

Heated circulating baths » TC120-ST12 mid range showcase

showcase 1 – mid range example

Model TC120-ST12* range 0°C to 120°C**, stability ±0.05°C

Versatile mid-range model with digital thermostatic control unit and stainless steel tank and a comprehensive specification to suit most applications for precision temperature control.

- Optima™ digital thermostat (TC120) for precise temperature control
- Integral pump for external fluid circulation
- Cooling/heating range 0°C to 120°C**
- Stability ±0.05°C
- 3 programmable temperature presets
- Easy to use rotary dial and two function keys

TC120-ST12 model shown

- Countdown timer with audible alarm – alerts you when your attention is required
- Simple-to-use rotary dial plus two function keys for quick temperature setting and menu navigation
- User calibration facility for optimum accuracy at the required operating temperature
- Powerful integral pump – allows temperature-controlled fluid to be circulated to external equipment (16L/min, 210mbar)
- Dual-position bridge plate – ensures visibility/accessibility of the thermostat whilst optimising bench space
- Raised feet – for carrying / repositioning and retort stand access

- Liquid level protection and adjustable over temperature cut-out
- Clear 4 digit display – easy to read from a distance for instant reassurance
- Operating setpoint plus 3 adjustable temperature presets for convenience
- Robust construction, corrosion resistant materials, stainless steel tank – durable in demanding environments
- Excellent temperature stability and uniformity ensured by stirred circulation in the bath
- Drain tap allows easy emptying
- Choice of 120 V and 230 V models
- Optional insulated gabled, removable hinged lid designed to improve energy efficiency and prevent evaporation



* see summary table on pp. 1.6–1.7 for accessories and for other models utilising the TC120 thermostat
 ** operation below ambient temperature requires accessory cooling

- Applications:**
- Clinical, Microbiology and Pathology labs - media tempering, thawing & incubating samples
 - University research - temperature control of spectrophotometers & refractometers and jacketed vessels
 - Industrial labs - temperature probe calibration, water analysis, QC testing product, petrochemical testing, material testing, milk sample testing

Heated circulating baths » Models, options and accessories

Heated circulating baths – models, options and accessories

Any of the four Grant Optima™ digital thermostats can be combined with any of the Grant stainless steel and plastic tanks. The colour-coded summary table shows you the temperature range of each combination. For more details of Grant Optima™ thermostats see, p 1.8

Key to symbols	Heating circulators			
	General purpose digital		Advanced digital	
	T100	TC120	TX150	TXF200
<ul style="list-style-type: none"> fixed over temperature cutout adjustable over temperature cutout display audible alarm timer pump external probe USB + RS232 2 2 point recalibration relay visual alarm 5 5 point recalibration menu system program storage programmable 	<p>h: 335mm d: 172 mm w: 120 mm 2.5 kg</p>	<p>h: 335 mm d: 172 mm w: 120 mm 2.5 kg</p>	<p>h: 345 mm d: 172 mm w: 120 mm 3 kg</p>	<p>h: 345 mm d: 172 mm w: 120 mm 3 kg</p>

Tanks					
Capacity (L)	Outer tank dimensions	Working area (l x w)			
		Min/max liquid depths			
		Inner tank dimensions (l x w x h)			
		Overall dimensions incl. controller (l x w x h)			
ST5 – 5 L stainless steel 3 kg h: 200 mm l: 330 mm w: 180 mm	<ul style="list-style-type: none"> 150 x 150 mm 85/140 mm 300 x 150 x 150 mm 330 x 180 x 395 mm 	T100-ST5 amb.+15 to 100°C	TC120-ST5 0 to 120°C	TX150-ST5 0 to 150°C	TXF200-ST5 0 to 200°C
ST12 – 12 L stainless steel 4.5 kg h: 200 mm l: 360 mm w: 330 mm	<ul style="list-style-type: none"> 205 x 300 mm 85/140 mm 325 x 300 x 150 mm 360 x 330 x 395 mm 	T100-ST12 0 to 100°C	TC120-ST12 0 to 120°C	TX150-ST12 0 to 150°C	TXF200-ST12 0 to 200°C
ST18 – 18 L stainless steel 7 kg h: 200 mm l: 540 mm w: 330 mm	<ul style="list-style-type: none"> 385 x 300 mm 75/130** mm 505 x 300 x 150 mm 540 x 330 x 395 mm 	T100-ST18 0 to 100°C	TC120-ST18 0 to 120°C	TX150-ST18 0 to 150°C	TXF200-ST18 0 to 200°C
ST26 – 26 L stainless steel 7.5 kg h: 255 mm l: 540 mm w: 330 mm	<ul style="list-style-type: none"> 385 x 300 mm 125/180** mm 505 x 300 x 200 mm 540 x 330 x 405 mm 	T100-ST26 0 to 100°C	TC120-ST26 -15 to 120°C	TX150-ST26 -15 to 150°C	TXF200-ST26 -15 to 200°C
ST38 – 38 L stainless steel 11 kg h: 255 mm l: 730 mm w: 330 mm	<ul style="list-style-type: none"> 575 x 300 mm 125/180** mm 690 x 300 x 200 mm 730 x 333 x 405 mm 	T100-ST38 0 to 100°C	TC120-ST38 -15 to 120°C	TX150-ST38 -15 to 150°C	TXF200-ST38 -15 to 200°C
P5 – 5 L plastic 2.5 kg h: 180 mm l: 240 mm w: 330 mm	<ul style="list-style-type: none"> 120 x 150 mm 85/140 mm 240 x 160 x 150 mm 390 x 200 x 380 mm 	T100-P5 amb.+15 to 99°C	TC120-P5 amb.+15 to 99°C	TX150-P5 amb.+15 to 99°C	TXF200-P5 amb.+15 to 99°C
P12 – 12 L plastic 3.5 kg h: 180 mm l: 415 mm w: 350 mm	<ul style="list-style-type: none"> 210 x 280 mm 85/140 mm 325 x 280 x 150 mm 415 x 350 x 380 mm 	T100-P12 amb.+5 to 99°C	TC120-P12 amb.+5 to 99°C	TX150-P12 amb.+5 to 99°C	TXF200-P12 amb.+5 to 99°C
P18 – 18 L plastic 5 kg h: 180 mm l: 600 mm w: 365 mm	<ul style="list-style-type: none"> 280 x 325 mm 85/140 mm 510 x 290 x 150 mm 600 x 350 x 380 mm 	T100-P18 amb.+5 to 99°C	TC120-P18 amb.+5 to 99°C	TX150-P18 amb.+5 to 99°C	TXF200-P18 amb.+5 to 99°C

Note: operation at or below ambient temperatures requires accessory cooling or a refrigeration unit on page 2.6

Options and accessories				
Labwise™ PC software (optional)				
Allows two-way communication for status display, programming and data capture (see p. 3.1 for more information) USB/RS232 cables provided	-	-		
External probes (optional) for monitoring and controlling temperature of remote loads				
TXPEP flexible plastic probe, 3m cable	-	-		
TXSEP stainless steel probe, 3m cable	-	-		
Remote switching device (optional)				
For switching appliances on and off (up to max. 8 Amps)	-	-	1	1
Vertical turbine pumps (optional)*				
Low noise, compact design. Supplied with pipe connections and special lid for fitting to tank, pipe bore 12.7 mm				
VTP 1 max. pressure 1000 mbar max. flow 9 L/min	<p>Required only where application demands a higher pressure than that delivered by the internal pump to maintain flow</p>			
VTP 2 max. pressure 1650 mbar max. flow 12 L/min				

* when pump is fitted, available working area is reduced ** maximum depth can be increased by 10 mm, by removing the circulation tray in 18, 26, 38 litre baths, with slight loss of performance