



designed for scientists



C 200

/// Data Sheet

C 200-System consists of the following components:

Measuring cell C 200

Decomposition vessel C 5010

Oxygen filling station C 248

Consumables for calibrations and installation

Space-saving and low cost combustion calorimeter for determining gross calorific values of liquid and solid samples.



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Validation according to DIN 51900, ISO 1928, ASTM D240, ASTM D4809, ASTM D5865, ASTM D1989, ASTM D5468, ASTM E711.

Suitable for teaching and training, as well (f.e. technical schools, universities) and for industrial laboratories with less analyses.

Manual handling for water and oxygen filling.

Four different working methods, isoperibolic, dynamic, manual, time controlled makes possible an ideal adjustment of different operating tasks.

Clear and easily explained display which is simply to use.

With an external power pack, "world tension useable" from 100 - 240 V AC, 50/60 Hz. The operating voltage of the calorimeter is 24 V DC low-voltage.

Friendly in after-sales

Manual (teaching mode): ignition and end of the measurement will be done by the operator himself; the temperature increase will be indicated at the display each minute.

All calculations have to be done manually.

At the other three modes ignition and calculation of the gross calorific value will be done automatically.

The gross calorific value will be shown on the display. Acid corrections and calculations of the net calorific value have to be done manually.

The modes have different measuring times:

Isoperibolic: approx. 17 min.

Dynamic: approx. 8 min

Manual: approx. 17 min

(depend on the operator)

Time controlled: 14 min

The decomposition vessel can be equipped to use an combustible crucibles C 14 (accessory C 5010.4 attachment is necessary)

User-friendly software C 6040 Calvin for controlling the calorimeter and administration of measuring data (accessory).

Transfer of the data to Excel or Word are possible

Up to eight IKA measuring cells can be controlled by a single PC, using a multiseriial plug in card PCI 8.2 (accessory)

Scope of delivery



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- C 200 Measuring cell
- C 5010 Decomposition vessel
- C 248 Oxygen filling station
- Ignition adapter
- C 200.1 Measuring cup 2000 ml
- Water emptying hose



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Technical Data

Measuring range max. [J]	40000
Measuring mode dynamic 25°C	yes
Measuring mode isoperibol 25°C	yes
Measuring time dynamic approx. [min]	8
Measuring time isoperibol approx. [min]	17
Reproducibility dynamic (1g benzoic acid NBS39i) [%RSD]	0.1
Reproducibility isoperibol (1g benzoic acid NBS39i) [%RSD]	0.1
Working temperature max. [°C]	25
Temperature measurement resolution [K]	0.0001
Interface printer	Centronix
Interface PC	RS232
Decomposition vessel C 5010	yes
Works according to DIN 51900	yes
Works according to DIN EN ISO 1716	yes
Works according to DIN EN ISO 18125	yes
Works according to DIN EN 15400	yes
Works according to DIN CEN TS 14918	yes
Works according to DIN CEN/TS 16023	yes
Works according to DIN SPEC 19524	yes
Works according to ASTM D240	yes
Works according to ASTM D4809	yes
Works according to ASTM D5468	yes
Works according to ASTM D5865	yes
Works according to ISO 1928	yes
Works according to GOST Certified	yes
Dimensions (W x H x D) [mm]	400 x 400 x 400
Weight [kg]	28.912
Permissible ambient temperature [°C]	20 - 25
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 20
RS 232 interface	yes
Voltage [V]	100 - 240
Frequency [Hz]	50/60
Power input [W]	120