Julabo

DYNEO DD Heating immersion 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 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

- 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)
- Flexible installation options
- For internal and external applications
- Unique early warning system for low liquid level
- Easy operation

Performance values

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

Technical data

Available voltage versions		Cooling	
Order No.	9 021 000	Cooling coil	accessory
Available voltage versions:			

9021000.33	200-230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F)
9021000.33.chn	200-230V/50-60Hz (CN Plug)
9021000.04	200-230V/50-60Hz (UK Plug Type BS1363A)
9021000.05	200-230V/50-60Hz (CH Plug Type SEV 1011)
9021000.22	100-115V/50-60Hz (Nema N5-15 Plug)

Other

Classification	Classification III (FL)
IP Code	IP 21
Pump function	Pressure Pump
Pump type	Immersion Pump
User Interface Language	Chinese, English, French, German, Italian, Japanese, Korean, Portuguese, Russian, Spanish

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	2.5
Minimum filling height below the upper edge of the bath tank cm	4.5
Minimum depth of bath vessel cm	15
Dimensions cm (W × L × H)	13.2 x 16 x 35.5

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 [1]	+5 ... +40
Setting the resolution of the temperature display °C	0.01

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

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.

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.

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

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

Powerful. Adjustable.
Strong pressure pump, continuously adjustable.

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).

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

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

ATC3. Calibration.
'Absolute Temperature Calibration' for compensating a physically caused temperature difference, 3-point calibration.

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

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

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

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

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

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

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

Services 24/7.
Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.

Quick support
If an error occurs, the integrated Black-Box function permits fast diagnosis by the JULABO service team

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.EN9.021.000/240312

4