

COMPRESSOR CALORIMETERS (HVAC)

Climatic Testing Systems, Inc. (CTS) designs and manufactures A/C Compressor Calorimeters in accordance with **ASHRAE Standard 23 and ISO Standard 917**. The calorimeters are provided with a secondary refrigerant calorimeter vessel and Micro Motion® coriolis mass flow sensor to provide accurate and repeatable determination of compressor capacity.

CTS calorimeter systems feature PID control with solid state sensors. Various refrigerant types such as R-12, R134a, R404a, R407C, R410a, R507, R600a and others can be tested. The calorimeters can be designed for capacities up to 200,000 BTUH (60 Kw) with an energy balance of 2% or better, and 1% repeatability.



Compressor Calorimeter Typical Specifications

PARAMETER	UNITS	CONTROL RANGE	STABILITY
Discharge Pressure	Psia	90 to 465	± 2
	kPa	620 to 3200	± 14
Suction Pressure	Psia	15 to 100	± 0.2
	kPa	100 to 700	± 1.4
Liquid Refrigerant Inlet Temperature	°F	60 to 120	± 0.2
	°C	15 to 50	±0.1
Suction Temperature	°F	-15 to 100	± 0.2
	°C	-25 to 38	±0.1
Compressor Chamber Temperature	°F	Ambient to 130	± 0.5
	°C	Ambient to 55	±1
Compressor Voltage	Volts	0 to 600	± 0.25% FS

- ❑ Software
 - Editing of test programs
 - Automatic test sequencing
 - Loop calibration and calibration reports
 - Hardware checkout routine
 - Stability monitoring
 - Real-time tolerance adjustments
 - Real-time- history graphing capability
 - Automatic test report generation
 - Data file management
- ❑ Performance Measurement
 - 2% agreement or better measured mass-flow vs. calculated mass-flow
 - 1% repeatability of test results
 - Compressor Capacities from 200 BTUH to 200,000 BTUH
- ❑ Options
 - Manually Controlled Calorimeter
 - Semi-Automatic Calorimeter with Digital Recorder
 - Oil Circulation Control Loop for real-time oil flow rate control

Note: The specifications shown above are typical. Climatic Testing Systems, Inc. can customize your system to provide the performance that you desire.

Climatic Testing Systems, Inc. manufactures a full line of Climate Control Test Equipment for the Automotive and HVAC marketplace. For a master product list, visit us at CLIMATICTESTING.COM

<http://climatictesting.com/>

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