

The comprehensive range of humidity cabinets includes active RH models and saturated salt solution models.

### CONSTRUCTION

All LEEC humidity cabinets have stainless-steel chambers and adjustable shelves. They have sealed water-tight chambers making them suitable for humidity's up to 98%. They can be ordered with a heated outer door to demist the inner glass door (extra cost option). High quality CFC-free polyurethane thermal insulation wraps the chamber for excellent stability. Two 12mm access ports are included for inserting monitoring probes into the chamber. The exterior is finished in white polyester powder coat paint.



### TEMPERATURE CONTROL

Control of heating and cooling is performed with great accuracy, achieving typical temperature stability of  $\pm 0.5^{\circ}\text{C}$ . The chamber is fan assisted as standard. The microprocessor based digital temperature controller allows the chamber performance to be easily verified on a dual colour LED display.

### SAFETY

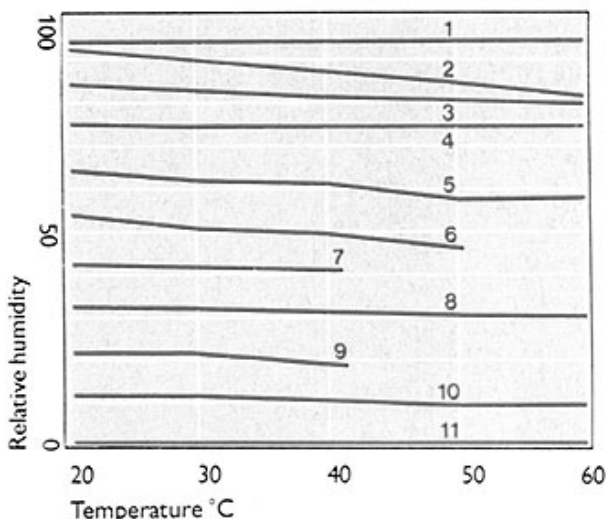
**Heat-only models** feature a digital over temperature cut out and alarm.

**Directly cooled models** feature a digital over & under temperature cut out and alarms. The cut out will disconnect the heating or cooling system if an over or under temperature situation occurs. A warning light and audible alarm gives clear indication when the chamber temperature goes out of limits.

### HUMIDITY CONTROL (SALT SOLUTION TYPES)

Salts type models rely on forced evaporation of known saturated salt solutions. The saturated salt solution is poured directly into the chamber base. This is a simple and reliable method of humidity control.

Temperature and relative humidities normally attainable in  $20^{\circ}\text{C}$  ambient temperature. Material to be placed in tray to obtain indicated values of relative humidity shown in graph.



Curve	Material
1	Distilled water
2	Potassium nitrate-saturated solution
3	Potassium chloride-saturated solution
4	Sodium chloride-saturated solution
5	Sodium nitrite-saturated solution
6	Sodium dichromate-saturated solution
7	Potassium carbonate-saturated solution
8	Magnesium chloride-saturated solution
9	Potassium acetate-saturated solution
10	Lithium chloride-saturated solution
11	Silica gel-dried

## Specification – Salt Solution Types

	SFC2 (Heat only)	SFC3 (Heat only)	SFC2C (Directly cooled)	SFC3C (Directly cooled)
<b>Temperature **</b> Range Control Variation Refrigerant	Ambient +5°C to +60°C ±0.2°C at 37°C ±0.5°C at +37°C N/A		+5°C to +60°C ±0.2°C at 20°C ±0.5°C at 20°C R134a	
<b>Protection Type</b>	Over temperature only		Over and under temperature	
<b>Humidity</b> Range Control	0% to 98% RH Basic control only (by means of appropriate saturated salt solution)			
<b>Construction</b> Chamber Exterior Access Port Insulation	Stainless steel White painted steel Two 12mm ports CFC-free		Stainless steel White painted steel Two 12mm ports CFC-free	
<b>Chamber Capacity</b>	150 L	320 L	150 L	320 L
<b>Shelves Included</b>	4	6	4	6
<b>Inner Glass Doors</b>	1	2	1	2
<b>External Dimensions</b> (H x W x D mm)	880 x 635 x 660	1550 x 635 x 660	1075 x 635 x 660	1745 x 635 x 660
<b>Internal Dimensions</b> (H x W x D mm)	590 x 510 x 490	1275 x 510 x 490	590 x 510 x 490	1275 x 510 x 490
<b>Weight</b>	75 KG	120 KG	100 KG	145 KG
<b>Power Rating</b>	200 Watts	250 Watts	800 Watts	850 Watts
<b>Electrical Supply</b>	220/240V AC, 50 Hz	220/240V AC, 50 Hz	220/240V AC, 50 Hz	220/240V AC, 50 Hz
<b>Warranty</b>	1 year	1 year	1 year	1 year

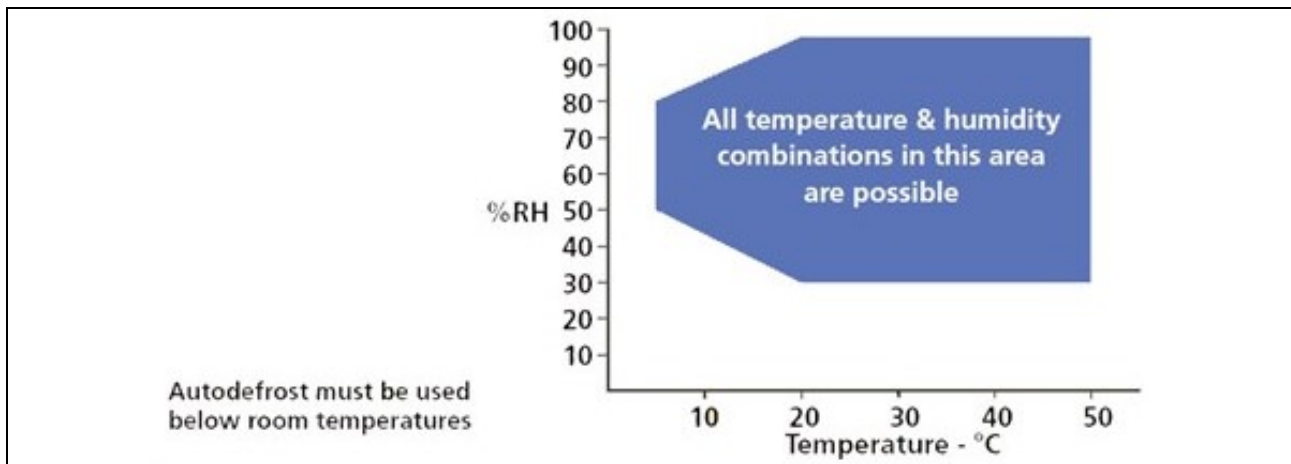
\*\* Temperature specification for model SFC2C at 20°C ambient.

## HUMIDITY CONTROL (ULTRASONIC TYPES)

All /RH models are fitted with an ultrasonic fine mist humidity generator, which is located inside the chamber. The microprocessor humidity controller accurately monitors and adjusts the chamber humidity level automatically. All RH models can dehumidify as well as increase humidity.

It should be noted that not all combinations of humidity and temperature are possible. Temperature and humidity performance varies according to the combination selected. Please contact LEEC for advice on which model will best meet your requirements.

### Typical operating range (Model SFC3C/RH with ultrasonic humidifier)

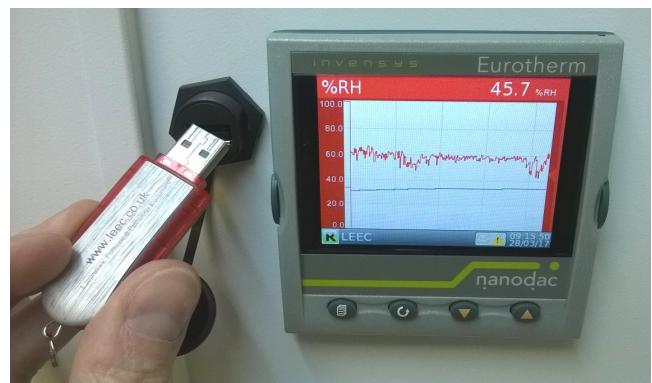


### Standard Features:

- Microprocessor controller with digital display
- Stainless-steel chamber and shelves
- Digital over / under temperature protection
- Inner glass doors
- Two 12mm cable access ports
- Energy efficient heating and cooling systems
- Fan assisted
- High quality thermal insulation

### Options:

- Heated outer door
- Additional stainless-steel shelves
- Digital Data Recorder with USB (pictured)
- Temperature / humidity mapping
- 4-20mA analogue output





### Specification – Ultrasonic Types

	<b>SFC2C/RH</b> (Directly cooled)	<b>SFC3C/RH</b> (Directly cooled)
<b>Temperature *</b> Range Control Variation Refrigerant	+5°C to +50°C ±0.5°C at 20°C ±0.5°C at 20°C R134a	+5°C to +50°C ±0.5°C at 20°C ±0.5°C at 20°C R134a
<b>Protection Type</b>	Over and under temperature	Over and under temperature
<b>Humidity</b> Range Control	30% to 98% RH Typically ±5% at 20°C operating temperature	
<b>Construction</b> Chamber Exterior Access Port Insulation	Stainless steel White painted steel Two 12mm ports CFC-free	Stainless steel White painted steel Two 12mm ports CFC-free
<b>External Dimensions</b> (H x W x D mm)	1075 x 635 x 660	1745 x 635 x 660
<b>Internal Dimensions</b> (H x W x D mm)	590 x 510 x 490	1275 x 510 x 490
<b>Chamber Capacity</b>	150 L	320 L
<b>Shelves Included</b>	4	6
<b>Inner Glass Doors</b>	1	2
<b>Weight</b>	100 KG	145 KG
<b>Power Rating</b>	800 Watts	850 Watts
<b>Electrical Supply</b>	220/240V AC, 50 Hz	220/240V AC, 50 Hz
<b>Warranty</b>	1 year	1 year

\* Temperature specification for model SFC2C/RH at 20°C ambient.