

5000 SERIES



Series 5000 Environmental Chambers -200 and 400 LITRE MODELS

As the global marketplace imposes many quality control standards on technical products, the ability to routinely achieve internationally compliant testing procedures is of the utmost importance. The Contherm Series 5000 Environmental Chambers provide that environment, and assist with the attainment of product conformity to global (including military) standards in an international market.

The Contherm Series 5000 Environmental Chambers- assuring product conformity in a global market.



Some conditions apply*



Model 5200RHS

With separate displays for each parameter and an easy-to-use digital control panel, Contherm's proven PLC5 Control System offers self-diagnostic alarm displays and automatic high/low limit protection. Nine on-board user-configurable programs are provided, and to save set-points during power failures, the system is EEROM backed for convenience and reliability. There is also an optional product disconnection feature which will switch a socket outlet/powerbox at the completion of the test cycle or in the event of thermal runaway.

Temperature control between -10° C to +100°C can be attained with all models, and in the RHS models, humidity control is achieved with a highly effective humidity generator incorporating the latest sensor technology, delivering RH control down to ±2%.

An efficient fan-driven vertical air system assures even circulation and diffusion of conditioned air through samples. The Contherm Series 5000 Environmental Chambers feature an attractive, corrosion-resistant finish on steel exteriors, with rounded corners to enhance user-friendliness and safety. 75mm of specialised insulation surrounds the polished stainless steel interior and door, which is fitted with a "door-open" sensor. Adjustable stainless steel shelves are also included. A heated inner door of toughened glass with purpose-designed compression seals and hinge system allows excellent visual monitoring of product without disturbing the chamber environment, even at maximum temperatures. In addition, the outer door is fitted with soft-closing magnetic seals to ensure jar-free closure. A 50mm cable port is fitted as standard equipment in all models.



Control Panel



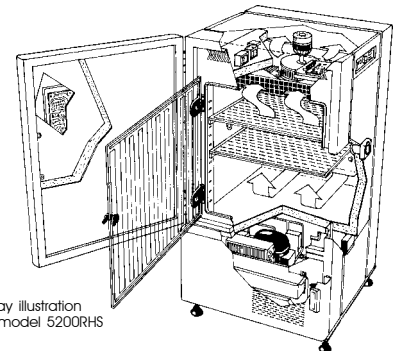
Refrigeration system

Typical Specifications

MODEL	5200R	5200RHS	5400R	5400RHS
Dimensions: External (H x W x D) Internal	1445 x 890 x 860 625 x 640 x 540	1445 x 890 x 870 625 x 640 x 540	2045 x 890 x 860 1225 x 640 x 540	2045 x 890 x 870 1225 x 640 x 540
Capacity	200 litre		400 litre	
Shelves	3 perforated stainless steel shelves		6 perforated stainless steel shelves	
Doors	Inner and Outer. (Inner glass door heated)			
Control System	Microprocessor-based digital 9 programmable steps; max. 99hrs. 59min. timer; max. 999 cycles; 2-line alphanumeric display, RS232C Comm. port.			
Refrigeration System	Hermetically sealed, auto defrost, tropical condenser, CFC free.			
Refrigeration Control	Hot Gas Modulation. Fully protected. Contherm Management Firmware.			
Heating	Stainless steel tubular heater. Hot gassing of refrigeration unit.			
Air Circulation	Vertical Air System throughout chamber			
Temperature: Range	-10°C to +100°C in 0.1°C steps			
Fluctuation	±0.3°C			
Uniformity	±0.75°C			
Pull-down rate within 60 mins.	+70°C to 0°C			
Heating rate in 45 mins.	-10°C to +70°C			
Automatic/Manual Safety	Automatic 2.0°C above and below set point. User-adjustable high limit. Earth leakage circuit-breaker.			
Humidity: Range	None	35%RH to 98%RH (see graph)	None	35%RH to 98%RH (see graph)
Temp. range for RH control	None	5°C to 70°C	None	5°C to 70°C
Power requirements	230-240VAC 50Hz, 1500W	230-240VAC 50Hz, 1700W	230-240VAC 50Hz, 1550W	230-240VAC 50Hz, 1750W
Weight	165kg		200kg	
Packed Weight	205kg		240kg	
Options (popular items are listed -full list available on enquiry)	Dehumidifier-Option HP; Rapid cooling CO ₂ Injection system-Option M; Comms. program-Option Q; Additional shelves and guides-Option SG; Castors-Option X; Additional cable port-Option Z.			

The Contherm 5000 Series Environmental Chambers offer the research professional maximum performance and reliability, assuring consistent and repeatable results. For enhanced flexibility, Option Q is recommended.

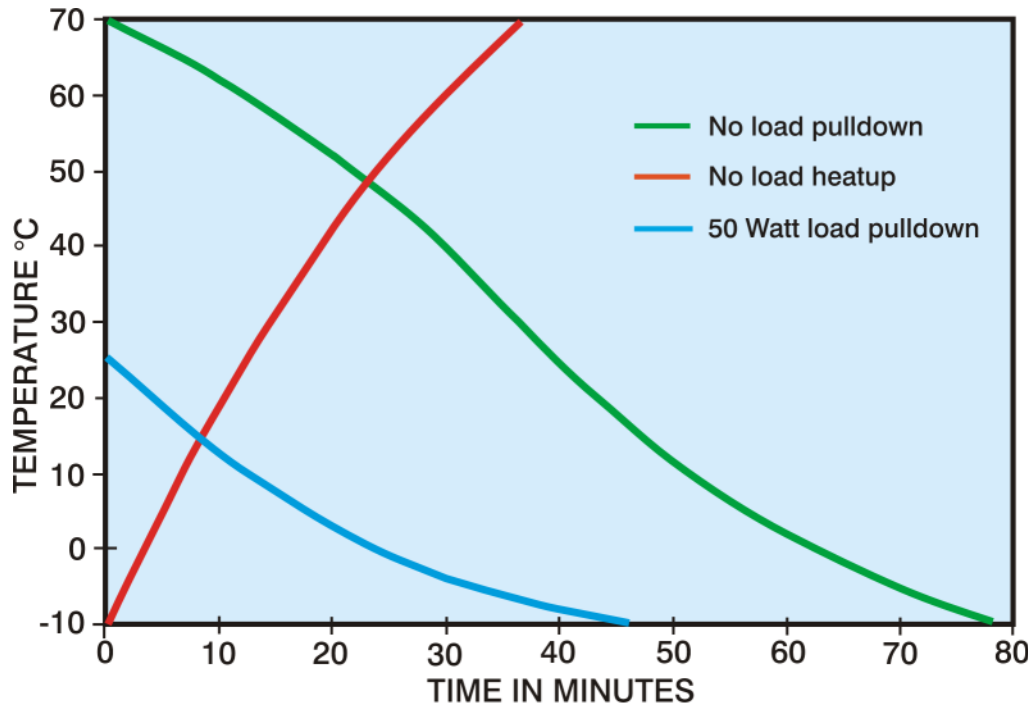
Manufactured in a quality production environment, these units are designed to NZS6200 and AS3100 electrical standards.



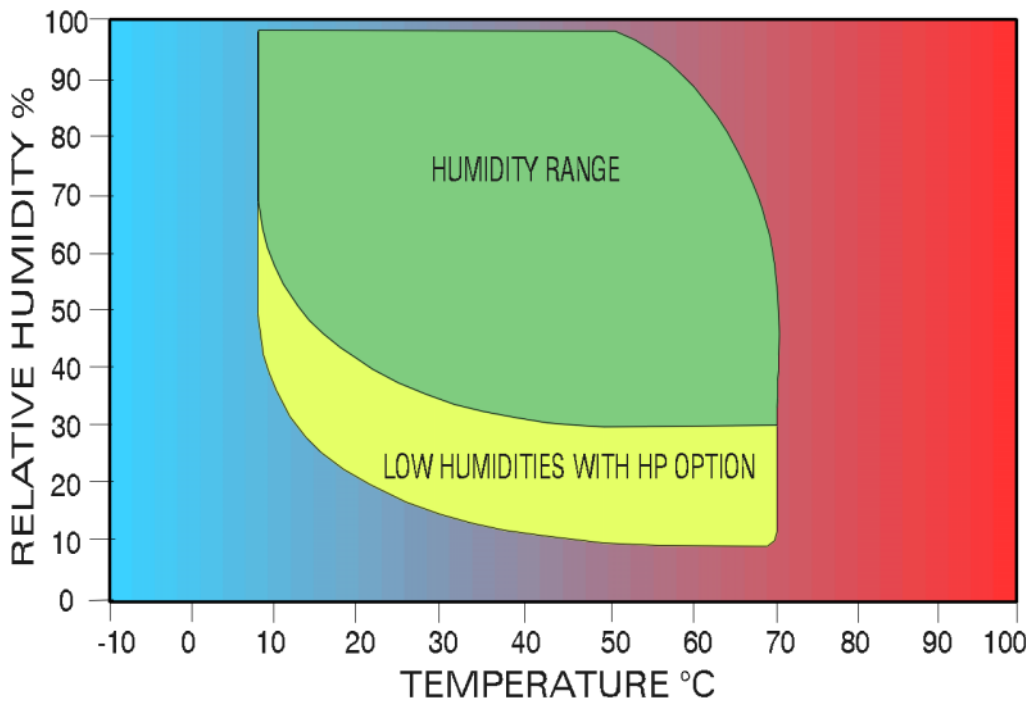
Cutaway illustration shows model 5200RHS

More technical information is available from the Contherm Techspec Library. Refer to our website for current information. The word 'Contherm' is the property of Contherm Scientific Ltd. *Warranty covers components and labour for 1 year. Full warranty applies only with regard to published pricelist. The information contained in this brochure is correct at time of printing but is subject to change without notice.

Manufactured by **CONTHERM SCIENTIFIC LTD**,
27 Cornish St, Petone, PO Box 30-605 Lower Hutt, New Zealand.
Tel: +64-4-568 8034 Fax: +64-4-568 8095.
Email: contherm@xtra.co.nz. Website: www.contherm.com



Graph showing temperature rise at maximum ramp rate and pull-down with and without 50W live load -ambient 20°C



Typical Temperature and Humidity Control Range at Ambient 20°C

