

**AEC**Material Handling | Process Cooling | **Temperature Control** | Size Reduction

TrueTemp™ SERIES

Water Temperature Control Unit



Technical Specifications

TrueTemp™ TCU Series Water Temperature Control Units provide highly accurate control for production applications requiring a continuous supply of temperature-controlled water.

Innovative design promotes turbulent water flow to maximize heat transfer performance. High flow pumps with 32°F to 250°F (0°C to 121°C) setpoint operating range. The cast-and-flange design reduces connection points by 40% while including high-efficiency pumps that offer higher flow rates at lower pressures. These highly efficient products maintain temperatures to within 1°F of setpoint, allowing for tighter temperature control and improved throughput.

Features

Standard Features

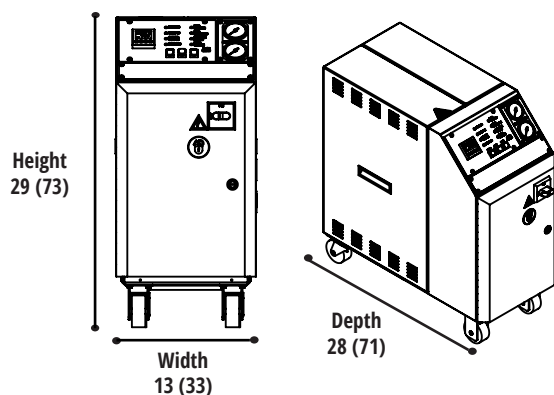
- Compact design with easy-access side panels for rapid maintenance
- Programmable auto vent sequence to automatically vent air from the system at start-up
- Independent high temperature safety thermostat to protect from heater overload
- Motor branch circuit overcurrent/overload protection
- Integrated cooling solenoid valves for efficient unit cooling
- Forward-facing liquid-filled To and From Process pressure gauges
- Non-fused lockable rotary through door disconnect
- 9kW dual stage immersion heater with IEC contactors
- Operator friendly PID temperature controller with Process and Setpoint LED readouts and straightforward unit performance data
- Graphic control panel with indicator and warning status lights
- Adjustable low supply water pressure switch; 16 psig (1.1 bar)
- 150 psig (10.3 bars) pressure relief valve
- SICB/carbon pump seal to maximize pump life
- 0.75" water supply connection, 1.5" process connections; valve size matches drain size

Optional Features

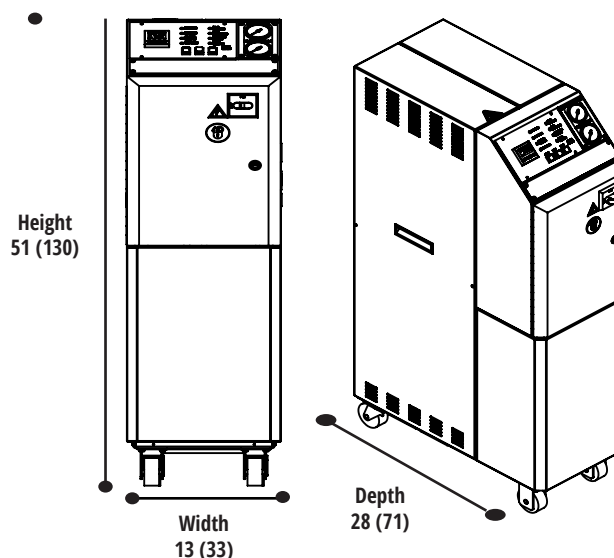
- Advanced Controller
- Compact units offer 12 kW, 18 kW, or 24 kW heater options
- Upright units offer 9 kW through 24 kW plus 36 kW or 48 kW heater options
- Maintained START/STOP switch
- Closed loop heat exchanger, model varies with unit sizes
- General fault audio/visual alarm to alert operators of unit issues
- Quick cool switch w/3216, w/Acv. Ctr. for rapid unit cooling
- Pressure regulator/relief valve for water supply
- Auto system water purge
- Y-strainer to protect unit from high particulate fluid
- Multi-zone capable with factory installed wiring and/or piping. Not available in all configurations
- 300°F (149°C) operations, includes silicon carbide/silicon carbide seal (requires 55 psig (379 kPa/3.8 bar) water supply pressure)

Product Diagrams

TrueTemp Compact



TrueTemp Upright



Specifications

TrueTemp Compact

Model	Pump HP (kW)	Flow GPM (LPM)	Pressure PSIG (kPa)	Loss PSIG (kPa)	FLA 9kW @ 460V	Dimensions in Inches (cm)			Shipping Wt. Lb (kg)
						Height	Width	Depth	
TCU075	0.75 (0.56)	30 (113)	25 (172)	0.5 (3)	12.7	29 (73)	13 (33)	28 (71)	210 (96)
TCU100	1 (0.75)	35 (132)	30 (206)	1.0 (6)	13.1	29 (73)	13 (33)	28 (71)	210 (96)
TCU200	2 (1.5)	50 (189)	30 (206)	1.5 (10)	14.7	29 (73))	13 (33)	28 (71)	210 (96)
TCU300	3 (2.24)	60 (227)	40 (275)	2.0 (13)	16.1	29 (73)	13 (33)	28 (71)	210 (96)
TCU500	5 (3.73)	75 (283)	54 (372)	2.5 (17)	18.9	29 (73)	13 (33)	28 (71)	240 (109)
TCU750	7.5 (5.6)	90 (340)	63 (434)	3.0 (20)	22.3	29 (73)	13 (33)	28 (71)	240 (109)

TrueTemp Upright

Model	Pump HP (kW)	Flow GPM (LPM)	Pressure PSIG (kPa)	Loss PSIG (kPa)	FLA 9kW @ 460V	Dimensions in Inches (cm)			Shipping Wt. Lb (kg)
						Height	Width	Depth	
TCU075U	0.75 (0.56)	30 (113)	25 (172)	0.5 (3)	12.7	51 (130)	13 (33)	28 (71)	210 (96)
TCU100U	1 (0.75)	35 (132)	30 (206)	1.0 (6)	13.1	51 (130)	13 (33)	28 (71)	210 (96)
TCU200U	2 (1.5)	50 (189)	30 (206)	1.5 (10)	14.7	51 (130)	13 (33)	28 (71)	210 (96)
TCU300U	3 (2.24)	60 (227)	35 (241)	2.0 (13)	16.1	51 (130)	13 (33))	28 (71)	210 (96)
TCU500U	5 (3.73)	75 (283)	50 (344)	2.5 (17)	18.9	51 (130)	13 (33)	28 (71)	240 (109)
TCU750U	7.5 (5.6)	90 (340)	50 (344)	3.0 (20)	22.3	51 (130)	13 (33)	28 (71)	240 (109)
TCU1000U	10 (7.46)	100 (378)	55 (379)	5.0 (34)	26.0	51 (130)	13 (33)	28 (71)	270 (123)