



C 200 h auto

The C 200 h auto package allows operating the C 200 with a completely automated water cycle. This results in ease of handling and saves valuable time especially for laboratories with a low number of analyses. The water circulates in a closed loop and is kept at a constant temperature by using a recirculating chiller. This leads to shorter preparation time for each experiment and even better reproducible results.

The scope of delivery includes:

- C 200 calorimeter measuring cell
- C 5012 halogen resistant, catalytic activated decomposition vessel
- C 200.2 conversion kit for C 5012
- C 248 oxygen filling station
- RC 2 basic circulating chiller
- C 200.RC hose set
- Consumables for calibration and installation

The semi-automated and conforming-to-standards combustion calorimeter determines the gross calorific value of liquid and solid samples. So far it has mainly been used for teaching and training purposes at technical schools and universities. Due to the automated water handling it is now also suitable for industrial laboratories with low number of analyses.

The catalytic activated, halogen resistant decomposition vessel C 5012 is specifically designed for the combustion of samples that contain halogens and sulfur (> 3 %). The material of the decomposition vessel (Hastelloy) prevents corrosion caused by samples with high chlorine content. The catalytic activated inner-surface leads to higher recovery rates in case analysis of halogens and/or sulfur is required after the combustion.

Four different operation modes enable the user to control the measuring times according to individual requirements:

- Isoperibol: approx: 17 min.
- Dynamic: approx. 8 min
- Manual: approx. 17 min (depends on the operator)
- Time controlled: 14 min

Measurements are possible according to e.g. DIN 51900, ISO 1928, ASTM D240, ASTM D4809, ASTM D5865, ASTM D1989, ASTM D5468, ASTM E711.

Données techniques

Plage de mesures max. [J]	40000
Mode de mesure dynamique 25°C	oui
Mode de mesure isopéribolique 25°C	oui
Durée de mesure dynamique env. [min]	8
Durée de mesure isopéribolique env. [min]	17
Reproductibilité dynamique (1g benzoïque NBS 39i) [%RSD]	0.1
Reproductibilité isopéribolique (1g benzoïque NBS 39i) [%RSD]	0.1
Température de travail max. [°C]	25
Résolution de réglage de thermométrie [K]	0.0001
Service de pression de la substance de refroidissement [bar]	2
Substance de refroidissement	eau du robinet
Type de substance de refroidissement	débit
refroidisseur	RC 2 basic
Débit enregistré à 18°C [l/h]	60
Système de pression en oxygène max. [bar]	40
Interface de connexion d'imprimante	Centronix
Interface de connexion d'ordinateur	RS232
Remplissage d'oxygène	non
Dégazage	non
Reconnaissance des bombes calorimétriques	non
Bombe calorimétrique C5012	oui
Analyse selon DIN 51900	oui
Analyse selon ISO 1928	oui
Dimensions (L x P x H) [mm]	400 x 400 x 400
Poids [kg]	21
Plage de température du milieu admise [°C]	20 - 25
Humidité relative admissible [%]	80
Protection selon DIN EN 60529	IP 20
Interface numérique RS 232	oui
Tension [V]	100 - 240
Fréquence [Hz]	50/60
Puissance absorbée de l'appareil [W]	120
Ident. N°.	0010002387

The software C 6040 CalWin controls the unit and monitors the measurement of the samples. Additionally, collected data can be exported to e.g. Excel, Word, SQL and LIMS for further analysis. It is possible to operate several calorimeters with one PC. A PC is not part of the scope of delivery and needs to be provided by the operator. CalWin is sold separately.

Accessoires: RC 2 basic, RC 2 control, C 200, C 200.RC Set of hoses, C 200.1 Verre mesureur 2.000 ml, C 5012 Bombe calorimétrique, résistante aux halogènes, C 5030 Station de désaération, C 5010.4 Support de creuset jetable C14, C 26 Support Prep, C 27 Calorimeter preparation set, C 29 Réducteur de pression, oxygène, C 21 Compacteur, C 5010.8 Porte-creuset, C 5010.5 Porte-creuset, grand modèle, C 710.4 Fils de coton, prédécoupés, C 710.8 Fils de coton, C 4 Coupelle en quartz, C 5 Jeu de creusets à combustion VA, C 6 Creuset en Quartz, grand modèle, C 710.2 Jeu de creusets à combustion VA, C 9 Capsules de gélatine, C 10 Capsules d'acétobutyrate, C 12 Sachet de combustion 40 x 35 mm, C 12 A Sachet de combustion 70 x 35 mm, C 15 Paraffine en bandes, C 16 Parafilm, C 17 Paraffine, C 43 Acide benzoïque NIST 39i, C 723 Acide benzoïque en ampoules, C 723 Acide benzoïque en ampoules, AOD 1.11 Solution étalon pour soufre et chlore, AOD 1.12 Solution étalon pour fluor et brome, C 5003.1 Stabilisateur de bain Aqua Pro, C 5010.3 Fil d'allumage, de rechange, C 5012.3 Fil d'allumage, platine, C 14 Creuset jetable