# MAGIO MX-BC12 Heating circulator

Like all circulators in the MAGIO range, the heating circulators are characterised by premium quality and high performance combined with intuitive usability. The devices offer extra powerful pressure and suction pumps to meet the most challenging demands for temperature control of external applications. Samples can also be temperature controlled in the internal bath of the high-quality, insulated and closed bath tank.

# High resolution TFT touch display

The modern TFT touch display gives you all the important information at a glance. Three large, predefined main screens clearly display data and graphics with various application priorities. Menu navigation is self-explanatory, arranged by relevance to daily operations and easy to operate with the touch of a finger. The in-built help function provides detailed support in case of additional questions.

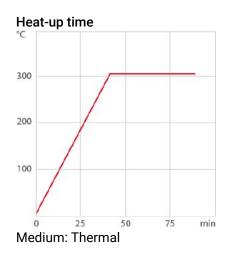
### **Product features**

- Models for internal and external applications from 3 to 26 liters
- Ideal for demanding external applications
- Simple control of complex applications
- Continuously adjustable, extremely powerful pressure / suction pump
- Large, high-resolution TFT touch display with multilingual user interface
- Parts being in contact with the medium made of stainless steel
- Flow rate 16 ... 31 I / min, pressure 0.24 ... 0.92 bar, suction 0.03 ... 0.4 bar
- Integrated programmer
- Integrated external Pt100 connection
- USB connection
- RS232 interface for online communication
- Ethernet
- analog interfaces (accessory)
- High-quality thermal insulation of the bath tanks
- Profibus DP (Accessory)
- Modbus
- RS232/RS485 interface for online communication
- Connections for solenoid valve
- Strong heating capacity of 3 kW (MX-Z) and 2 kW (MS-Z)









### Performance values

230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)			
Heating capacity kW	3		
Viscosity max. cST	70		
Pump capacity flow rate I/min	16 31		
Pump capacity flow pressure bar	0.24 0.92		
Maximum suction bar	-0.030.4		
Power A	15		

### **Technical data**

Available voltage version	ons	Bath	
Order No.	9 033 512	Bath tank	Stainless steel
Available voltage versions:		Bath cover	integrated
	200-230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F)	Usable bath opening cm (W x L / D) $$	22 x 15 / 20
9033512.33.chn	200-230V/50-60Hz (CN Plug)		
Cooling		Other	
Cooling coil	integrated	Classification	Classification III (FL)
		IP Code	IP 21
		Pump function	Pressure Suction Pump
		Pump type	Immersion Pump
Electronics		Dimensions and volumes	
Digital interface RS232, RS485, USB, Ethernet, Modbus		Weight kg	14.6
		Dimensions cm (W × L × H)	33 x 49 x 47
External pt100 sensor conner	ection integrated	Filling volume I	8.5 12
Integrated programmer	8x60 steps	Pump connections	M16x1 male
Temperature control	ICC		
Absolute temperature calibra	ation 10 Point Calibration		
-			

Temperature display 7" TFT Touchscreen

Temperature setting	Touchscreen
Electronic Timer hr:min	00:00 99:59
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	+10 +40
Temperature display resolution °C	0.01

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



Ouick start.

Green technology.



JULABO. Quality.

before leaving the factory.

Highest standards of quality for a long product life.



Satisfied customers.

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



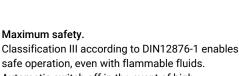
Highest measuring accuracy 'Absolute Temperature Calibration' for manual compensation of a temperature difference, 10-



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Intelligent temperature control.

Intelligent cascade control - automatic and selfoptimizing adaptation of the PID control parameters with external stability of +/- 0.05 °C.



point calibration

Automatic switch-off in the event of high temperature or low liquid level.

Multi-lingual. Operation in multiple languages.



Services 24/7.

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

Development consistently applied environmentally

friendly materials and technologies.

Individual JULABO consultation and comprehensive manuals at your disposal.



Touch display. Perfect operation.

With the touch display, the user always has an overview of all values and functions. The intuitive and multilingual menu structure enables perfect control.



#### Many interfaces.

Straight-forward remote control, data management, and integration into process structures. USB, Ethernet, RS232, SD card, and alarm off are permanently integrated. Further interfaces available as accessories.



Space saving. Free up space. Place your JULABO Circulator right next to an application, another unit, or wall. That saves space. This is made possible by eliminating vents and connections on the sides.



Programmer. Integrated.

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









#### Temperature. Under control.

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



Process stability.

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



Stable. Mobile.

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



# Everything made of stainless steel.

Quality and material compatibility at the highest level. All parts in contact with the medium are entirely made of stainless steel.



#### Connection. Easy.

Inclined pump connections (M16×1) facilitate the connection of applications. Each unit includes 2 barbed fittings of 8/12 mm diameter each.



#### Most powerful pump.

The integrated pressure/suction pump with performance values of 0.9 bar and -0.4 bar is the most powerful in its class and continuously adjustable.



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.



Energy-saving. The high-quality insulation of all relevant components saves energy.



#### Wide range.

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



#### Analog I/O.

Analog interfaces for integration into process control systems (optional).



#### Condensation protection.

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