

Product data sheet

DYNEO DD-BC4 Heating circulator

for working temperatures from +20 °C to +200 °C

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

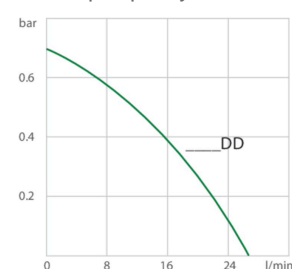
DYNEO circulators can optionally be equipped with analogue or digital interfaces. To request the options, order number must be extended with .d for the digital and .a for the analog interface (9XXX XXXX.A / 9XXX XXX.D)



Product Features

- ✓ 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

Pump capacity Medium: Water



Available options

Interfaces

Digital interface

Digital interface for controlling the circulator via RS232.



Analogue interface

Analog interface includes Standby, Reg-Eprog and alarm output for DYNEO circulators.



Performance values

230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)	
Heating capacity kW	2
Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure bar	0.1 ... 0.7
Power consumption A	10
Voltage Tolerance %	230V ± 10

Technical data

Available voltage versions	
Order No.	9021504
Available voltage versions:	
9021504.33	200-230V 50/60Hz (Schuko Plug - CEE 7/4 Plug Type F)
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)

Bath	
Bath tank	Stainless steel
Bath cover	integrated
Usable bath opening cm (W x L / D)	13 x 15 / 15

Electronics	
Interfaces	Alarm output optional, REG/EPROG optional, RS232 optional, Standby-Input optional, USB
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 h:min	00:00 ... 99:59

Dimensions and volumes

Weight kg	8.5
Barbed fittings inner diameter mm	8/12 mm
Total dimensions cm (W × L × H)	23 x 41 x 42
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 ¹	+20 ... +200
Temperature stability °C	±0.01
Ambient temperature °C	+5 ... +40
Temperature display resolution °C	0.01

¹ For applications near or below ambient temperature: use a cooling coil or JULABO immersion cooler.

Other

Classification	Classification III (FL)
Pump function	Pressure Pump
Pump type	Immersion Pump
User Interface Language	Chinese, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish

Included in delivery

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

All Benefits



Handle with ease.

Makes day-to-day work easy.
Comfortably move your JULABO Circulator around by using the ergonomic handles (front and rear).



Highly precise

PID Temperature control with drift compensation and adjustable control parameters, temperature stability ±0.01...±0.02 °C



Wide range.

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



Turn. Push. Go.

Easy operation of all parameters using the central controller.



USB.

Remote control made easy using the integrated USB interface.



RS232.

Connection using the optional 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.



ATC3. Calibration.

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



Connection. Easy.

Inclined pump connections (M16×1) 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 regulation of the dynamics control, access to all important control parameters for individual process optimization.



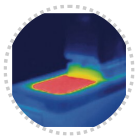
Stable. Mobile.

Rubber feet keep JULABO Circulators standing firm. Larger and more powerful units also have integrated rollers for easy handling.



100% Checked.

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



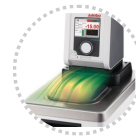
Solid.

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.

Refer to www.julabo.com for more information regarding the entire JULABO product portfolio. Technical changes without prior notification. Images may deviate from the original. | Datasheet No.EN9021504/260311