Design Environmental

High/Low Temperature Test Chambers 0°c to 60°c

Available in four sizes, the test chamber has a working temperature range of 0° to + 60°C.

The internal chamber (and air guides) is fabricated from 304 grade stainless steel and is externally sealed to prevent moisture entering the insulation when the chamber is used at sub-ambient temperatures. The polished stainless steel inner provides resistance to chemical attack and allows easy cleaning. The main case of the chamber is constructed from zinc coated mild steel sheet and has a double skin construction for maximum thermal efficiency. All external surfaces are finished with a light grey stoved epoxy polyester powder paint which is easy to clean and withstands many years of intensive use.

The front of the chamber is fitted with a single side hinged door to give access to the full width of the chamber. An internal heatproof toughened glass door is fitted to allow a clear view of the inner chamber without disturbing the atmosphere. All controls are vertically mounted on the right hand side of the chamber, thereby avoiding damage from spillage or from rising heat.

Heating is provided by mineral insulated metal sheathed elements; the low surface watt loading of the elements ensures that they have a long and reliable life. Power to the elements is controlled by a thyristor based solid state relay. The relay works in the fast cycle zero voltage switching mode to ensure good control and to reduce the level of radio frequency interference. A platinum resistance thermometer senses the chamber temperature. A high performance fan circulates the air within the chamber for maximum temperature uniformity. Insulation of the chamber is with a high quality ceramic fibre blanket to ensure a safe outer case temperature. The chamber is cooled by a hermetically sealed refrigeration system.

Options:

- Cable port
- Stand
- Trolley
- Overtemperature protection - either analogue or digital
- Viewing window
- Interior light
- Extra shelves

Control Options

The 301 is a three term PID controller, with a large wipe clean display. It has a single ramp to set-point facility and incorporates a process timer function.

Eurotherm 3216 P1 / P5. These are advanced set-point programming temperature controllers, with either one or five eight segment pair programmers. In which each segment pair is a ramp followed by a dwell (the dwell can be set to zero).

Eurotherm 3508 P1 / P10 / P25. This range comprises of enhanced programmers with more display information as well as other addition features that allow for greater control, including at least 16 fully programmable segments.

RS232 (all models) and RS485 (not 301) two-way communications may be fitted as an option at the time of order.

SPECIFICATION DETAILS

	PIC 30	PIC 60	PIC 120	PIC 200
Temperature Range	0°C to + 60°C			
Temperature uniformity measured at 37°C	±1°C			
Temperature stability	±0.25°C			
Usable volume (1)	30	60	120	200
No of shelves supplied	2	2	2	2
Internal dimensions (mm) (h x w x d)	255 x 330 x 320	350 x 392 x 420	450 x 492 x 520	700 x 592 x 520
External dimensions (mm) (h x w x d)	715 x 705 x 510	815 x 805 x 570	915 x 905 x 670	1165 x 1005 x 670
Power (kW)	0.25	0.7	0.7	1.0

N.B. The width includes a water drip spout of 40mm which protrudes from the side.

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