# **Temperature Control Units**

# Water Units

- 30°F to 250°F Process Fluid Temperatures\*
- 10 to 34 kW Heaters
- ¾ to 7½ HP Centrifugal Pumps (20 100 GPM)
- 1/2" & 3/4" AVT<sup>™</sup> Modulating Cooling Valves

The water temperature control unit is used to preheat a process to the desired operating temperature by engaging the unit's electric immersion heater and recirculating the water in the system.

Upon reaching the operating temperature, the water temperature control unit can continue to add heat or become a cooling device by exchanging a small amount of recirculated water with cooling water supplied from an external source.

Tight temperature control is achieved by adding just the right amount of heat or by precisely metering cooling water into the system.



Temperature control unit, shown with 10 kW heater and 34 HP pump and T Series control instrument.

#### T Series Controller

- · Touch screen simplicity
- 4.3" full color touch screen interface
- · More than 15 screens with custom set-up, operation & system monitoring information.
- Home screen includes continuous setpoint and to process temperature.
- Digital flow rate display and from process temperature on informational screen.
- % Heating or Cooling indication on home screen.
- Standard shut down pump seal cooling feature.
- · User configurable automatic start-up venting.
- Out-of-spec alarm including standard audible signal.
- · Solid state temperature sensors.
- Selectable SPI or Modbus RTU communication. .

#### **G** Series Controller

- Visual graphical display
- · Easy to navigate LCD display.
- · Home screen includes continuous setpoint and to process temperature.
- · Standard shut down pump seal cooling feature.
- · User configurable automatic start-up venting.
- · Out-of-spec alarm including standard audible signal.
- Solid state temperature sensors.
- · Selectable SPI or Modbus RTU communication.

180 F POINT 180 0 MILACRON

**200** °F

200 °F

MILACRON

\* Relies on an external source of cooling water that must be colder than the desired set point temperature.

# SPECIFICATIONS

		Standard							Optional: Units with 16 kW Heater						
		75	100	150	200	300	500	750	75	100	150	200	300	500	750
Heater <sup>1</sup>	kW	10	10	10	10	10	10	10	16	16	16	16	16	16	16
Process Pump	HP	3/4	1	1½	2	3	5	7½	3/4	1	11⁄2	2	3	5	7½
	GPM	35	45	62	75	80	90	100	35	45	62	75	80	90	100
	PSI	30	30	30	30	30	34	47	30	30	30	30	30	34	47
Full Load Amperage	230 volt	27.8	28.6	30.2	31.8	34.6	40.3	47.1	42.8	43.6	45.2	46.8	49.6	55.4	62.2
@3ø/60hz <sup>2</sup>	460 volt	13.9	14.3	15.1	15.9	17.3	20.2	23.5	21.4	21.8	22.6	23.4	24.8	27.7	31.1
Dimensions (inches)	Height	28¼	28¼	28¼	28¼	28¼	44	44	28¼	28¼	28¼	28¼	28¼	44	44
	Width	12½	12½	12½	12½	12½	16	16	121⁄2	12½	12½	12½	12½	16	16
	Depth	19½	19½	19½	19½	19½	24	24	19½	19½	19½	19½	19½	24	24
Connections (inches)	T/F <sup>3</sup>	1¼	1¼	1¼	1¼	1¼	2	2	1¼	1¼	1¼	1¼	1¼	2	2
	S/D <sup>4</sup>	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1⁄2
Weight (pounds)	Shipping⁵	200	208	208	213	223	275	290	205	210	210	220	225	285	300
		Optional: Units with 24 kW Heater						Optional: Units with 34 kW Heater							
		75	100	150	200	300	500	750	75	100	150	200	300	500	750
Heater <sup>1</sup>	kW	24	24	24	24	24	24	24	34	34	34	34	34	34	34
Process Pump	HP	3/4	1	1½	2	3	5	71⁄2	3/4	1	1½	2	3	5	7½
	GPM	35	45	65	75	80	90	100	35	45	65	75	80	90	100
	PSI	30	30	30	30	30	34	47	30	30	30	30	30	34	47
Full Load Amperage	230 volt	63.1	63.9	65.5	67.1	69.9	75.5	82.3	88.2	89.0	90.6	92.2	95.0	100.6	107.4
@3ø/60hz <sup>2</sup>	460 volt	31.6	32.0	32.8	33.6	35.0	37.8	41.2	44.1	44.5	45.3	46.1	47.5	50.3	53.7
Dimensions (inches)	Height	44	44	44	44	44	44	44	44	44	44	44	44	44	44
	Width	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	Depth	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Connections (inches)	T/F <sup>3</sup>	1¼	1¼	1¼	1¼	1¼	2	2	1¼	1¼	1¼	1¼	1¼	2	2
	S/D <sup>4</sup>	1⁄2	1/2	1/2	1⁄2	1/2	1/2	1/2	1/2	1/2	1/2	1⁄2	1/2	1/2	1⁄2
Weight (pounds)	Shipping⁵	270	275	280	285	290	295	310	280	285	290	295	300	305	320

Notes: 1. Derate heater output by 25% for 208/3/60 operation. 2. Consult factory for 50hz operations. 3. T - to process; F - from process. 4. S - water supply; D - drain. 5. Approximate unit shipping weight. Since product innovation and improvement is our constant goal all features and specifications are subject to change without notice or liability. Selection of certain optional features may change listed specifications.

**MFCT-75** Manifold To Process Instrument Pump Control Instrument -M T Series Touch Screen = T 75 = 3/4 HP Temperature Probe Cooling Valve Heater G Series = G 100 = 1 HP V Series = V 150 = 1.5 HP  $\bowtie$ M M 300°F Series = T300 200 = 2 HP Drain N From Process Water Supply 300 = 3 HP Pump -00 500 = 5 HP Manifold \_\_\_\_

# **Process Connection**

**Temperature Control Unit** 



### **Model Number Designator**

750 = 7.5 HP