

TCO SERIES

Oil Temperature Control Unit



Technical Specifications

The TCO Series Oil Temperature Control Units have been engineered to withstand the rigors of high temperature heat transfer fluid recirculation. These superior performance units have a wide temperature operating range from 100°F to 550°F (38°C to 288°C). With a wide array of available options and several flow and output choices, units can be tailored to the unique needs of various manufacturing applications and individual facilities. Critical applications can maintain setpoint temperature to within 1°F (0.55°C).

Features

Standard Features

- Temperature range from 100°F to 550°F* (38°C to 288°C)
- Eurotherm 3216 micro-processor controller with "To-Process" and "Setpoint" LED readouts
- Positive displacement pump capable of reversing to evacuate the process
- Easily removable panels for quick access to internal components
- Pressure activated bypass valve
- Configurable 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 protection with phase loss and overload trip detection
- Y-strainer on the From Process line
- Forward-facing "To Process" pressure gauge
- Pressure switch for low pump pressure shutdown
- Audible alarm
- Low level alarm for reservoir
- Drain valve for heat transfer fluid removal and change
- 1 year parts and labor warranty at the factory
- 3 year controller warranty
- UL Listed sub-panel
- 460v

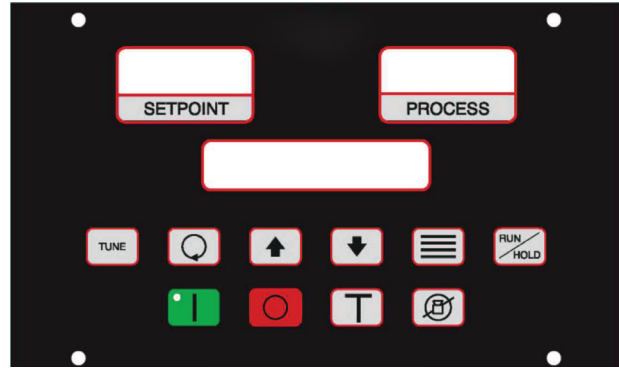
Optional Features

- 12 kW, 18 kW, or 24 kW heater
- Available voltages: 575/3/60, 380/3/50, 415/3/50, 208/3/60, 230/3/60
- Advanced Controller with more robust informational display
- Remote Controls enclosure to allow operators full access to unit control from a desired location
- Hour meter to monitor pump run time
- Closed loop heat exchanger to cool heat transfer fluid
- General fault visual alarm to alert operators of unit issues
- Multi-zone capable in various design styles that include common wiring and/or piping
- Protective Lexan® cover for additional protection in harsh environments

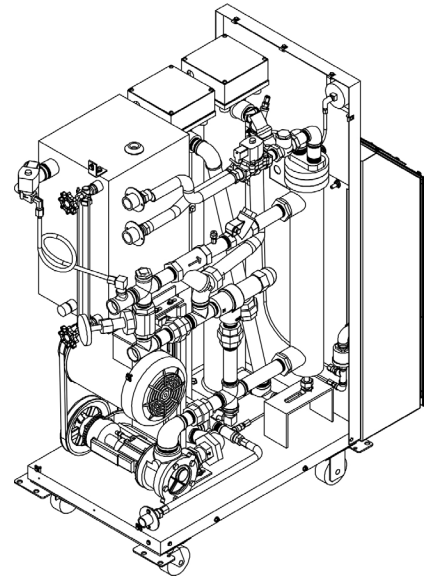
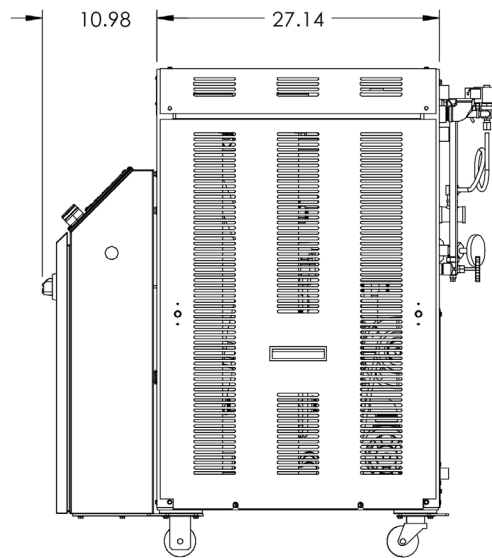
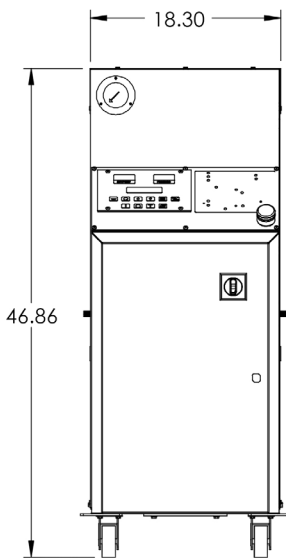
* NOTE: Standard units utilize a 6kW heater which limits the maximum operating temperature to 400°F (204°C)

Advanced Controller

- PID control for both heating and cooling
- Built-in Ramp/Soak feature
- Setpoint, To Process, From Process and DT displays
- Autovent sequence (adjustable from 1 to 10 minutes)
- °F to °C programmable
- 2 line by 20 character LCD to display status information and alarms
- Advanced controller options include: 4-20 mA remote set point and retransmission of PV; SPI protocol, RS-485; General protocols, types RS-232, RS-485; Ethernet IP via Modbus RTU; Remote sensor with 6 ft. cable



Product Diagrams



Specifications

Model	Pump HP (kW)	Flow GPM (LPM)	Pressure PSIG (bar)	FLA by Heater Selection 460v				Dimensions in Inches (cm)			Shipping Wt. Lbs (kg)
				6 kW	12 kW	18 kW	24 kW	Height	Width	Depth	
TCO	1.0 (0.75)	18 (68)	30 (2.0)	9	16	24	31	46.9 (119)	18.3 (46)	43.9 (112)	600 (272)
TCO	1.5 (1.12)	18 (68)	50 (3.4)	10	17	25	32	46.9 (119)	18.3 (46)	43.9 (112)	600 (272)
TCO	2.0 (1.49)	24 (91)	30/50 (2/3.4)	11	18	26	33	46.9 (119)	18.3 (46)	43.9 (112)	600 (272)
2TCO	1.0 (0.75)	18 (68)	30 (2.0)	18	32	48	62	46.9 (119)	36.5 (93)	43.9 (112)	1200 (546)
2TCO	1.5 (1.12)	18 (68)	50 (3.4)	20	34	50	64	46.9 (119)	36.5 (93)	43.9 (112)	1200 (546)
2TCO	2.0 (1.49)	24 (91)	30/50 (2/3.4)	22	36	52	66	46.9 (119)	36.5 (93)	43.9 (112)	1200 (546)