SINPAR
PETROLEUM TESTING EQUIPMENT

Engine Air Humidity Control System for Octane Rating Engine

Shanghai Sinpar Scientific Instrument Co.,Ltd

Professional Manufacturer of Fuel Rating Engines

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Engine Air Humidity Control System

The Engine Air Control System, standard on the FTC-M2 Octane Rating Unit, is equipped with an adjustable refrigeration circulating system replacing the previous ice tower, is used for dehumidifying and chilling the intake air to research and motor method octane test engines.
Connected to the carburetor via a humidifier tube, the unit is used to regulate the moisture content of the intake air into octane engine at a constant 25-50 grains of moisture prescribed of dry air as specified by ASTM D2699, D2700 and D2885.

Features

■ **Precise Automation and Simple to Use**
The system provides precise automatic control of engine air intake temperature and humidity as required by ASTM standard test methods. Factory default settings are ready to use and no additional settings are required under normal laboratory conditions.

■ **Reliable Design for Trouble-Free Use**
The entire system is mounted in a removable and sturdy industrial cabinet, suitable for different laboratory space conditions. The professional engineering design with an independent power control system ensures many years of trouble-free use.

■ **Safety and Real-Time Monitoring**
The unit is equipped with an electrical protection system and a real-time coolant monitoring system to meet laboratory safety requirements.

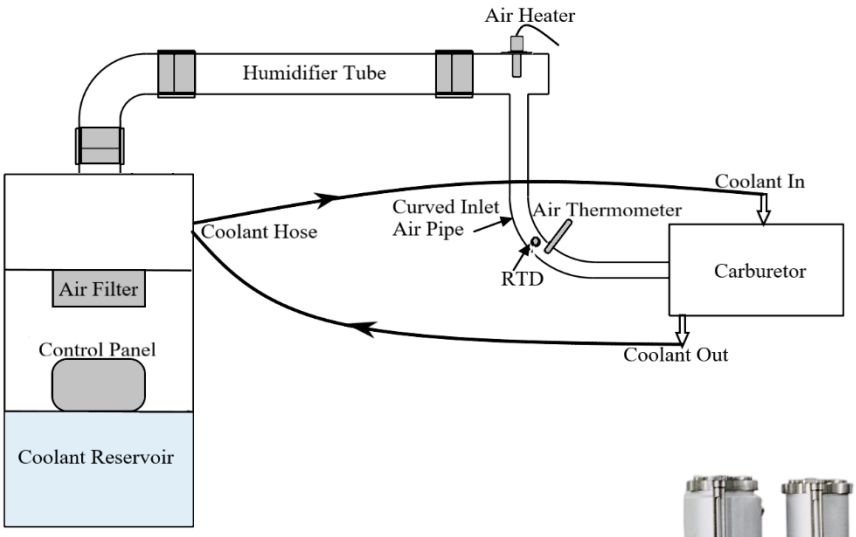
The Refrigeration Circulation System is equipped with a separate stainless steel reservoir for 5 liters of refrigeration fluid (glycol), with a low level warning.

The temperature range of the refrigerant is from ambient temperature to -10°C with a stability of 0.5°C. The cooling temperature and time can be adjusted via a digital control panel.

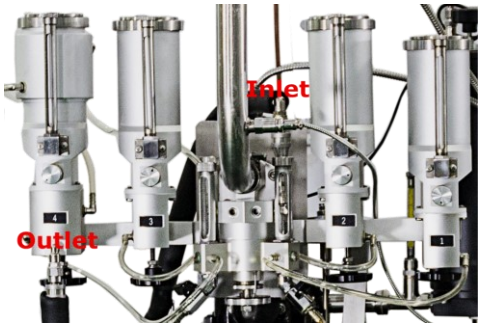
The Control Panel contains switch buttons for panel power, refrigeration, circulating pump, and cooling temperature and time setting buttons, as well as a data display screen.

The main power connector & switch and protection fuses for electronically controlled heating and cooling are located on the back of the panel.

Default Settings:
The factory default settings are ready to use when power is turned on, and no additional settings are required under normal laboratory conditions.



The Cooling Circulation System circulates coolant to the carburetor of the octane engine and to the fuel bowl that needs to be cooled by means of a specialized pump, through coolant hoses with quick couplings.



Technical Specifications:

Applicable Standard	**ASTM D2699, ASTM D2700, ASTM D2885**
Application	For RON and MON method Octane Engines
Operation Mode	Digital Control Panel
Control System	Automatic Control of Temperature and Humidity
Temperature Cooling Range	From Laboratory Ambient to -10°C
Temperature Control Stability	±0.5°C
Cooling Fluid Volume	5 liters
Cooling Medium	Glycol
Cooling System Connection	Quick Couplings
Safety System	Real-time Monitoring for Fluid Level&Temperature System Electrical Protection
Air Filter	Easy Change
Power Supply	220V 50Hz/60Hz with Single Phase
Weight	95.00 kg
Dimension	46.0x46.0x160.0 cm (without humidifier tube)

**Due to continuing products development, the illustrations used may differ from actual products, and specifications are subject to change.*

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