Refrigerated Baths

These baths are a complete refrigerated circulating system for open or closed applications for temperature ranges from -35°C to 100°C. Each bath is supplied with a lid and bridging plate.

There are three bath capacities: 7 litre (RB-5A), 12 litre (RB-12A) and 22 litre (RB-22A). Temperature control is via one of the four thermoregulators and together they offer a choice of 12 different bath combinations.

- Circulating bath with built in refrigeration
- Temperature range from -35°C to 100°C
- Three different capacities of refrigerated bath; 7, 12 or 22 litre
- The combination of 3 circulating baths and 4 thermoregulators provides 12 options

RB-12A

Technical Specification

Cooling (at 20°C ambient)	RB-5A	RB-12A	RB-22A
Minimum achievable temperature[1]	-20°C	-35°C	-30°C
Cooling capacity at 20°C	145W	240W	240W
Cooling capacity at 0°C	145W	240W	240W
Cooling capacity at -10°C	110W	230W	220W
Dimensions			
Overall Size - L x W x H (mm)[2]	430 x 250 x 566	430 x 370 x 610	430 x 395 x 565
Liquid surface to top of bath - max (mm)	65	65	65
Internal dimensions - L x W x H (mm)	192 x 151 x 200	208 x 300 x 150	360 x 295 x 220
Working length to thermoregulator (mm)	224	224	250
Working depth - max/min (mm)	180/135	130/85	200/160
Working capacity - max/min (litres)	7.0/5.5	11.6/9.6	22/18
Shipping weight kg[3]	31	53	61

[1] Using a mixture of 50% of water and 50% antifreeze to achieve -20°C.

Alternatively 40% water, 40% antifreeze, 20% alcohol to achieve -35°C.

[2] Overall size with controller

[3] Add thermoregulator and bath shipping weight to get shipping weight of complete bath system.

Ordering Information

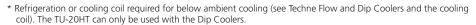| Product Code	Description
FRB5D	RB-5A bath, 7 litre capacity with built in refrigeration unit, -20°C to 100°C
FRB2D	RB-12A bath, 12 litre capacity with built in refrigeration unit, -35°C to 100°C
FRB22D	RB-22A bath, 22 litre capacity with built in refrigeration unit, -30°C to 100°C

RB-5A

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

TU-20D

Technical Specification

Specifications to DIN 12876	TU-20D	TU-20HT
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	Yes RS232	Yes RS232
Heating/Pumping		
Pump capacity litres/minute	10	N/A internal circulation only
Pump capacity (mbar)	145	-
Nominal heater power at 120V (W)	1500	1500
Nominal heater power at 240V (W)	1800	1800
Cooling coil	Option	Option
Extension below base (mm)	145	145
Dimensions L x W x H (mm)	237 x 124 x 260	237 x 124 x 260
TechneWorks software package	TechneWorks#	TechneWorks#

* 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.

(See page 11 for details)

TU-20HT

Ordering Information

Product Code	Description
FTU20DDC	TU-20D, advanced thermoregulator with RS232, -40°C to 200°C, (supplied with clamp)
FTU20HDC	TU-20HT, advanced high temperature thermoregulator with RS232 and Techneworks software, -40°C to +250°C, (supplied with clamp)
FCCO1	Cooling Coil