





KS 3000 i control

/// Data Sheet

Innovative incubator shaker design allowing unattended operation in a temperature-controlled environment.

- Large LED display for speed and time settings
- Controls with antimicrobial coating for reduction of bacteria
- Integrated PID temperature control (use of two PT 1000 temperature sensors)
- Junction box in the workspace for connection of an additional temperature sensor e.g. PT 1000.60
- Electronic temperature and speed control
- Electronic timer switch: 0 999 h (set by the minute or by the hour)
- Unit switches off automatically if disturbed









designed for scientists

- Unit stops automatically when hood is lifted
- Collecting tray with drain hose on rear of unit
- Simple operation
- All functions can be controlled and documented with labworldsoft®
- Attachements are not included in delivery, please order separately







designed for scientists

Technical Data

Shaking stroke [mm] 20 Permissible shaking weight (incl. attachment) [kg] 7.5 Motor rating output [W] 46 Motor rating output [W] 10 Spermissible On Nime [%] 100 Speed min (adjustable) [pm] 10 - 500 Speed display LED Speed display LED Speed display 1 - RPM steps Speed display 1 - RPM steps Timer Immed yes Timer Steplay 7 - Segment LED Timer setting range [min] 1 - 59940 Operating mode timer and continuous operation Heating temperature range [°C] room temp. +5° - 80 Heat uptur [W] 1000 Set temperature resolution [K] ±0.5 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temperature inner chamber [m] 330 x 330 x 258 Total volume inner chamber [m] 50 Raw material housing Sheet metal powder coat Raw material front foil polyseter Raw material front p	Type of movement	orbital
Motor rating input [W]	Shaking stroke [mm]	20
Motor rating output [W]	Permissible shaking weight (incl. attachment) [kg]	7.5
Permissible ON time [%] 100 Speed min (adjustable) [rpm] 10 - 500 Speed display LED Speed display 1 Speed adjustment 1 RPM steps Timer yes Timer display 7 segment LED Time setting min. [s] 1 Time setting rins [min] 1-5940 Operating mode timer and continuous operation Heat output [W] 1000 Set temperature range [*C] room temp. 45° - 80 Heat output [W] 100 Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temp. stability (0.21 H2O, RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [m] 330 x 330 x 258 Total volume inner chamber [m] 50 Raw material housing Sheet metal powder coat Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.5 Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] <	Motor rating input [W]	45
Speed range [rpm] 10 Speed range [rpm] 10 - 500 Speed deviation [%] 1 Speed deviation [%] 1 RPM steps Timer of display 7 segment LED Timer display 7 segment LED Time setting range [min] 1 - 59940 Operating mode timer and continuous operation Heating temperature range [*C] room temp. +5* - 80 Heat output [W] 1000 Set temperature resolution [K] 40.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22*C, T=37*C) [K] ±0.5 Temperature display yes Temp, stability (0.2l H2O; RT 25*C, T=37*C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [mm] 50 Raw material housing Sheet metal powder coat Raw material front foil polyester Raw material front poil ABS painted Temperature stability (1 vessel 0.5 L, RT 25*C, T=37*C) [K] ±0.5 Temperature bomogenity (5 vessel 0.5 L; RT 25*C, T=37*C) [K] ±0.5 </td <td>Motor rating output [W]</td> <td>10</td>	Motor rating output [W]	10
Speed display	Permissible ON time [%]	100
Speed deviation [%] 1 1 1 1 1 1 1 1 1	Speed min (adjustable) [rpm]	10
Speed adjustment	Speed range [rpm]	10 - 500
Speed adjustment	Speed display	LED
Timer yes Timer display 7 segment LED Time setting min. [s] 1 Time setting range [min] 1 - 59940 Operating mode timer and continuous operation Heating temperature range [°C] room temp. +5° - 80 Heat output [W] 1000 Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temperature chamber [I] 50 Raw material housing Sheet metal powder coat Raw material houd PMMA Raw material front foil polyester Raw material front panel ABS painted Temperature homogenity (5 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.5 <td>Speed deviation [%]</td> <td>1</td>	Speed deviation [%]	1
Timer display 7 segment LED Time setting min. [s] 1 Time setting range [min] 1 - 59940 Operating mode timer and continuous operation Heat output [M] 1000 Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temp. stability (0.2l H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [II] 50 Raw material housing Sheet metal powder coat Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.5 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP	Speed adjustment	1 RPM steps
Time setting min. [s] 1 Time setting range [min] 1 - 59940 Operating mode timer and continuous operation Heating temperature range [°C] room temp. +5° - 80 Heat output [W] 1000 Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Tempe, stability (0.2 H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mn] 330 x 330 x 330 x 258 Total volume inner chamber [mm] 50 Raw material housing Sheet metal powder coat Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W X H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes <td>Timer</td> <td>yes</td>	Timer	yes
Time setting range [min] 1 - 59940 Operating mode timer and continuous operation Heating temperature range [°C] room temp. +5° - 80 Heat output [W] 1000 Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temperature display yes Temp. stability (0.2l H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [mm] 50 Raw material housing Sheet metal powder coat Raw material front panel PMMA Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature bnoogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529	Timer display	7 segment LED
Operating mode timer and continuous operation Heating temperature range [°C] room temp. +5° - 80 Heat output [W] 1000 Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temp. stability (0,21 H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [mm] 50 Raw material housing Sheet metal powder coat Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface <	Time setting min. [s]	1
Heating temperature range [°C] room temp. +5° - 80 Heat output [W] 1000 Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temp. stability (0,2l H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [I] 50 Raw material housing Sheet metal powder coat Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 80 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 P 30 RS 232 interface yes USB interface Yes Voltage [V] 230 Frequency [Hz] 50/60	Time setting range [min]	1 - 59940
Heat output [W]	Operating mode	timer and continuous operation
Set temperature resolution [K] ±0.1 Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temp. stability (0,2l H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [I] 50 Raw material housing Sheet metal powder coat Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes Voltage [V] 230 Frequency [Hz] 50/60	Heating temperature range [°C]	room temp. +5° - 80
Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K] ±0.5 Temperature display yes Temp. stability (0,2l H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [I] 50 Raw material housing Sheet metal powder coat Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.5 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes Voltage [V] 230 Frequency [Hz] 50/60	Heat output [W]	1000
Temperature display yes Temp. stability (0,2l H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [I] 50 Raw material housing Sheet metal powder coat Raw material hood PMMA Raw material front foil polyester Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Set temperature resolution [K]	±0.1
Temp. stability (0,21H2O; RT 25°C, T=37°C) [K] ±0.1 Operating area inner chamber [mm] 330 x 330 x 258 Total volume inner chamber [I] 50 Raw material housing Sheet metal powder coat Raw material front foil PMMA Raw material front panel ABS painted Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Control accuracy with sensor (1 vessel 0.5 L H2O, RT 22°C, T=37°C) [K]	±0.5
Operating area inner chamber [mm] Total volume inner chamber [I] Raw material housing Raw material houd Raw material front foil Raw material front panel Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] Temperature homogenity (5 vessel 0.5 L, RT 25°C, T=37°C) [K] Height with open hood [mm] Dimensions (W x H x D) [mm] Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Protection class according to DIN EN 60529 RS 232 interface Voltage [V] Frequency [Hz] Sheet metal powder 50 80 PMMA ABS painted ### 40.05 ### 40.05 ### 40.05 ### 40.05 ### 40.5	Temperature display	yes
Total volume inner chamber [I] Raw material housing Raw material hood Raw material front foil Raw material front panel Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] Height with open hood [mm] Dimensions (W x H x D) [mm] Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Protection class according to DIN EN 60529 RS 232 interface USB interface Voltage [V] Frequency [Hz]	Temp. stability (0,2l H2O; RT 25°C, T=37°C) [K]	±0.1
Raw material housing Raw material hood Raw material front foil Raw material front panel Raw material front panel Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] Height with open hood [mm] B75 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Protection class according to DIN EN 60529 RS 232 interface USB interface Voltage [V] Frequency [Hz]	Operating area inner chamber [mm]	330 x 330 x 258
Raw material hood Raw material front foil Raw material front panel Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Total volume inner chamber [I]	50
Raw material front foil Raw material front panel Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz]	Raw material housing	Sheet metal powder coat
Raw material front panel Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Raw material hood	PMMA
Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K] ±0.05 Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Raw material front foil	polyester
Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K] ±0.5 Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	·	ABS painted
Height with open hood [mm] 875 Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Temperature stability (1 vessel 0.5 L, RT 25°C, T=37°C) [K]	±0.05
Dimensions (W x H x D) [mm] 465 x 430 x 695 Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Temperature homogenity (5 vessel 0.5 L; RT 25°C, T=37°C) [K]	±0.5
Weight [kg] 35 Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Height with open hood [mm]	875
Permissible ambient temperature [°C] 15 - 32 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 30 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Dimensions (W x H x D) [mm]	465 x 430 x 695
Permissible relative humidity [%] Protection class according to DIN EN 60529 RS 232 interface USB interface Voltage [V] Frequency [Hz] 80 IP 30 yes yes 230 50/60	Weight [kg]	35
Protection class according to DIN EN 60529 RS 232 interface USB interface Voltage [V] Frequency [Hz] IP 30 yes 29 29 50/60	Permissible ambient temperature [°C]	15 - 32
RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Permissible relative humidity [%]	80
USB interface yes Voltage [V] 230 Frequency [Hz] 50/60	Protection class according to DIN EN 60529	IP 30
Voltage [V] 230 Frequency [Hz] 50/60	RS 232 interface	yes
Frequency [Hz] 50/60	USB interface	yes
	Voltage [V]	230
Power input [W] 1120	Frequency [Hz]	50/60
	Power input [W]	1120



