

Water Temperature Controls (TCU)

Features

- Heater: 10 kW, 16 kW, and 24 kW
- Processing Pump: 3/4 HP to 5 HP
- Display: LED, LCD, or Touch Screen
- Media: Water Circulating
- Temperature: 250°F
- Compact Electrical Panel
- Electrical: 230V / 3 / 60 or 460V / 3 / 60
- Limit Devices
- Temperature Probes
- Modulating Cooling Valve (LCD and Touch Screen Models)
- Solenoid Cooling Valve (LED model)
- 1/2" NPT connections for supply and return
- 2 yr Warranty: Controller, Cooling Valve, Heater, Mechanical, Pump Seal



U Inch

Item Number	Heater (kW)	Pump HP	Process Pump (GPM)	Display	Power	Full Amp Load	Process Connections	Shipping Weight (lbs)
VTR-2100-LS	10	1	45	LED	230V	28.6	1 1/4" NPT	210
VTR-2100-LS-460	10	1	45	LED	460V	14.3	1 1/4" NPT	210
VTR-2100-LXG	10	1	45	LCD	230V	28.6	1 1/4" NPT	210
VTR-2100-LXG-460	10	1	45	LCD	460V	14.3	1 1/4" NPT	210
VTR-2100-LXT	10	1	45	Touch Screen	230V	28.6	1 1/4" NPT	210
VTR-2100-LXT-460	10	1	45	Touch Screen	460V	14.3	1 1/4" NPT	210
VTR-2150-LS	10	1.5	65	LED	230V	30.2	1 1/4" NPT	210
VTR-2150-LS-460	10	1.5	65	LED	460V	15.1	1 1/4" NPT	210
VTR-2150-LXG	10	1.5	65	LCD	230V	30.2	1 1/4" NPT	210
VTR-2150-LXG-460	10	1.5	65	LCD	460V	15.1	1 1/4" NPT	210
VTR-2150-LXT	10	1.5	65	Touch Screen	230V	30.2	1 1/4" NPT	210
VTR-2150-LXT-460	10	1.5	65	Touch Screen	460V	15.1	1 1/4" NPT	210
VTR-2200-LS	10	2	75	LED	230V	31.8	1 1/4" NPT	215
VTR-2200-LS-460	10	2	75	LED	460V	15.9	1 1/4" NPT	215
VTR-2200-LXG	10	2	75	LCD	230V	31.8	1 1/4" NPT	215
VTR-2200-LXG-460	10	2	75	LCD	460V	15.9	1 1/4" NPT	215
VTR-2200-LXT	10	2	75	Touch Screen	230V	31.8	1 1/4" NPT	215
VTR-2200-LXT-460	10	2	75	Touch Screen	460V	15.9	1 1/4" NPT	215
VTR-2300-LS	10	3	80	LED	230V	33.4	1 1/4" NPT	225

Available upon request:
 6kW and 34kW heaters
 1/2 and 7.5 HP pumps
 300°F maximum temperature rating



Water Temperature Controls (TCU) - Continued

Water circulating Mold Temperature Control Units provide precise, reliable fluid temperature regulation for a wide range of industrial processes. They quickly preheat systems to the required operating temperature by continuously recirculating water through an electric immersion heater. Once the setpoint is reached, the unit maintains stable temperatures automatically—adding heat as needed or activating a cooling valve to blend cooling water with the recirculated flow for consistent, accurate temperature control.



U Inch

Item Number	Heater (kW)	Pump HP	Process Pump (GPM)	Display	Power	Full Amp Load	Process Connections	Shipping Weight (lbs)
VTR-2300-LXG	10	3	80	LCD	230V	33.4	1 1/4" NPT	225
VTR-2300-LXG-460	10	3	80	LCD	460V	16.7	1 1/4" NPT	225
VTR-2300-LXT	10	3	80	Touch Screen	230V	33.4	1 1/4" NPT	225
VTR-2300-LXT-460	10	3	80	Touch Screen	460V	16.7	1 1/4" NPT	225
VTR-2500-LS	10	5	90	LED	230V	36.6	2" NPT	325
VTR-2500-LS-460	10	5	90	LED	460V	18.3	2" NPT	325
VTR-2500-LXG	10	5	90	LCD	230V	36.6	2" NPT	325
VTR-2500-LXG-460	10	5	90	LCD	460V	18.3	2" NPT	325
VTR-2500-LXT	10	5	90	Touch Screen	230V	36.6	2" NPT	325
VTR-2500-LXT-460	10	5	90	Touch Screen	460V	18.3	2" NPT	325
VTR-275-LS	10	0.75	35	LED	460V	13.9	1 1/4" NPT	210
VTR-275-LS-460	10	0.75	35	LED	230V	27.8	1 1/4" NPT	210
VTR-275-LXG	10	0.75	35	LCD	460V	13.9	1 1/4" NPT	210
VTR-275-LXG-460	10	0.75	35	LCD	230V	27.8	1 1/4" NPT	210
VTR-275-LXT	10	0.75	35	Touch Screen	460V	13.9	1 1/4" NPT	210
VTR-275-LXT-460	10	0.75	35	Touch Screen	230V	27.8	1 1/4" NPT	210
VTR-3100-LS	16	1	45	LED	230V	43	1 1/4" NPT	210
VTR-3100-LS-460	16	1	45	LED	460V	21.5	1 1/4" NPT	210
VTR-3100-LXG	16	1	45	LCD	230V	43	1 1/4" NPT	210
VTR-3100-LXG-460	16	1	45	LCD	460V	21.5	1 1/4" NPT	210
VTR-3100-LXT	16	1	45	Touch Screen	230V	43	1 1/4" NPT	210
VTR-3100-LXT-460	16	1	45	Touch Screen	460V	21.5	1 1/4" NPT	210
VTR-3150-LS	16	1.5	65	LED	230V	44.4	1 1/4" NPT	210
VTR-3150-LS-460	16	1.5	65	LED	460V	22.2	1 1/4" NPT	210

Available upon request:
 6kW and 34kW heaters
 1/2 and 7.5 HP pumps
 300°F maximum temperature rating



Water Temperature Controls (TCU) - Continued



LED Display



LCD Display



Touch Screen

Item Number	Heater (kW)	Pump HP	Process Pump (GPM)	Display	Power	Full Amp Load	Process Connections	Shipping Weight (lbs)
VTR-3150-LXG	16	1.5	65	LCD	230V	44.4	1 1/4" NPT	210
VTR-3150-LXG-460	16	1.5	65	LCD	460V	22.2	1 1/4" NPT	210
VTR-3150-LXT	16	1.5	65	Touch Screen	230V	44.4	1 1/4" NPT	210
VTR-3150-LXT-460	16	1.5	65	Touch Screen	460V	22.2	1 1/4" NPT	210
VTR-3200-LS	16	2	75	LED	230V	45.8	1 1/4" NPT	220
VTR-3200-LS-460	16	2	75	LED	460V	22.9	1 1/4" NPT	220
VTR-3200-LXG	16	2	75	LCD	230V	45.8	1 1/4" NPT	220
VTR-3200-LXG-460	16	2	75	LCD	460V	22.9	1 1/4" NPT	220
VTR-3200-LXT	16	2	75	Touch Screen	230V	45.8	1 1/4" NPT	220
VTR-3200-LXT-460	16	2	75	Touch Screen	460V	22.9	1 1/4" NPT	220
VTR-3300-LS	16	3	80	LED	230V	47.8	1 1/4" NPT	225
VTR-3300-LS-460	16	3	80	LED	460V	23.9	1 1/4" NPT	225
VTR-3300-LXG	16	3	80	LCD	230V	47.8	1 1/4" NPT	225
VTR-3300-LXG-460	16	3	80	LCD	460V	23.9	1 1/4" NPT	225
VTR-3300-LXT	16	3	80	Touch Screen	230V	47.8	1 1/4" NPT	225
VTR-3300-LXT-460	16	3	80	Touch Screen	460V	23.9	1 1/4" NPT	225
VTR-3500-LS	16	5	90	LED	230V	51.2	2" NPT	335
VTR-3500-LS-460	16	5	90	LED	460V	25.6	2" NPT	335
VTR-3500-LXG	16	5	90	LCD	230V	51.2	2" NPT	335
VTR-3500-LXG-460	16	5	90	LCD	460V	25.6	2" NPT	335
VTR-3500-LXT	16	5	90	Touch Screen	230V	51.2	2" NPT	335
VTR-3500-LXT-460	16	5	90	Touch Screen	460V	25.6	2" NPT	335
VTR-375-LS	16	0.75	35	LED	460V	21.4	1 1/4" NPT	205
VTR-375-LS-460	16	0.75	35	LED	230V	42.8	1 1/4" NPT	205

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 6kW and 34kW heaters
 1/2 and 7.5 HP pumps
 300°F maximum temperature rating



Water Temperature Controls (TCU) - Continued



LED Display



LCD Display



Touch Screen

Item Number	Heater (kW)	Pump HP	Process Pump (GPM)	Display	Power	Full Amp Load	Process Connections	Shipping Weight (lbs)
VTR-375-LXG	16	0.75	35	LCD	460V	21.4	1 1/4" NPT	205
VTR-375-LXG-460	16	0.75	35	LCD	230V	42.8	1 1/4" NPT	205
VTR-375-LXT	16	0.75	35	Touch Screen	460V	21.4	1 1/4" NPT	205
VTR-375-LXT-460	16	0.75	35	Touch Screen	230V	42.8	1 1/4" NPT	205
VTR-4100-LS	24	1	45	LED	230V	62.2	1 1/4" NPT	275
VTR-4100-LS-460	24	1	45	LED	460V	31.1	1 1/4" NPT	275
VTR-4100-LXG	24	1	45	LCD	230V	62.2	1 1/4" NPT	275
VTR-4100-LXG-460	24	1	45	LCD	460V	31.1	1 1/4" NPT	275
VTR-4100-LXT	24	1	45	Touch Screen	230V	62.2	1 1/4" NPT	275
VTR-4100-LXT-460	24	1	45	Touch Screen	460V	31.1	1 1/4" NPT	275
VTR-4150-LS	24	1.5	65	LED	230V	63.6	1 1/4" NPT	280
VTR-4150-LS-460	24	1.5	65	LED	460V	31.8	1 1/4" NPT	280
VTR-4150-LXG	24	1.5	65	LCD	230V	63.6	1 1/4" NPT	280
VTR-4150-LXG-460	24	1.5	65	LCD	460V	31.8	1 1/4" NPT	280
VTR-4150-LXT	24	1.5	65	Touch Screen	230V	63.6	1 1/4" NPT	280
VTR-4150-LXT-460	24	1.5	65	Touch Screen	460V	31.8	1 1/4" NPT	280
VTR-4200-LS	24	2	75	LED	230V	65	1 1/4" NPT	285
VTR-4200-LS-460	24	2	75	LED	460V	32.5	1 1/4" NPT	285
VTR-4200-LXG	24	2	75	LCD	230V	65	1 1/4" NPT	285
VTR-4200-LXG-460	24	2	75	LCD	460V	32.5	1 1/4" NPT	285
VTR-4200-LXT	24	2	75	Touch Screen	230V	65	1 1/4" NPT	285
VTR-4200-LXT-460	24	2	75	Touch Screen	460V	32.5	1 1/4" NPT	285
VTR-4300-LS	24	3	80	LED	230V	67	1 1/4" NPT	290
VTR-4300-LS-460	24	3	80	LED	460V	33.5	1 1/4" NPT	290

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 6kW and 34kW heaters
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Water Temperature Controls (TCU) - Continued



LED Display



LCD Display



Touch Screen

Item Number	Heater (kW)	Pump HP	Process Pump (GPM)	Display	Power	Full Amp Load	Process Connections	Shipping Weight (lbs)
VTR-4300-LXG	24	3	80	LCD	230V	67	1 1/4" NPT	290
VTR-4300-LXG-460	24	3	80	LCD	460V	33.5	1 1/4" NPT	290
VTR-4300-LXT	24	3	80	Touch Screen	230V	67	1 1/4" NPT	290
VTR-4300-LXT-460	24	3	80	Touch Screen	460V	33.5	1 1/4" NPT	290
VTR-4500-LS	24	5	90	LED	230V	70.4	2" NPT	345
VTR-4500-LS-460	24	5	90	LED	460V	35.2	2" NPT	345
VTR-4500-LXG	24	5	90	LCD	230V	70.4	2" NPT	345
VTR-4500-LXG-460	24	5	90	LCD	460V	35.2	2" NPT	345
VTR-4500-LXT	24	5	90	Touch Screen	230V	70.4	2" NPT	345
VTR-4500-LXT-460	24	5	90	Touch Screen	460V	35.2	2" NPT	345
VTR-475-LS	24	0.75	35	LED	460V	31.6	1 1/4" NPT	270
VTR-475-LS-460	24	0.75	35	LED	230V	63.1	1 1/4" NPT	270
VTR-475-LXG	24	0.75	35	LCD	460V	31.6	1 1/4" NPT	270
VTR-475-LXG-460	24	0.75	35	LCD	230V	63.1	1 1/4" NPT	270
VTR-475-LXT	24	0.75	35	Touch Screen	460V	31.6	1 1/4" NPT	270
VTR-475-LXT-460	24	0.75	35	Touch Screen	230V	63.1	1 1/4" NPT	270

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LED Display



LCD Display



Touch Screen

U Inch

Features	LED Display	LCD Display	Touch Screen
4.3" full color touch screen interface			X
More than 25 screens with custom set-up & system monitoring information			X
Home screen includes continuous set point and to process temperature		X	X
Process temperature on informational screen			X
% Heating or Cooling indication on home screen		X	X
Standard shut down pump seal cooling feature		X	X
User configurable automatic start-up venting		X	X
Out-of-spec alarm including standard audible signal			X
Pump rotation monitor			X
Selectable English or Spanish language display			X
Selectable °F or °C temperature display		X	X
Selectable SPI or Modbus RTU communication		X	X
Configurable second set point feature			X
Operates exclusive AVT modulating cooling valve		X	X
For process fluid temperature up to 250°F	X	X	X
Simple menu driven controller		X	
Continuous display of To Process temperature	X		
Status indicating lights for Power, Pump, Heat and Cool	X		
On - Off rocker switch	X		
Pulsed solenoid cooling valve is used with this instrument.	X		

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