



TC SERIES TEMPERATURE CONTROLLERS

Available from ½ to 3 HP with 4½ to 18 kW Heaters



TC-1



TC-2

HIGH-QUALITY TEMPERATURE CONTROL FOR INJECTION MOLDING

Rated for water temperatures from 32°F to 230°F, Cooling Technology's TC Series Temperature Controllers provide the best value in the market today.

Cooling Technology's TC Series Temperature Controllers are made with the best available components such as premium quality solenoid valves, high flow pumps with leak-resistant silicon carbide seals and rugged incoloy heaters for years of maintenance-free operation.

FEATURES

- Minimum use of threaded fittings to prevent leaks
- Electronics protected in separate bay with hinged lid
- Cabinet drawer opens to allow on-spot maintenance
- Attractive stainless steel cabinet
- Industrial swivel casters

MICROPROCESSOR CONTROLLER

- Advanced programmable PID temperature controller
- Prevents overshooting set point for accurate control
- Auto-tuning at start-up provides +1°F temperature control
- Easy-to-read display monitors set point and actual temperature
- Industry standard DIN module is a non-proprietary design
- Set point easily adjusted
- One button start-up cycle features automatic air purge

SAFETIES

- High temperature cut-off
- Low water pressure switch
- Pressure relief valve
- Fused transformer
- Pump motor & heater protection

- Non-ferrous water path construction
- Non-ferrous non-overloading centrifugal pump with high operating efficiency over a wide range of capacity
- Horizontal pump mounting and pump seal flush increases seal life
- Large stainless steel tank, insulated to conserve energy and reduce radiated heat
- Low watt density Incolloy heater
- Make-up water mix at pump suction to extend heater life
- Large, easy-to-read liquid filled pressure gauge
- Continuous air purging prevents loss of flow

OPTIONS

- Stacking rack
- Remote control panel
- Modulating valve
- High temperature alarm

TC SERIES TEMPERATURE CONTROLLER SPECIFICATIONS

GENERAL DATA

MODEL	TCI-1/2	TCI-3/4	TCI-1	TCI-1-1/2	TCI-2	TCII-3/4	TCII-1	TCII-1-1/2	TCII-2	TCII-3
Pump hp	½	¾	1	1½	2	¾	1	1½	2	3
Flow rate GPM	10	20	25	30	30	20	25	30	50	70
Flow rate PSI	20	26	28	39	39	26	28	39	40	43
Length	22	22	22	22	22	21	21	21	21	21
Width	13	13	13	13	13	16	16	16	16	16
Height	16	16	16	16	16	25.5	25.5	25.5	25.5	25.5
Weight	100	105	105	110	110	320	320	330	330	350
FLA (460-3-60) 4.5kW Heater	6.3	12.2	6.6	6.8	7.5	8.2	-	-	-	-
9.0kW Heater	-	-	12.5	12.7	13.4	13.4	-	-	-	-
12kW Heater	-	-	-	-	-	-	16.3	16.7	17.2	17.9
18kW Heater	-	-	-	-	-	-	23.8	24.2	18.4	25.4
Process Line	1"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/4"	1-1/2"	2"
Make-up Line	½"	½"	½"	½"	½"	½"	½"	½"	½"	½"
Drain Line	½"	½"	½"	½"	½"	½"	½"	½"	¾"	¾"

CONSTRUCTION

Cabinet & Frame	Carbon steel
Finish	Painted with acrylic enamel
Piping & Fittings	Copper, bronze and stainless steel
Features	Four industrial grade swivel casters; Components bolted to the frame for ease of maintenance; Minimum use of threaded fittings to prevent leaks; Electronics protected in separation bay with hinged lid

PUMP

Type	End suction close coupled centrifugal Non-overloading Horizontally mounted
Construction	All bronze
Motor	ODP, 60Hz / 3450 rpm
Seal	EPDM-CM mechanical seal
Features	Seal flush; Liquid filled pressure gauge; Motor contactor; Overload protection

TANK

Type	AISI 304 stainless steel
Insulation	0.5 inch Armaflex or equivalent
Safeties	Continuous air purge; Pressure relief valve

ELECTRICAL/CONTROL PANEL

Temperature Control	1/16 DIN PID controller
Indicators and Controls	Set-point temperature Actual temperature Unit on Pump on Heater on Cooling on Low water pressure
Features	One button start-up Auto-tuning at start-up Fused transformed

**Packaging - Processing
Bid on Equipment**

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