



designed for scientists



C 6000 global standards Package 2/12

/// Data Sheet

The C 6000 global standards oxygen bomb calorimeter combines modern technology, variability and automation (adiabatic, isoperibol; dynamic modes) in one instrument. It operates according to all bomb calorimeter standards, such as e.g. the DIN, ISO, ASTM, GOST and GB. The operator can choose between three different starting temperatures (22 °C, 25 °C, 30 °C) in each measuring mode: adiabatic, isoperibol or dynamic. Due to the spherically shaped decomposition vessel head, the wall thickness was able to be reduced, allowing for faster heat transfer which results in a shorter time measurement. Due to the variety of different interfaces (PC, Ethernet, SD-card, balance, printer) this unit is easily adaptable depending on the customer's specific application needs. Further adaption to data management and LIMS is possible with our calorimeter software C 6040 Calvin (Accessory).



designed for scientists

- Automatic ignition
- Automatic water filling and draining
- Automatic oxygen filling, venting and flushing
- RFID technology for automatic decomposition vessel identification
- New design of the decomposition vessel allows for easier and faster sample preparation
- Can be operated with a chiller (e.g. KV 600)
- Easy and convenient touch screen operation
- Control chart view and correction calculation of globally used standards
- Ethernet interface for data management via FTP server or connection of a network printer
- Removable SD-card allows for easier data measurement management, in addition to software updates

The C 6000 global standards Package 2/12 consists of:

- C 6000 global standards (0003780000)
- C 6012 Decomposition vessel, halogen resistant (0004504000)



designed for scientists

Technical Data

| | |
|--|-----------------|
| Measuring range max. [J] | 40000 |
| Measuring mode adiabatic 22°C | yes |
| Measuring mode dynamic 22°C | yes |
| Measuring mode isoperibol 22°C | yes |
| Measuring mode adiabatic 25°C | yes |
| Measuring mode dynamic 25°C | yes |
| Measuring mode isoperibol 25°C | yes |
| Measuring mode adiabatic 30°C | yes |
| Measuring mode dynamic 30°C | yes |
| Measuring mode isoperibol 30°C | yes |
| Measurements/h adiabatic | 5 |
| Measurements/h dynamic | 6 |
| Measurements/h isoperibol | 4 |
| Reproducibility adiabatic (1g benzoic acid NBS39i) [%RSD] | 0.05 |
| Reproducibility dynamic (1g benzoic acid NBS39i) [%RSD] | 0.15 |
| Reproducibility isoperibol (1g benzoic acid NBS39i) [%RSD] | 0.05 |
| Touchscreen | yes |
| Working temperature [°C] | 22 - 30 |
| Temperature measurement resolution [K] | 0.0001 |
| Cooling medium temperature [°C] | 12 - 27 |
| Cooling medium permissible operating pressure [bar] | 1.5 |
| Cooling medium | tap water |
| Type of cooling | flow |
| Chiller | RC 2 basic |
| Flow rate [l/h] | 60 - 70 |
| Rec. flow rate at 18°C [l/h] | 60 |
| Oxygen operating pressure max. [bar] | 40 |
| Interface scale | RS232 |
| Interface printer | USB |
| Interface PC | RS232 |
| Interface test rack | yes |
| Interface ext. keyboard | yes |
| Oxygen filling | yes |
| Degasification | yes |
| Decomposition detection | yes |
| Decomposition vessel C 6012 | yes |
| Analysis according to DIN 51900 | yes |
| Analysis according to DIN EN ISO 1716 | yes |
| Analysis according to DIN EN ISO 9831 | yes |
| Analysis according to DIN EN 15170 | yes |
| Analysis according to DIN CEN TS 14918 | yes |
| Analysis according to ASTM D240 | yes |
| Analysis according to ASTM D4809 | yes |
| Analysis according to ASTM D5865 | yes |
| Analysis according to ASTM E711 | yes |
| Analysis according to ISO 1928 | yes |
| Analysis according to GB T213 | yes |
| Dimensions (W x H x D) [mm] | 500 x 425 x 450 |



designed for scientists

| | |
|--|-----------------------|
| Weight [kg] | 29 |
| Permissible ambient temperature [°C] | 20 - 30 |
| Permissible relative humidity [%] | 80 |
| Protection class according to DIN EN 60529 | IP 20 |
| RS 232 interface | yes |
| USB interface | yes |
| Voltage [V] | 220 - 240 / 100 - 120 |
| Frequency [Hz] | 50/60 |
| Power input [W] | 1700 |