



C 200 Calorimetersystem

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.

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 industriell 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 aftersales

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

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 |
| Oxygen filling | no |
| Degasification | no |
| Decomposition detection | no |
| Decomposition vessel C 5010 | yes |
| Dimensions (W x H x D) [mm] | 400 x 400 x 400 |
| Weight [kg] | 21 |
| Permissible ambient temperature [°C] | 20 - 25 |
| Permissible relative moisture [%] | 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 |
| Ident. No. | 8802500 |

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

User-friendly software C 5040 Calwin for controlling the calorimeter and administration of measuring data (asseccory). Transfer of the datas 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)

Accessories: C 5010 Decomposition vessel, standard, C 5010.4 Attachment for combustible crucible C14, C 5010.5 Crucible holder, big, C 5030 Venting station, C 21 Pelleting press, C 200.1 Measuring cup 2000 ml, C 29 Pressure gauge, oxygen, C 710.4 Cotton thread, cut to length, C 5010.3 Ignition wire, spare, C 4 Quartz dish, C 5 Set of VA combustion crucibles, C 6 Quartz crucible, big, C 710.2 Set of VA combustion crucibles, C 723 Benzoic acid, blister package, C 723 Benzoic acid BIG Package, C 43 Benzoic acid NBS 39i, C 9 Gelatine capsules, C 10 Acetobutyrate capsules, C 12 A Combustion bags 70 x 35 mm, C 12 Combustion bags 40 x 35 mm, C 14 Combustible crucible, C 15 Paraffin strips, C 16 Parafilm, C 17 Paraffin