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## C 3000 isoperibol Package 1/10 plus

/// Data Sheet

The IKA C 3000 isoperibol calorimeter is the technologically advanced successor of the IKA C 2000 model, with great new features such as faster sample runs, a spherically shaped decomposition vessel for faster heat transfer and a convenient touch screen for easy operation. Both oxygen filling and water handling are fully automated.

Its measurements and calculations of net calorific value are according to ISO 1928, ASTM D4809, ASTM D5865, ASTM 240 and GB T213. Areas of application include the power and cement industry where accurate analyses are vital.

Key features:



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- Easy handling via touch screen operation or standard USB mouse
- Two choices of starting temperatures (22°C, 30°C)
- Automated ignition, water filling and draining and oxygen filling
- Several interfaces: Ethernet, RS 232, USB, SD card slot
- Six temperature sensors to monitor all temperatures allowing best analysis
- Spherically shaped decomposition vessel for better pressure stability and faster heat transfer
- Easy sample preparation due to new crucible holder technology
- Can be operated with a chiller (e.g. RC 2 basic)

Our C 3000 isoperibol Package 1/10 plus was created for those customers requiring an overall solution.

It includes:

- C 3000 measuring cell
- C 6010 decomposition vessel, standard
- RC 2 basic recirculation chiller
- Oxygen regulator (to reduce the oxygen bottle pressure to 30 bar)
- Pellet press
- Wear parts and consumables for up to 500 tests



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## Technical Data

|                                                            |                 |
|------------------------------------------------------------|-----------------|
| Measuring range max. [J]                                   | 40000           |
| Measuring mode dynamic 22°C                                | yes             |
| Measuring mode isoperibol 22°C                             | yes             |
| Measuring mode dynamic 30°C                                | yes             |
| Measuring mode isoperibol 30°C                             | yes             |
| Measurements/h dynamic                                     | 6               |
| Measurements/h isoperibol                                  | 4               |
| 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 ext. keyboard                                    | yes             |
| Oxygen filling                                             | yes             |
| Decomposition vessel C 6010                                | yes             |
| Decomposition vessel C 6012                                | yes             |
| Analysis according to ASTM D240                            | yes             |
| Analysis according to ASTM D4809                           | yes             |
| Analysis according to ASTM D5865                           | yes             |
| Analysis according to ISO 1928                             | yes             |
| Analysis according to GB T213                              | yes             |
| Works according to DIN 51900                               | yes             |
| Works according to DIN EN ISO 1716                         | yes             |
| Works according to DIN EN ISO 9831                         | yes             |
| Works according to DIN EN ISO 18125                        | yes             |
| Works according to DIN EN 15170                            | 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 GB T213                                 | yes             |
| Dimensions (W x H x D) [mm]                                | 500 x 425 x 450 |



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|                                            |           |
|--------------------------------------------|-----------|
| 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                              | USB-B     |
| Voltage [V]                                | 220 - 240 |
| Frequency [Hz]                             | 50/60     |
| Power input [W]                            | 1700      |