

## designed for scientists



### ICC control eco 18

/// Data Sheet

IKA facilitates the configuration of your temperature control system by offering "ready for connection" packages with all necessary accessories.

#### Package includes

- ICC control compact immersion circulator
- IB 18 eco plastic bath (size L)
- BL.ICC large bridge









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total: 338 x 584 x 349 mm bath opening: 245 x 305 mm \*

max. bath opening: 286 x 325 mm \*\* Immersion depth. 85 mm-125 mm

\*Dimensions to set plate at the bottom of bath.

\*\* Maximum bath opening dimensions at the upper edge of the bath

Max. temperature in the plastic bath ("eco" series): 100°C (water only)

Technical data relates to the temperature control instrument included in the package







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#### **Technical Data**

Appliance type	Appliance type	Compact immersion circulators
Identification according to DIN 12876	Appliance type	Compact immersion circulators
Heat output		
Working temperature [*C]         room temp. +10K @1000rpm - 150           Operating temperature min. (with external cooling) [*C]         -20           Temperature control         PID           Working temperature sensor         PTI 100           Safety temperature display         TFT           Working temperature display         TFT           Temperature display         TFT           Temperature display         TFT           Temperature stability DIN 12876 [K]         ±0.01           Connection for ext. temperature sensor         PTI 100           Display for operation with ext. sensor         PTI 100           Display for operation with ext. sensor         yes           Set temperature resolution [K]         ±0.1           Warning function optical         yes           Warning function acoustic         yes           Warning function specifical         yes           Warning function acoustic         yes           Warning function acoustic         yes           Warning function acoustic         yes           W		
Operature display         yes           Temperature control         PID           Working temperature sensor         PT 100           Safety temperature sensor         PT1000           Working temperature display         TFT           Safety temperature display         TFT           Safety temperature display         TFT           Temperature stability DIN 12876 [K]         ±0.01           Connection for ext. temperature sensor         PT 100           Display resolution [K]         ±0.1           Usiplay resolution [K]         ±0.1           Usiplay resolution optical         yes           Warning function optical         yes           Warning function optical         yes           Warning function excess temperature         yes           Warning function optical         yes           Voer-level protection         yes           Purp prosesser purp function in purp protection         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2		
Temperature display		
PID   Working temperature sensor		
Working temperature sensor         PT 100           Safety temperature sensor         PT1000           Working temperature display         TFT           Safety temperature display         TFT           Safety temperature stability DIN 12876 [K]         ±0.01           Connection for ext. temperature sensor         PT 100           Display resolution [K]         0.01           Display for operation with ext. sensor         yes           Set temperature resolution [K]         20.1           Warning function optical         yes           Warning function excess temperature         yes           Varning function excess temperature         yes           Verlevel protection         yes           Pump type         Pressure-/ suction pump           Pump type         Pressure-/ suction pump           Pump (by personal max. (0) liter flow) [bar]		•
Safety temperature sensor         PT1000           Working temperature display         TFT           Safety temperature display         TFT           Temperature stability DIN 12876 [K]         ±0.01           Connection for stx. temperature sensor         PT 100           Display resolution [K]         0.01           Display for operation with ext. sensor         yes           Set temperature resolution [K]         ±0.1           Warning function optical         yes           Warning function excests         yes           Warning function excests temperature         yes           Over-level protection         yes           Over-level protection         yes           Pump protection         yes           Pump protection         yes           Pump prossure max. (0 liters discharge flow) [bar]         0.2	·	
Working temperature display         TFT           Safety temperature display         TFT           Temperature stability DN 12876 [K]         ± 0.01           Connection for ext. temperature sensor         PT 100           Display resolution [K]         0.01           Display for operation with ext. sensor         yes           Set temperature resolution [K]         ±0.1           Warning function optical         yes           Warning function acoustic         yes           Warning function excess temperature         yes           Adjustable safety circuit [°C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure / suction pump           Pump capacity adjustable         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100      <		
Safety temperature display         TFT           Temperature stability DIN 12876 [K]         ±0.01           Connection for ext. temperature sensor         PT 100           Display resolution [K]         0.01           Display for operation with ext. sensor         yes           Set temperature resolution [K]         ±0.1           Warning function optical         yes           Warning function acoustic         yes           Warning function excess temperature         yes           Adjustable safety circuit [°C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure-/ suction pump           Pump pacapacity adjustable         yes           Pump presure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         80           Permi		
Emperature stability DIN 12876 [K]		
Connection for ext. temperature sensor         PT 100           Display resolution [K]         0.01           Display for operation with ext. sensor         yes           Set temperature resolution [K]         ±0.1           Warning function optical         yes           Warning function access temperature         yes           Warning function excess temperature         yes           Adjustable safety circuit (°C)         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure-/ suction pump           Pump propacity adjustable         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [Kg]         11.99           Permissible enablent temperature [*C]         5 - 40		
Display resolution [K]         0.01           Display for operation with ext. sensor         yes           Set temperature resolution [K]         ±0.1           Warning function acoustic         yes           Warning function accusts temperature         yes           Warning function excess temperature         yes           Adjustable safety circuit [*C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure-/ suction pump           Pump type         Pressure-/ suction pump           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible ambient temperature [*C]         5 - 40           Permissible relative humidity [%]         80 </td <td></td> <td></td>		
Display for operation with ext. sensor         yes           Set temperature resolution [K]         ±0.1           Warning function optical         yes           Warning function acoustic         yes           Warning function excess temperature         yes           Adjustable safety circuit [*C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure -/ suction pump           Pump capacity adjustable         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible ambient temperature [*C]         5 - 40           Permissible ambient temperature [*C]         5 - 40           Permissible evaluate thumidity [%]         80     <		
Set temperature resolution [K]         ±0.1           Warning function optical         yes           Warning function acoustic         yes           Warning function excess temperature         yes           Adjustable safety circuit [°C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure- / suction pump           Pump pacapacity adjustable         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible embient temperature [°C]         5 - 40           Permissible relative humidity [%]         80           Protection class according to DIN EN 60529         IP 21           RS 232 interface         yes		0.01
Warning function optical         yes           Warning function acoustic         yes           Warning function excess temperature         yes           Adjustable safety circuit [°C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure- / suction pump           Pump papacity adjustable         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible ambient temperature [°C]         5 - 40           Permissible relative humidity [%]         80           Protection class according to DIN EN 60529         IP 21           RS 232 interface         yes           USB interface         yes           USB interf		yes
Warning function acoustic         yes           Warning function excess temperature         yes           Adjustable safety circuit [°C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure - / suction pump           Pump type         Pressure - / suction pump           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible ambient temperature [°C]         5 - 40           Permissible relative humidity [%]         80           Protection class according to DIN EN 60529         IP 21           RS 232 interface         yes           Voltage [V]         230           Frequency [Hz]         50/60		±0.1
Warning function excess temperature         yes           Adjustable safety circuit [°C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure- / suction pump           Pump pacpacity adjustable         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible ambient temperature [°C]         5 - 40           Permissible relative humidity [%]         80           Protection class according to DIN EN 60529         IP 21           RS 232 interface         yes           USB interface         yes           Voltage [V]         230           Frequency [Hz]         50/60	Warning function optical	yes
Adjustable safety circuit [°C]         0 - 160           Sub-level protection         yes           Over-level protection         yes           Pump type         Pressure-/ suction pump           Pump type         yes           Pump pressure max. (0 liters discharge flow) [bar]         0.3           Pressure pump (suction side) (0 liter flow) [bar]         0.2           Flow rate max. (0 bar back pressure) [l/min]         18           Bath depth min. [mm]         150           Calibration option         yes           Appliance fastener         clamp           Technical data complies with the standard         DIN 12876           Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible ambient temperature [°C]         5 - 40           Permissible relative humidity [%]         80           Protection class according to DIN EN 60529         IP 21           RS 232 interface         yes           Voltage [V]         230           Frequency [Hz]         50/60	Warning function acoustic	yes
Sub-level protection Over-level protection  Pump type Pressure- / suction pump Pump capacity adjustable Pump pressure max. (0 liters discharge flow) [bar] Pressure pump (suction side) (0 liter flow) [bar] Pissure pump (suction side) (0 liter flow) [bar] Pressure pump (suction pump Pressure pump (suction side) (supplementation pump Pressure pump (suction side) (supplementation pump Pressure pump (suction side) (supplementation pump Pressure pump (suction side) (suffersion pump Pressure pump (suction side) (suffersion pump Pressure pump (suction side) (suffersion pump Pressure pump (suctio	Warning function excess temperature	yes
Over-level protectionyesPump typePressure- / suction pumpPump capacity adjustableyesPump pressure max. (0 liters discharge flow) [bar]0.3Pressure pump (suction side) (0 liter flow) [bar]0.2Flow rate max. (0 bar back pressure) [l/min]18Bath depth min. [mm]150Calibration optionyesAppliance fastenerclampTechnical data complies with the standardDIN 12876Permissible ON time [%]100Dimensions (W x H x D) [mm]145 x 340 x 200Weight [kg]11.99Permissible ambient temperature [°C]5 - 40Permissible relative humidity [%]80Protection class according to DIN EN 60529IP 21KS 232 interfaceyesUSB interfaceyesVoltage [V]230Frequency [Hz]50/60	Adjustable safety circuit [°C]	0 - 160
Pump type Pressure / suction pump Pump capacity adjustable yes Pump pressure max. (0 liters discharge flow) [bar] 0.3 Pressure pump (suction side) (0 liter flow) [bar] 0.2 Flow rate max. (0 bar back pressure) [l/min] 18 Bath depth min. [mm] 150 Calibration option yes Appliance fastener clamp Technical data complies with the standard DIN 12876 Permissible ON time [%] 100 Dimensions (W x H x D) [mm] 145 x 340 x 200 Weight [kg] 11.99 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 RS 232 interface yes USB interface yes Voltage [V] 230 Frequency [Hz] 50.66	Sub-level protection	yes
Pump capacity adjustable Pump pressure max. (0 liters discharge flow) [bar] Pressure pump (suction side) (0 liter flow) [bar] Pump flow flow flow flow flow flow flow flow	Over-level protection	yes
Pump pressure max. (0 liters discharge flow) [bar]  Pressure pump (suction side) (0 liter flow) [bar]  Flow rate max. (0 bar back pressure) [l/min]  Bath depth min. [mm]  Calibration option  Appliance fastener  Clamp  Technical data complies with the standard  Permissible ON time [%]  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]	Pump type	Pressure- / suction pump
Pressure pump (suction side) (0 liter flow) [bar]  Flow rate max. (0 bar back pressure) [l/min]  Bath depth min. [mm]  Calibration option  Appliance fastener  Technical data complies with the standard  Permissible ON time [%]  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]  0.2  18  0.2  18  0.2  18  80  150  0.2  18  150  150  150  150  150  160  17  18  18  18  18  19  100  11  145 x 340 x 200  11  11  19  11  11  11  11  12  13  14  15  15  16  16  17  17  18  18  18  18  18  19  100  11  11  12  13  14  15  15  16  16  17  17  17  18  18  18  18  18  18  18	Pump capacity adjustable	yes
Flow rate max. (0 bar back pressure) [l/min]       18         Bath depth min. [mm]       150         Calibration option       yes         Appliance fastener       clamp         Technical data complies with the standard       DIN 12876         Permissible ON time [%]       100         Dimensions (W x H x D) [mm]       145 x 340 x 200         Weight [kg]       11.99         Permissible ambient temperature [°C]       5 - 40         Permissible relative humidity [%]       80         Protection class according to DIN EN 60529       IP 21         RS 232 interface       yes         USB interface       yes         Voltage [V]       230         Frequency [Hz]       50/60	Pump pressure max. (0 liters discharge flow) [bar]	0.3
Bath depth min. [mm]       150         Calibration option       yes         Appliance fastener       clamp         Technical data complies with the standard       DIN 12876         Permissible ON time [%]       100         Dimensions (W x H x D) [mm]       145 x 340 x 200         Weight [kg]       11.99         Permissible ambient temperature [°C]       5 - 40         Permissible relative humidity [%]       80         Protection class according to DIN EN 60529       IP 21         RS 232 interface       yes         USB interface       yes         Voltage [V]       230         Frequency [Hz]       50/60	Pressure pump (suction side) (0 liter flow) [bar]	0.2
Calibration option Appliance fastener Clamp Technical data complies with the standard DIN 12876 Permissible ON time [%] Dimensions (W x H x D) [mm] 145 x 340 x 200 Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Permissible relative humidity [%] RS 232 interface USB interface Voltage [V] Frequency [Hz]  Solomo	Flow rate max. (0 bar back pressure) [l/min]	18
Appliance fastener Technical data complies with the standard DIN 12876 Permissible ON time [%] Dimensions (W x H x D) [mm] 145 x 340 x 200 Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Protection class according to DIN EN 60529 IP 21 RS 232 interface USB interface Voltage [V] Frequency [Hz]  clamp 100 1100 145 x 340 x 200 11.99 11.99 11.99 11.99 11.99 11.99 11.99 11.99 11.99 11.99 11.99 11.99 11.99 11.99 12.40 13.40 14.50 15.40 15.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40 16.40	Bath depth min. [mm]	150
Technical data complies with the standard  Permissible ON time [%]  Din 12876  100  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]  DIN 12876  100  80  11.99  5 - 40  80  IP 21  yes  230  50/60	Calibration option	yes
Permissible ON time [%]         100           Dimensions (W x H x D) [mm]         145 x 340 x 200           Weight [kg]         11.99           Permissible ambient temperature [°C]         5 - 40           Permissible relative humidity [%]         80           Protection class according to DIN EN 60529         IP 21           RS 232 interface         yes           USB interface         yes           Voltage [V]         230           Frequency [Hz]         50/60	Appliance fastener	clamp
Dimensions (W x H x D) [mm]       145 x 340 x 200         Weight [kg]       11.99         Permissible ambient temperature [°C]       5 - 40         Permissible relative humidity [%]       80         Protection class according to DIN EN 60529       IP 21         RS 232 interface       yes         USB interface       yes         Voltage [V]       230         Frequency [Hz]       50/60	Technical data complies with the standard	DIN 12876
Weight [kg]       11.99         Permissible ambient temperature [°C]       5 - 40         Permissible relative humidity [%]       80         Protection class according to DIN EN 60529       IP 21         RS 232 interface       yes         USB interface       yes         Voltage [V]       230         Frequency [Hz]       50/60	Permissible ON time [%]	100
Permissible ambient temperature [°C] 5 - 40  Permissible relative humidity [%] 80  Protection class according to DIN EN 60529 IP 21  RS 232 interface yes  USB interface yes  Voltage [V] 230  Frequency [Hz] 50/60	Dimensions (W x H x D) [mm]	145 x 340 x 200
Permissible relative humidity [%]  Protection class according to DIN EN 60529  RS 232 interface  USB interface  Voltage [V]  Frequency [Hz]  80  IP 21  yes  yes  230  50/60	Weight [kg]	11.99
Protection class according to DIN EN 60529         IP 21           RS 232 interface         yes           USB interface         yes           Voltage [V]         230           Frequency [Hz]         50/60	Permissible ambient temperature [°C]	5 - 40
RS 232 interface         yes           USB interface         yes           Voltage [V]         230           Frequency [Hz]         50/60	Permissible relative humidity [%]	80
RS 232 interface         yes           USB interface         yes           Voltage [V]         230           Frequency [Hz]         50/60	Protection class according to DIN EN 60529	IP 21
Voltage [V]         230           Frequency [Hz]         50/60	RS 232 interface	yes
Voltage [V]         230           Frequency [Hz]         50/60	USB interface	yes
Frequency [Hz] 50/60	Voltage [V]	
		50/60
		2100







