Routine Laboratory Thermoregulators

Baths and Thermoregulators

The Techne® Tempette clip-on thermoregulators are designed for use in combination with the Techne® unheated water baths or any other suitable laboratory vessels. They will heat, circulate and safely control the temperature of the liquid in the bath within precise limits suitable for routine laboratory applications.

TE-10A Tempette

- Temperature range of -20°C* to 95°C
- Excellent temperature stability: ±0.01°C at 40°C
- Simple to use analogue control
- Suitable for most routine laboratory applications
- User adjustable over-temperature cut-out for unbeatable safety



TE-10D Tempette

- Temperature range of -40°C* to 120°C
- Excellent temperature stability: ±0.01°C at 40°C
- 4 digit setting with a bright LED digital temperature display
- Suitable for most routine laboratory applications
- User adjustable over-temperature cut-out
- Low liquid level cut-out as standard



Routine Laboratory Thermoregulators

Baths and Thermoregulators

Technical Specification

| Specifications to DIN 12876 | TE-10A | TE-10D |
|--|-----------------|-----------------|
| Temperature range* | -20°C to +95°C | -40°C to +120°C |
| Temperature selection | Analogue | Digital |
| Temperature stability using water @ 40°C | ±0.01°C | ±0.01°C |
| Method of control | Proportional | PID |
| Temperature sensor | Thermistor | PRT |
| Adjustable over-temperature cut-out | Yes | Yes |
| Low liquid level cut-out | Yes | Yes |
| | | |
| Heating/Pumping | | |
| Pump capacity litres/minute | 10 | 10 |
| Pump capacity (mbar) | 145 | 145 |
| Nominal heater power at 120V (W) | 1000 | 1000 |
| Nominal heater power at 240V (W) | 1000 | 1000 |
| Extension below base, mm | 145 | 145 |
| Dimensions (L x W x H), mm | 237 x 124 x 260 | 237 x 124 x 260 |
| Shipping Weight, kg | 3.7 | 3.9 |
| | | |

^{*} Refrigeration or cooling coil required for below ambient cooling (see Techne Flow and Dip Coolers and the cooling coil).

Ordering Information

| | Product codes | | |
|--|---------------|----------|----------|
| Description | 230V | 120V | 100V |
| TE-10A, analogue thermoregulator, -20°C to 95°C, (supplied with clamp) | FTE10ADC | FTE10APC | FTE10AYC |
| TE-10D, digital thermoregulator, -40°C to 120°C, (supplied with clamp) | FTE10DDC | FTE10DPC | FTE10DYC |

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High Powered Thermoregulators

Baths and Thermoregulators

The Tempunit® offers increased heater power to enable accurate control over a wider temperature range, designed for applications requiring temperatures above 100°C. Techne also recommends the Tempunit® in conjunction with the larger 26 & 48 litre baths when temperature control above 50°C is required. Controlled heating rates and hold times can be achieved by linking the Tempunit® to the free TechneWorks software#.

TU-20D Tempunit®

- A wider temperature range of -40°C* to 200°C
- Excellent temperature stability: ±0.005°C at 40°C
- 1.8kW heater power for fast heat up
- 4 digit setting with a bright LED digital temperature display
- This unit incorporates an RS232 connection
- User adjustable over-temperature cut-out
- Low liquid level cut-out as standard



TU-20HT Tempunit®

- This sophisticated Tempunit® covers a wide temperature range of -40°C* to 250°C
- Excellent temperature stability: ±0.005°C at 40°C
- 1.8kW heater power for fast heat up
- 4 digit setting with a bright LED digital temperature display
- RS232 connection supplied with TechneWorks software package and connecting lead as standard
- User adjustable over-temperature cut-out with an audible alarm fitted
- Low liquid level cut-out as standard

TechneWorks is also downloadable free of charge from www.techne.com and www.techneusa.com



High Powered Thermoregulators

Baths and Thermoregulators

Technical Specification

| Specifications to DIN 12876 | TE-20D | TE-20HT |
|---|-----------------|----------------------|
| Temperature range* | -20°C to +95°C | -40°C to +120°C |
| Temperature range* | -40°C to +200°C | -40°C to +250°C |
| Temperature selection | Digital | Digital |
| Temperature stability using water @ 40°C | ±0.005°C | ±0.005°C |
| Method of control | PID | PID |
| Temperature sensor | PRT | PRT |
| Adjustable over-temperature cut-out | Yes | Yes |
| Low liquid level cut-out | Yes | Yes |
| PC Interface | RS232 | RS232 |
| | | |
| Heating/Pumping | | |
| Pump capacity litres/minute | 10 | Internal circulation |
| Pump capacity (mbar) | 145 | |
| Nominal heater power at 120V (W) | 1500 | 1500 |
| | | |
| Nominal heater power at 240V (W) | 1800 | 1800 |
| Nominal heater power at 240V (W) Cooling coil | | |
| | 1800 | 1800 |
| Cooling coil | 1800 No | 1800 Option |

^{*} Refrigeration or cooling coil required for below ambient cooling (see Techne Flow and Dip Coolers and the cooling coil). The TU-20HT can only be used with the Dip Coolers

Ordering Information

| | Product codes | | | |
|--|---------------|----------|----------|----------|
| Description | 230V | 120V | 115V | 100V |
| TU-20D, advanced thermoregulator with RS232, -40°C to 200°C, (supplied with clamp) | FTU20DDC | n/a | FTU20DPC | n/a |
| TU-20HT, advanced high temperature thermoregulator with RS232, -40°C to 250°C, (supplied with clamp) | FTU20HDC | FTU20HPC | n/a | FTU20HYC |

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