Specifications TC16 - TC40 - TC58

Thermostatic Bath and Circulator



General

The TC16, TC40, and TC58 are used for precise temperature control. The baths offer a choice in different bath volumes and offer high reliability for use under rough circumstances.

Accuracy

The insulation of the bath and electronic design result in a stable working temperature of $\pm 0.02^{\circ}$ C for the TC16, TC40, and TC58. The stability was measured in water at 50°C. The set point temperature can be set in steps of 0.1°C in the range of 0°C up to 250°C (32°F.482°F). The accuracy on the display is displayed in 0.1°C. However the controller has an internal accuracy of 0.01°C. This two decimal-readout also is available using the RS232 communication port and the free Tamcom software.

Temperature readout

Standard available in °C, on request in °F.

Pump

- Three pumps can be offered:
- Standard pump

- Suction/pressure pump	00T0253
- Performance pump	24T0399

Item	Unit	TC16	TC40	TC58	
P/N 230V/50-60Hz		00T0671	00T0681	00T0691	
P/N 115V/60HZ		00T0861	00T0851	00T0881	
Power	[Watt]	1600	3000	3000	
Materials	Used	Used inside bath: stainless steel 304, brass			
Range	Ambient 250°C/482°F				
Reading	Standard °C, °F on request				
Setting	[°]	0.1			
Stability ±	[°C]	0.02	0.02	0.02	
Heating	[W]	1400**	2800	2800	
Bath volume	[L]	16	40	58	
Pump	[mBar]	Max pressure 300*			
Pump	[L/min]	Max flow 7.5*			
Opening	[mm]	180*210	420*275	420*275	
Depth bath	[mm]	220	200	300	
Length	[mm]	480	705	705	
Width	[mm]	295	375	375	
Height	[mm]	480	440	590	
Weight	[Kg]	19	26.8	35	
CE	Conforms to CE regulation				
* Optional pump with pressure max 1Bar, flow max 16L/min,					

* Optional pump with pressure max 1Bar, flow max 16L/min reference: 24T0399.

** Additional heater 1400W optional to heat larger loads when circulating

Span

The baths can be operated from ambient up to 250° C (482°F). Due to the "self-heating" of the stirring mechanism (friction-heat) and when using a top lid, the minimum temperature lies approximately 5° C above the ambient temperature. When using the standard built-in cooling coil the minimum operating temperature lies approximately $\pm 5^{\circ}$ C above the temperature of the cooling liquid circulating inside the cooling coil. Minimum working temperature when using external cooling lies around 10°C. Lower temperatures generate problems with built up of condensate in the inner insulation of the bath.

Safety

The bath conforms to CE regulation. It is further equipped with a mechanical resettable safety thermostat.

Optional

See table on the next page.

Tamson Instruments bv

Specifications TC16 - TC40 - TC58

Thermostatic Bath and Circulator

Operating

- 1 LED Temperature display
- 2 Item
- 3 Sequence
- 4 Up & Down
- 5 Over temperature safety
- 6 Power

The thermostatic bath is easy to operate. The four keys will set all the parameters. Using the up and down arrow the desired working temperature or SP can be set in steps of 0.1° C. The bath temperature is displayed with a resolution of 0.1° C.



	Ite	m	TC16	TC40	TC58	
	Remote PT100	On request				
	RS232 serial communica	ation	02T3025			
	Software "Tamcom"		Free of charge 24T0399			
	Performance pump					
	Bath drain	Γ	Standard included			
	Levelling platform		07T0210	07T0211	07T0212	
	Lid levelling platform		Included in 07T0210	03T2270		
7	Gabled lid			03T2210 (In combination with 07T0211/07T0212)		
	Top lid with cover of one set of nine rings		00T0254			
G	Top lid with cover of two sets of six rings (opening without rings ø180 mm)			00T(0255	
	Top lid with cover of six sets of three rings (opening without rings ø95 mm)			00T(0256	



Tamson Instruments Specification shee

Specifications TC16 - TC40 - TC58

Thermostatic Bath and Circulator

Item		TC16	TC40	TC58	
Cooling circulator TLC10-3 230V/50Hz		00T0050			
Cooling circulator TLC10-3 230V/60Hz			00T0051		
Cooling circulator TLC10-3 115V/60Hz		00T0052			
Cooling circulator TLC15-5 230V/50Hz			00T	0565	
Cooling circulator TLC15-5 230V/60Hz			00T	0567	
Cooling circulator TLC15-5 115V/60Hz			00T	0570	
Additional heater (1400W)		25T0194 - 230V			

TC40