

## DYNEO DD-BC4 Heating circulator

DYNEO DD heating circulators for internal and external applications are equipped with closed bath tanks. The tanks are well insulated and include a coil for counter-cooling. An integrated drain tap makes emptying the tank safe and clean. The multilingual 3.5-inch color display and unique rotary knob provide for straightforward and intuitive operation.

### Optional analog and digital interface

DYNEO thermostats can optionally be equipped with analogue or digital interfaces. To request the options, order number must be extended with .d for the digital and .a for the analog interface (9XXX XXXX.A / 9XXX XXX.D)



### Product features

- For internal and external applications
- Powerful and infinitely adjustable pressure pump
- Flow rate 27 l/min, pressure 0.7 bar
- Easy switching between internal and external circulation
- Large color TFT display, multilingual interface
- Central rotary knob (controller) simplifies operation
- Integrated programmer
- Integrated external Pt100 connection
- USB connection
- RS232 interface or analog interfaces (optional)
- Integrated drain makes emptying liquid easy and safe.
- High-quality thermal insulation of the bath tank
- For internal and external applications

### Performance values

115V/60Hz (Nema N5-15 Plug)	
Heating capacity kW	1
Viscosity max. cST	50
Pump capacity flow rate l/min	8 ... 27
Pump capacity flow pressure psi	1.5 ... 10.2
Power A	11

### Technical data

Available voltage versions		Bath	
Order No.	9 021 504	Bath tank	Stainless steel
Available voltage versions:		Bath cover	integrated
9021504.33	200-230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F)	Usable bath opening in. (W x L / D)	5.1 x 5.9 / 5.9

9021504.33.chn	200-230V/50-60Hz (CN Plug)
9021504.04	200-230V/50-60Hz (UK Plug Type BS1363A)
9021504.05	200-230V/50-60Hz (CH Plug Type SEV 1011)
9021504.22	100-115V/50-60Hz (Nema N5-15 Plug)

Other	
Classification	Classification III (FL)
Pump function	Pressure Pump
Pump type	Immersion Pump

Electronics	
Digital interface	RS232 optional, USB, Alarm output optional, Reg/Eprog optional, Standby-Input optional
External pt100 sensor connection	integrated
Integrated programmer	8x60 steps
Temperature control	PID3
Absolute temperature calibration	3 Point Calibration
Temperature display	3.5" TFT Display
Temperature setting	Shaft Encoder
Electronic Timer hr:min	00:00 ... 99:59

Dimensions and volumes	
Weight lbs	18.7
Barbed fittings inner diameter	8/12 mm
Dimensions in. (W x L x H)	9.1 x 16.1 x 16.5
Filling volume l	3 ... 4.5
Pump connections	M16x1 male

Temperature values	
Setting the resolution of the temperature display °C	0.01
Working temperature range °C	+20 ... +200
Temperature stability °C	±0.01
Ambient temperature °C	+5 ... +40

### Included in delivery

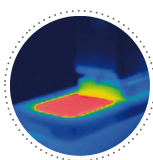
2 Barbed fittings for tubing 8 and 12 mm ID. (Pump connections M16x1 male)

For applications near or below ambient temperature: use a cooling coil or JULABO immersion cooler.

### All Benefits



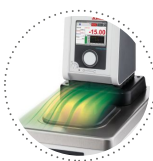
**100% Checked.**  
100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.



**Solid.**  
Minimized energy loss through high-quality insulation.



**Tidy.**  
The special drain tap for easy draining of bath fluids without tools.



**Condensation protection.**  
Superb design solution. Integrated ventilation directs air over the bath lid and minimizes condensation.



**Green technology.**  
Development consistently applied environmentally friendly materials and technologies.



**JULABO. Quality.**  
Highest standards of quality for a long product life.



**Quick start.**  
Individual JULABO consultation and comprehensive manuals at your disposal.



**Satisfied customers.**  
11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.



**Services 24/7.**  
Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at [www.julabo.com](http://www.julabo.com).



**Handle with ease.**  
Makes day-to-day work easy. Comfortably move your CORIO around by using the ergonomic handles (front and rear).



**Highly precise**  
PID Temperature control with drift compensation and adjustable control parameters, temperature stability  $\pm 0.01 \dots \pm 0.02 \text{ } ^\circ\text{C}$



**Turn. Push. Go.**  
Easy operation of all parameters using the central controller.



**USB.**  
Remote control made easy using the integrated USB interface.



**RS232.**  
Standard connection using the serial RS232 interface.



**Analog I/O.**  
Analog interfaces for integration into process control systems (optional).



**Process stability.**  
Early warning - visual and acoustic - of critical states increases process stability.



**Connection. Easy.**  
Inclined pump connections (M16x1) facilitate the connection of applications. Each unit includes 2 barbed fittings of 8/12 mm diameter each.



**100 % Cooling capacity**  
'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



**Brilliance. In color.**  
Large color display with vivid luminance is easy to read, even from a large distance.



**Information. Everything clear.**  
Information in plain text on a large color screen.



**Multi-lingual.**  
Operation in multiple languages.



**Programmer. Integrated.**  
The integrated internal programmer makes it possible to automatically run temperature time profiles.



**Powerful. Adjustable.**  
Strong pressure pump, continuously adjustable.



**Temperature. Under control.**  
External Pt100 sensor connection for precise measurement and control directly in the external application.



**Fill level. Monitored.**  
Fill level indicator on the display for heat-transfer liquid.



**Process. Under control.**  
Full control of the dynamic, access to all important control parameters for individual process optimization.



**Stable. Mobile.**



**Wide range.**

Refrigerated and heating circulator in various combinations, circulator in various sizes. Maximum flexibility through large selection of accessories.



**ATC3. Calibration.**

'Absolute Temperature Calibration' for compensating a physically caused temperature difference, 3-point calibration.