mm)	Weight (kg)
H (mm)	

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