



### C 5000 control package 2/12

The IKA® calorimeter C 5000 control is the only calorimeter in the world that offers a free selection of 3 working methods:

Thus it is possible to perform determinations of gross calorific values of liquid and solid samples in adiabatic (approx. 14 - 18 min), isoperibolic (approx. 22 min) and dynamic (reduced time: approx. 10 min) mode. A high level of automation in addition to an extensive range of accessories leave nothing more to wish for.

- Automatic water handling system includes tempering, filling and emptying of calorimeter inner vessel
- Automatic oxygen filling and degassing of the decomposition vessel
- Automatic decomposition vessel identification
- Validation according to DIN 51900, ISO 1928, ASTM D240, ASTM D4809, ASTM D5865, ASTM D1989, ASTM D5468, ASTM E711
- Interface connections for each of the following: scale, printer, monitor and sample rack C 5020
- User-friendly software C 5040 CalWin for controlling the calorimeter and administration of measuring data (accessory)
- LIMS integration is possible
- Cooling water supply via thermostat f.e IKA KV 600 ( accessory ) or firmly installed water connection, (temperature range 10 - 19 °C)
- Special halogen resistant vessel C 5012 for quantitative decomposition of halogens and sulfur
- The decomposition vessel can be changed over to use combustible crucibles C 14 ( accessory C 5010.4 is needed )
- The C 5000 control can be expanded to the duocontrol system with two measurement cells at any time C 5000
- Standard consumables for calibrations and initial operation included with delivery

Accessories: KV 600 cooling water supply, C 5010 Decomposition vessel, standard, C 5012 Decomposition vessel, halogen resistant, C 5010.4 Attachment for combustible crucible C14, C 5010.5 Crucible holder, big, C 5030 Venting station, C 5020 Sample rack, C 5040 CalWin, C 5041.10 Connection cable, C 21 Pelleting press, C 29 Pressure gauge, oxygen, C 5003.1 Aqua Pro stabilizing agent, C 710.4 Cotton thread, cut to length, C 5010.3 Ignition wire, spare, C 5012.3 Ignition wire, platinum, C 4 Quartz dish, C 6 Quartz crucible, big, C 5 Set of VA combustion crucibles, C 710.2 Set of VA combustion crucibles, C 723 Benzoic acid BIG Package, C 723 Benzoic acid, blister package, C 43 Benzoic acid NBS 39i, C 9 Gelatine capsules, C 10 Acetobutyrate capsules, C 12 Combustion bags 40 x 35 mm, C 12 A Combustion bags 70 x 35 mm, C 14 Combustible crucible, C 15 Paraffin strips, C 16 Parafilm, C 17 Paraffin, AOD 1.11 Control standard, AOD 1.12 Control standard

#### 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 dynamic 30°C	no
Measuring mode isoperibol 30°C	no
Measuring mode double dry (ISO 1928)	no
Measuring time adiabatic approx. [min]	15
Measuring time dynamic approx. [min]	10
Measuring time isoperibol approx. [min]	22
Reproducibility adiabatic (1g benzoic acid NBS39i) [%RSD]	0.05
Reproducibility dynamic (1g benzoic acid NBS39i) [%RSD]	0.1
Reproducibility isoperibol (1g benzoic acid NBS39i) [%RSD]	0.05
Working temperature max. [°C]	25
Temperature measurement resolution [K]	0.0001
Cooling medium temperature min. [°C]	10
Cooling medium temperature max. [°C]	19
Cooling medium permissible operating pressure [bar]	9
Cooling medium	tap water
Type of cooling	flow
Flow rate min. [l/h]	18
Flow rate max. [l/h]	42
Oxygen operating pressure max. [bar]	40
Interface scale	RS232
Interface printer	Centronix
Interface PC	RS232
Interface test rack	yes
Interface ext. monitor	no
Interface ext. keyboard	no
Oxygen filling	yes
Degasification	yes
Decomposition detection	yes
Decomposition vessel C 5010	yes
Analysis according to DIN 51900 (1977/84)	yes
Analysis according to ASTM D240 (2002)	yes
Analysis according to ASTM D4809 (2000)	yes
Analysis according to ASTM D1989 (1992)	yes
Analysis according to ASTM D5468 (2002)	yes
Analysis according to ASTM D5865 (2001)	yes
Analysis according to ASTM E711	yes
Dimensions (W x H x D) [mm]	560 x 400 x 380
Weight [kg]	42
Permissible ambient temperature [°C]	20 - 25
Permissible relative moisture [%]	80
Protection class according to DIN EN 60529	IP 21
RS 232 interface	yes
Voltage [V]	230
Frequency [Hz]	50/60
Power input [W]	1300
<b>Ident. No.</b>	<b>8803400</b>