

2016M SERIES

Oil Temperature Control Unit



Technical Specifications

2016M Series High 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 (0.6°C). Energy efficiencies are gained through the use of dual-stage immersion heaters capable of maintaining temperature setpoints through half or full heat power.

Features

Standard Features

- Temperature range from 100°F to 550°F* (38°C to 288°C)
- M2B+ microprocessor controller, includes diagnostic features with LCD Display
- 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 liquid-filled "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

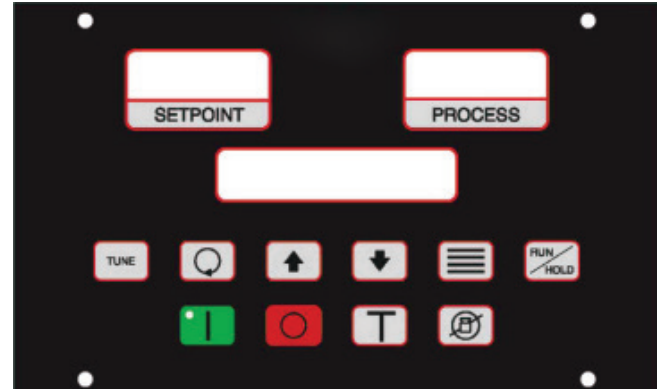
Optional Features

- 12 kW, 18 kW, or 24 kW heater
- Available optional voltages: 575/3/60, 380/3/50, 415/3/50, 208/3/60, 230/3/60
- 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
- Communications options to include: Modbus protocol, RS-232 or RS-485; SPI protocol RS-485; Ethernet IP via Modbus RT4

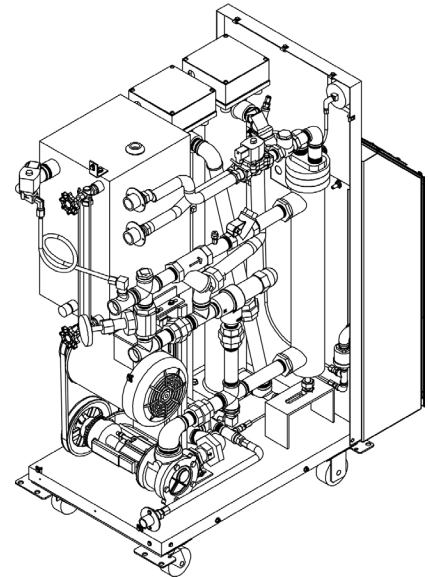
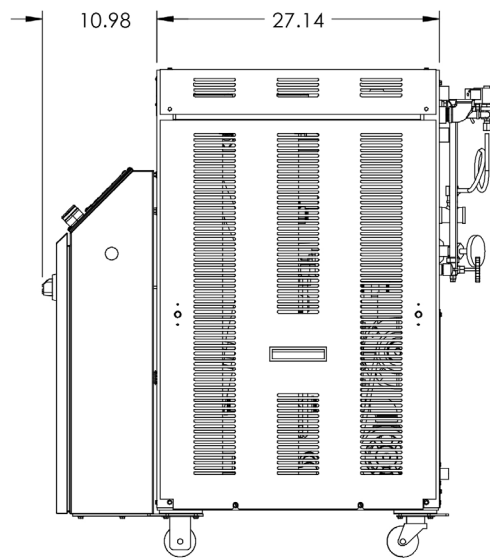
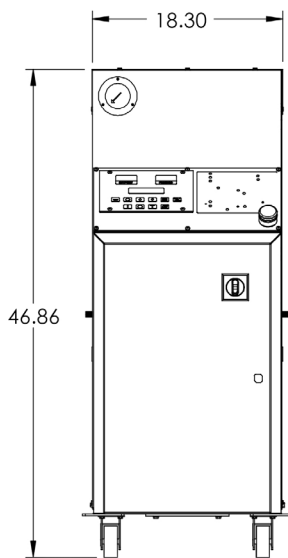
* NOTE: Standard units utilize a 6kW heater which limits the maximum operating temperature to 400°F (204°C)

Superior Controls

- 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)
- 2 line by 20 character LCD to display status information and alarms
- Communication Options: 4-20 mA remote set point and retransmission of PV; SPI protocol, RS-485; Ethernet IP via Modbus RTU;
- Auto shut down feature cools the unit in stages
- Built-in Auto-tuning feature to optimize unit performance



Product Diagrams



Specifications

Model	Pump HP (kW)	Flow GPM (LPM)	Pressure PSIG (kPa)	FLA by Heater Selection				Dimensions in Inches (CM)			Shipping Wt.
				6 kW	12 kW	18 kW	24 kW	Height	Width	Depth	
2016M 1	1.0 (0.75)	18 (68)	30 (2.0)	9	16	24	31	46.0 (117)	18.3 (46)	42.0 (107)	600 (272)
2016M 1.5	1.5 (1.12)	18 (68)	50 (3.4)	10	17	25	32	46.0 (117)	18.3 (46)	42.0 (107)	600 (272)
2016M 2	2.0 (1.49)	24 (91)	30/50 (2/5.4)	11	18	26	33	46.0 (117)	18.3 (46)	42.0 (107)	600 (272)
2026M 1	1.0 (0.75)	18 (68)	30 (2.0)	18	32	48	62	46.0 (117)	36.5 (93)	42.0 (107)	1200 (546)
2026M 1.5	1.5 (1.12)	18 (68)	50 (3.4)	20	34	50	64	46.0 (117)	36.5 (93)	42.0 (107)	1200 (546)
2026M 2	2.0 (1.49)	24 (91)	30/50 (2/5.4)	22	36	52	66	46.0 (117)	36.5 (93)	42.0 (107)	1200 (546)