

## SE-12 Heating Circulator

JULABO Heating Circulators with stainless steel bath tanks are mainly used for internal and external temperature tasks. The new range of these models now have increased capacities, allowing for temperature application of larger external systems, as well as open systems. Simultaneous temperature applications of smaller objects can also be carried out directly in the internal bath of the circulator. Models from the TopTech and HighTech Series' are available with different bath sizes and features. Accessories for these units include test tube racks, bath covers etc. An integrated cooling coil is provided for temperature applications at near ambient or just below.



### Your advantages

- RS232 interface for online communication
- VFD COMFORT DISPLAY
- Integrated programmer for 10 program steps
- LCD DIALOG DISPLAY backlit for convenient interactive operation
- Keypad for setpoints, warning/safety values and menu functions
- ICC (Intelligent Cascade Control), self-optimizing temperature control
- TCF Temperature Control Features to optimize the control behavior
- ATC3 3-Point-Calibration
- Pt100 External sensor connection for measurement and control
- SMART PUMP, electronically adjustable pump stages
- Adjustable high temperature cut-out, visible via display
- RS232/RS485 interface for online communication
- Integrated programmer for 6 x 60 program steps
- Connections for solenoid valve and HSP booster pump

### Technical data

Available voltage versions	
Order No.	9 252 512
Available voltage versions:	
9 252 512.33	
Cooling	
Cooling coil	integrated
Electronics	
Digital interface	Profibus optional
External pt100 sensor connection	integrated
Integrated programmer	1x10 steps
Temperature control	ICC
Absolute temperature calibration	3 Point Calibration
Temperature display	VFD
Temperature setting	Keypad
Temperature values	
Setting the resolution of the temperature display °C	0.01
Working temperature range °C	+20 ... +300
Temperature stability °C	±0.01
Ambient temperature °C	+5.0 ... +40.0
Temperature display resolution °C	0.01

Bath	
Bath tank	Stainless steel
Bath cover	integrated
Usable bath opening cm (W x L / D)	22 x 15 / 20
Other	
Classification	Classification III (FL)
IP Code	IP 21
Dimensions and volumes	
Weight kg	14
Dimensions cm (W x L x H)	30 x 43 x 47
Filling volume l	12
Pump connections	M16x1 male

## Performance values

230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F)

208V/60Hz		230V/50Hz	
Heating capacity kW	2.5	Heating capacity kW	3
Viscosity max. cST	50	Viscosity max. cST	50
Pump capacity flow rate l/min	22 ... 26	Pump capacity flow rate l/min	22 ... 26
Pump capacity flow pressure bar	0.4 ... 0.7	Pump capacity flow pressure bar	0.4 ... 0.7
Maximum suction bar	0.2 ... 0.4	Maximum suction bar	0.2 ... 0.4
230V/60Hz			
Heating capacity kW	3		
Viscosity max. cST	50		
Pump capacity flow rate l/min	22 ... 26		
Pump capacity flow pressure bar	0.4 ... 0.7		
Maximum suction bar	0.2 ... 0.4		

## All Benefits



### 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.



### 100% Checked.

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



### 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.



### Early warning system for high/low temperature limits

Maximum safety for applications, optical and audible alarm, convertible to automated cut-off function



### Clever pump system

Reliable and consistent pump capacity, electronically adjustable pump stages



### Control from the external application

External Pt100 sensor connection for precise measurement and control directly in the external application



### For flammable bath fluid

Classification III (FL) according to DIN 12876-1



**ATC3. Calibration.**

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



**Process. Under control.**

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



**100 % Cooling capacity**

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



**Energy saving cooling**

Proportional cooling control for automatic adjustment of cooling power or temporary switch-off of compressor as needed to save up to 90 % energy in comparison to unregulated cooling machines