

U Series (Compact)

AQUA STREAM

Water Circulating Temperature Control Systems



U Series (Compact)

Cooling Method

The TUC standard temperature controller is available using either a direct or indirect cooling method. Direct cooling of the process water is provided by a cooling solenoid which drains the process water, adding back cooler make-up water. The indirect cooling method utilizes a cooling solenoid and a heat exchanger. The cooling solenoid allows cooling water to flow through the heat exchanger, removing heat from the process water. This method keeps the cooling water and the process water separated.

Sturdy, Dependable Construction

High quality, standard components provide years of trouble-free operation. The cabinet, constructed of heavy gauge sheet metal, provides maximum ventilation to keep the internal operating environment cool. Portability is standard, each unit has two rigid and two swivel casters to provide mobility throughout your plant.

Maintenance Friendly

Hinged access panels provide quick and easy access to the interior and to the electrical panel. Quarter turn screws provide easy release of the panels. The electrical panel is neat, organized, and wires are labeled for ease in troubleshooting. For ease in change-out and service, the controller can be unplugged without removing any wires.

Simple Controls

TUC's controls provide an intuitive interface. The control panel has indicator lights to display the status of the equipment. The microprocessor controller has a large, 1/8 DIN, highly visible display of Set Point and Delivery temperature, and can be configured to meet your operating needs. The configuration is stored in non-volatile memory.

Vertically Mounted Incoloy Heater

The Incoloy heater is vertically mounted to provide efficient heating and ease of maintenance while minimizing the potential for high temperature damage. An insulated heater tank results in less radiant heat being released into the inside of the unit. The U Series comes standard with a 9kW heating element, but can accept up to a 36kW element. The standard model will provide an operating range up to 250°F for your heat transfer application.

High Efficiency Pump

A centrifugal pump mounted horizontally minimizes fluid cavitation and provides maximum flow under the wide variations of pressure generated with multiple tool designs. The U Series has a standard range of pumps from 1/2 to 3 HP.

Seal Flush System

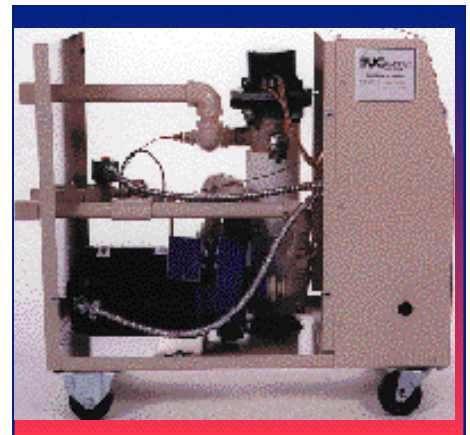
The Seal Flush system extends the life of the seals, reducing the need for maintenance. TUC introduced this feature in 1979 and it has been an industry standard ever since.

Built-In Safety Features

Standard safety features protect your investment. A low pressure switch and pressure relief valve protect the unit and your operators in case of under or over pressure conditions. An internal bypass protects your heating element when process flow is accidentally shut-off. The motor is protected by an overload relay on the motor contactor.

Industrial Quality Painted Finish

A high quality industrial finish keeps the unit looking new even in the roughest plant environments. TUC's standard color is tan, with custom paint colors available upon request.



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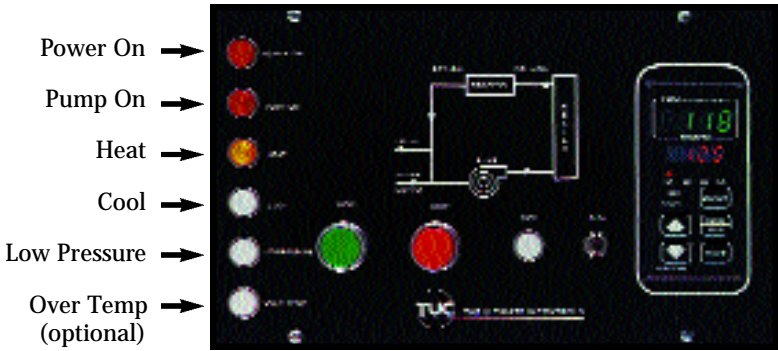
The Ultimate Control®

Designer & manufacturer of innovative equipment for heat transfer & process cooling

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Controller Features:

- Touch Panel Controls
- Dual Digital 1/8 DIN Display of Set Point & Process Temperature
- Non-Volatile Memory
- Celsius or Fahrenheit Selectable
- Adjustable High/Low Limits of Set Point
- Program Lockable
- 3-Year Warranty

Optional Features:

- Audible Alarm
- Visual Alarm
- Various Communication Such As RS-232, RS-422, RS-485
- PLC Interface
- Many Other Options

Direct Cooling

TUC	HP	MODEL #	ZONE	kW	GPM/PSI	SOLENOID	PROCESS LINES	SUPPLY LINES	DRAIN LINES	DIMENSIONS
COMPACT	1/2	WU-1150	SINGLE	9	20/25	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	3/4	WU-1175	SINGLE	9	25/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	1	WU-1110	SINGLE	9	30/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	2	WU-1120	SINGLE	9	40/35	1/4"	1-1/4"	1"	1/2"	16"W x 27"D x 26"H
	3	WU-1130	SINGLE	9	60/48	1/4"	1-1/4"	1"	1/2"	16"W x 27"D x 26"H
	1/2	WU-2150	DUAL	9	20/25	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*
	3/4	WU-2175	DUAL	9	25/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*
	1	WU-2110	DUAL	9	30/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*
	2	WU-2120	DUAL	9	40/35	1/4"	1-1/4"	1"	1/2"	16"W x 27"D x 48"H*
3	WU-2130	DUAL	9	60/48	1/4"	1-1/4"	1"	1/2"	16"W x 27"D x 48"H*	

Indirect Cooling

TUC	HP	MODEL #	ZONE	kW	GPM/PSI	SOLENOID	PROCESS LINES	SUPPLY LINES	DRAIN LINES	DIMENSIONS
COMPACT	1/2	WU-1250	SINGLE	9	20/25	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	3/4	WU-1275	SINGLE	9	25/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	1	WU-1210	SINGLE	9	30/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	2	WU-1220	SINGLE	9	40/35	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	3	WU-1230	SINGLE	9	60/48	1/4"	1"	3/4"	1/2"	16"W x 27"D x 26"H
	1/2	WU-2250	DUAL	9	20/25	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*
	3/4	WU-2275	DUAL	9	25/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*
	1	WU-2210	DUAL	9	30/30	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*
	2	WU-2220	DUAL	9	40/35	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*
3	WU-2230	DUAL	9	60/48	1/4"	1"	3/4"	1/2"	16"W x 27"D x 48"H*	

Indirect Cooling Utilizes a Heat Exchanger

*Shown in a stacked two high configuration, dimension changes to 32.5"W x 27"D x 26"H when combined two wide

TUC	OPTIONS	OPTIONS
AQUA STREAM OPTIONS	<ul style="list-style-type: none"> • Communication Port RS-232, RS-422, RS-485 (Choose One) • Automatic Air Purge Valve w/Solenoid, Valves, and Wiring • Dual Pressure Gauges - Delivery and Return • Custom Paint - TUC Will Match Your Color Chip • Larger Cooling Solenoids • Flow Switch (Tied to Pump Contractor) • Pressure Relief Drain Tube • Non-Ferrous Construction of Components • Audible Alarm (Pump Shut-Down, Low Pressure) • Visual Alarm (Pump Shut-Down, Low Pressure) 	<ul style="list-style-type: none"> • Manual Air Purge Valve w/Check Valve for Evacuating Water Lines and Molds • Auto Vent • Fused Disconnect • Overtemp Sensor Auto Shut-Down • 575V Operation • 380V Operation • Remote Face Plate for Remote Mounting of Controls • Heater Element Sizes Up To 36kW • Auto Shut-Down on Low Voltage, Phase Failure or Incorrect Rotation



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