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Thermo Scientific Horizon Fog Testing System

Reliable and consistent performance

The perfect fit

Temperature control products for any application

As an innovative leader in temperature control, we have the expertise to enable you to optimize your liquid cooling and heating applications while increasing productivity and reducing operating costs. With over 50 years of service and countless successful installations around the world, we collaborate with you to provide product and applications expertise to meet the most demanding temperature control requirements.
From bio-tech and pharmaceutical to printing and semiconductor, world class companies and industry leaders continue to make Thermo Scientific temperature control products their first choice.

Select the Thermo Scientific™ Horizon™ Fog Testing System that is right for your application. We have comprehensive portfolios of temperature control solutions that deliver scalable product offerings ranging from bench top research to large process manufacturing. Our new and innovative products – developed from customer feedback to help ensure fulfillment of every need – represent a giant leap forward in performance, configurability and technology that provide superior advantages including:

A perfect fit:
Whatever your application or your budget, you can configure the most flexible, cost-effective temperature control system that suits your specific requirements.

Innovation:
Our research and development team is focused on designing innovative products based on your feedback.

Global service and support:
With our extensive global footprint service and support is just a click or phone call away.

Thermo Scientific™ Horizon™ Fog Testing System configured with the PC-FTS controller, the PC200-A25, and the reflectometric accessory kit

Thermo Scientific Horizon Fog Testing System

You can rely on the Horizon FTS to meet your needs when testing leather, textiles, or plastics for semi volatile organic compound (SVOC) emissions. The flexible design and accessory options allow you to build the perfect fit for testing to your required standard.

Reliable:
Designed with robust components for dependable temperature stability from one sample to the next.

Consistent:
Maintains constant test conditions to produce repeatable results between test batches, helping to ensure that the procedure is replicated every time and fulfills the DIN, ISO, and SAE standards.

Performance:
Whether you need basic temperature control, ramp programs, or powerful 3kW heaters for rapid heating, choose the controller that is the best for your needs.

Features and Benefits

Large volume tank with 6 beakers allows you to do more tests at once which helps save valuable time and money

Ease of use fill vent on top of unit; drain located on front of unit; step-by-step instructions for setting up the unit

Easy to view liquid level indicator to ensure proper fluid levels are maintain

Sealed bath surface prevents the bath fluid from condensing on the glass plate

Horizon Fog Testing System

Only 3 steps to configure the perfect fit

1. Choose the controller for your fog testing system

Choose the controller with the best features and performance for you to test and qualify materials in accordance with the DIN, ISO, SAE, and OEM standards.

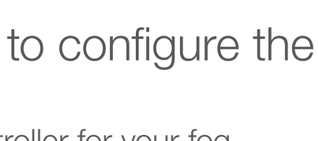
What's included with the Horizon FTS:
Controller, bath, funnel, cut to length hose for the cooling plates, hose clamps, drain fitting, and hex key for level indicator, 6 foot (1.8m) power cord.

2. Choose the cooling system

Accel 250 LC
When cost and space are important, this recirculating chiller is an economical choice and the small footprint saves space in the lab.

SC100-A10
If you have other temperature control needs that require a bath area or external circulation, this bath can be multi-tasked when the Fog Testing System is not in use.

PC200-A25
Another top of the line multi-tasking option where a larger bath area, more cooling capacity, lower temperatures or more advanced controller features are required. Matches well when the PC-FTS controller is also selected..



3. Choose the test method

The Reflectometric method accessory kit
This method uses a refractometer to quantify the amount of material collected on the glass plate during testing. The kit contains the following accessories:

- 6 Cooling plates
- 6 Glass beakers
- 6 Metal rings
- 6 Elastomer sealing rings
- 6 Support rings
- 6 Square glass plates
- Frame for glass plates
- Set of covers
- Filter paper

The Gravimetric method accessory kit
This method uses a gravimetric scale to measure the mass of the material gathered on the foil during testing. The kit contains the following accessories:

- 6 Cooling plates
- 6 Glass beakers
- 6 Metal rings
- 6 Elastomer sealing rings
- 6 Support rings
- 6 Round glass plates
- Round foils
- Set of covers

Notes: Refer to the ordering information for the part #.
Heat transfer fluid oil and DIDP is sold separately.
All accessories can be purchased separately.

Features and Benefits

Feature	AC-FTS	PC-FTS
Ambient +13°C to 200°C	●	●
3.0kW heater	●	●
Force/suction pump	●	●
Remote sensor, multifunction & USB port	●	●
Languages	*	**
Ramp programming	●	●
Multiple information/data display		●
Quick navigation keypad		●
Large, color LCD screen		●
2-year warranty	●	●
CE/WEEE/RoHS compliant	●	●
Physical dimensions (HxWxD)		
Centimeters	53.7 x 43.3 x 68.3	53.7 x 43.3 x 68.3
Inches	21.1 x 17.0 x 26.9	21.1 x 17.0 x 26.9

* AC-FTS languages: English, German, French, Spanish, Italian
** PC-FTS languages: English, German, French, Spanish, Italian, Mandarin, Japanese

Specifications

Feature	Accel 250 LC	SC100-A10	PC200-A25
Heating capacity			
230V/50Hz at 20°C	2 kW	2 kW	2 kW
115V/60Hz at 20°C	1.2 kW	1.2 kW	1.2 kW
Cooling capacity at 20°C	250 Watts	240 Watts	500 Watts
Working Temperature Range	-10°C to 80°C	-10°C to 100°C	-25°C to 200°C
	14°F to 176°F	14°F to 212°F	-13°F to 392°F
Temperature stability	+/- 0.1°C	+/- 0.02°C	+/- 0.01°C
Pump			
Total pressure	300 mbar (4.4 psi)	300 mbar (4.35 psi)	560 mbar (8.12 psi)
Maximum flow	15 lpm (4.0 gpm)	17 lpm (3.96 gpm)	24 lpm (6.3 gpm)
Max suction			380 mbar (5.5 psi)
Reservoir volume	2.8 liters (0.74 gallons)	6 liters (1.58 gallons)	12 liters (3.17 gallons)
Unit weight	30 kg (66 lbs)	27 kg (59.52 lbs)	36.1 kg (79.58 lbs)
Physical dimensions (HxWxD)			
Centimeters	62.0 x 23.2 x 48.7	63.2 x 22.0 x 41.4	74.9 x 27.3 x 48.3
Inches	24.4 x 9.1 x 19.2	24.9 x 8.7 x 16.3	29.5 x 10.7 x 19.0
Compliance	CE, WEEE, RoHS	CE, WEEE, RoHS	CE, WEEE, RoHS

Robust pump design for uniform sample temperatures

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Ordering information

Horizon Fog Testing System Model	200-230V/50-60 Hz Cat. No.
AC-FTS	156-8005
PC-FTS	158-8005

Refrigerated Circulators Model	115V/60Hz Cat. No.	100V/50-60Hz Cat. No.	230V/50Hz Cat. No.	220V/60Hz Cat. No.
SC100-A10	152-5108	152-5106	152-5101	–
PC200-A25	157-5258	157-5256	157-5251	–
Accel 250LC	223312800	223312600	223312100	223312900

Accessory	Description	Cat. No.
Cooling plates (requires 6)	Aluminum and stainless steel plates cooled by the refrigerated circulator	333-0285
Glass beakers (requires 6)	Heat-resistant glass beakers have a flat base; material samples are placed on the base of the beakers for test	333-0276
Metal rings (requires 6)	Chrome-plated steel rings secure sample on base of beaker	333-0286
Elastomer sealing rings (requires 6)	Used as a seal between the beakers and glass plates	333-0278
Support rings (requires 6)	Used for stabilizing the sealing rings	002-1658
Square glass plates (requires 6)	Floated glass plates used for fogging condensation sample. Use for the Reflectometric testing method.	333-0288
Borosilicate square glass plates (requires 6)	Borosilicate glass plates used for fogging condensation sample. Use for the Reflectometric testing method.	097262
Frame for glass plates (requires 1)	Aluminum frame protects fogging condensation sample from being influenced or smudged	999-0067
Round glass plates (requires 6)	Seals the round aluminum foils	333-0443
Borosilicate round glass plates (requires 6)	Seals the round aluminum foils	097261
Round foils (requires 1)	Contains 200 foils for the gravimetric testing method. 1 foil needed per test sample	333-0442
Sample cutter (requires 1)	Designed to cut sample material with 80mm diameter	999-0062
FTS fluid (requires 40 liters)	Thermal liquid that is soluble in water and can be used up to 150°C	0117417
Set of covers (requires 1)	Two half covers to prevent contamination and/or evaporation of heat transfer liquid	333-0284
Reflectometer (requires 1)	Used to measure reflection of material at a 60° angle	999-0224
DIDP control fluid	Used for the standard that validates testing - 1 liter	095935

Accessory Kits	Description	Cat. No.
Gravimetric method accessory kit	Kit with borosilicate glass plates	098798
Gravimetric method accessory kit	Kit with floated glass plates	098795
Reflectometric method accessory kit	Kit with borosilicate glass plates	098797
Reflectometric method accessory kit	Kit with floated glass plates	098796

Horizon FTS Accessories