

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



*MAR 05

5000 SERIES



**Series 5000 RLT and RHS-LT
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.



Model 5400RHS-LT

With separate displays for each parameter and an easy-to-use digital control panel, Contherm's proven PLC55 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. Temperature control between -40°C to +100°C can be attained with all models, and in the RHS-LT models, humidity control is achieved with a highly effective humidity generator incorporating the latest sensor technology. An efficient fan-driven vertical air system assures even circulation and diffusion of conditioned air through samples. The Contherm Series 5000 Low Temperature 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. The door with purpose-designed compression seals, hinge system and heated viewing window allows excellent visual monitoring of samples without disturbing the chamber environment. In addition, the door is fitted with dual compression catches to ensure security. A 50mm cable port is fitted as standard equipment in all models.

Specifications

MODEL	5200RLT	5200RHS-LT	5400RLT	5400RHS-LT
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	Single door with heated viewing window, interior light and dual compression catches			
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	-40°C to +100°C in 0.1°C steps			
Fluctuation	±0.3°C			
Uniformity	±1.5°C			
Pull-down rate within 60 mins.	+70°C to -20°C			
Heating rate in 45 mins.	-40°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 (±3% accuracy at 25° to 65°C and ±5% accuracy at 15° to 70°C; see graph)	None	35%RH to 98%RH (±3% accuracy at 25° to 65°C and ±5% accuracy at 15° to 70°C; see graph)
Temp. range for RH control	None	5°C to 70°C	None	5°C to 70°C
Power requirements	230VAC 50Hz, 2200W	230VAC 50Hz, 2350W	230VAC 50Hz, 2200W	230VAC 50Hz, 2350W
Weight	165kg	165kg	200kg	200kg
Packed Weight	205kg	205kg	240kg	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; Power outlet-Option T; Additional cable port-Option Z.			

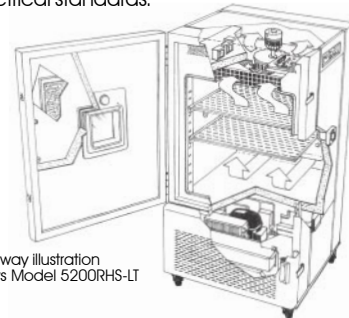


Control Panel



Refrigeration system

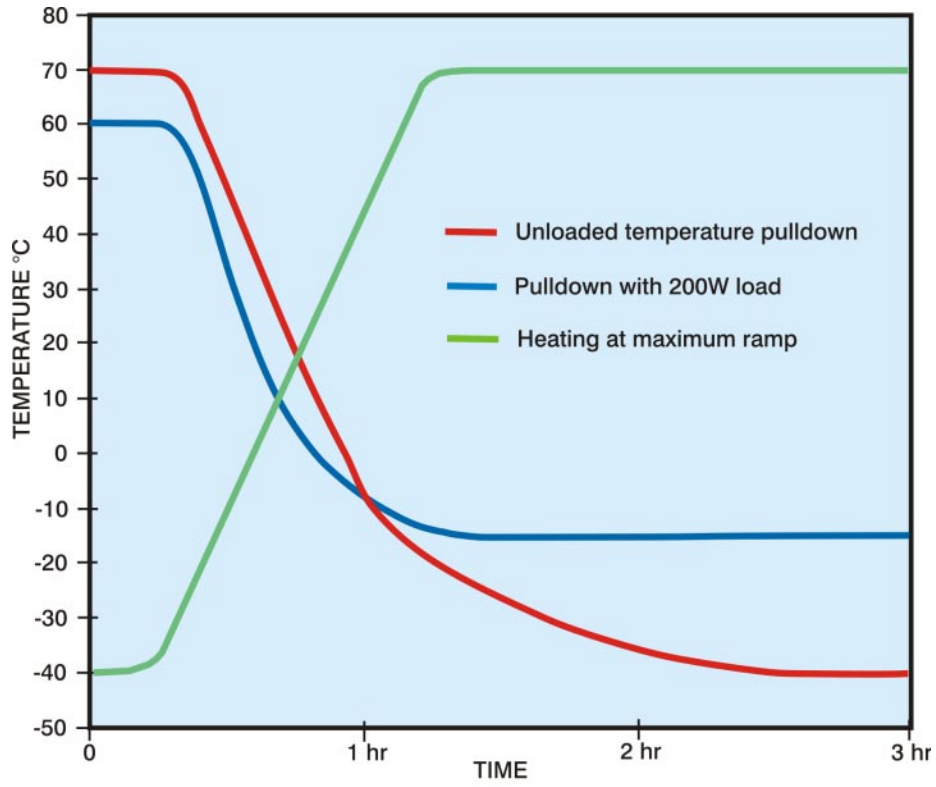
The Contherm 5000 Series Low Temperature Environmental Chambers offer the research professional maximum performance and reliability, assuring consistent and repeatable results. For enhanced flexibility, Option Q is recommended. Manufactured in a quality production environment, these units are designed to NZS6200 and AS3100 electrical standards.



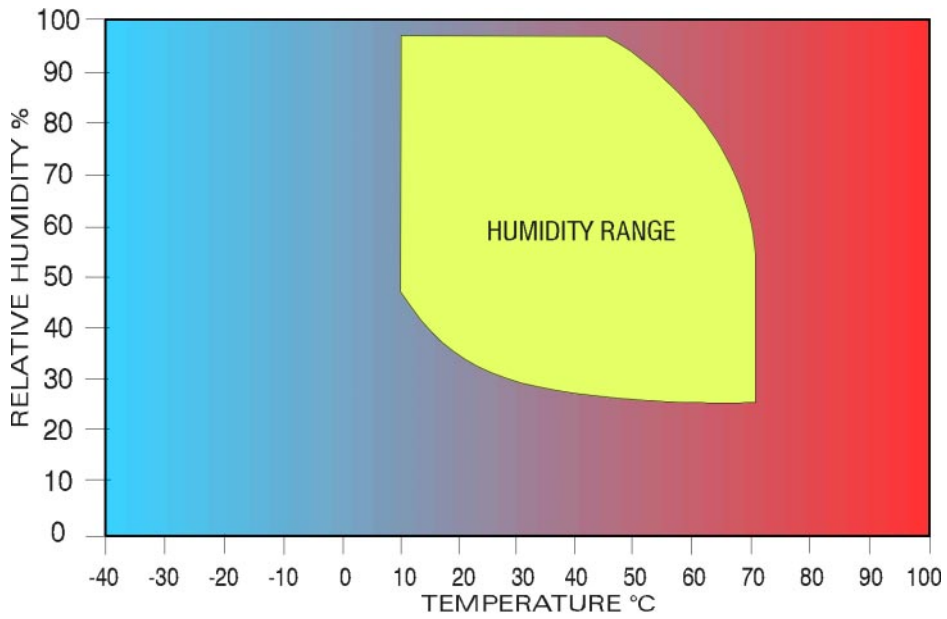
Cutaway illustration shows Model 5200RHS-LT

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, 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 pulldown with and without load - Ambient 20°C



Typical Temperature and Humidity Control Range at Ambient 20°C

