

MAGIO MX-BC12 HST Heating Circulator

MAGIO heating circulators with booster heater are characterized by premium quality and high performance combined with intuitive usability. The MAGIO offers powerful pressure suction pumps to meet the most challenging demands for temperature control of external applications.

High Resolution TFT Touch Display

The color TFT touch display gives you all the important information immediately. 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 built-in help function provides detailed support in case of additional questions.



Product Features

- For external applications only
- Continuously adjustable, powerful pressure / suction pump
- Large, high-resolution TFT touch display with multilingual user interface
- All wetted components made from stainless-steel
- Flow rate 16 ... 31 L / min | pressure 3.5 ... 13.3 psi, suction -2.3 ... -5.8 psi
- Integrated programmer
- Integrated external Pt100 connection
- USB B connection for PC integration | USB A connection for data-logging
- RS232 / RS485 interface for online communication
- Ethernet, Modbus TCP/IP
- Optional: Analog interfaces (accessory p/n 9900100)
- High-quality thermal insulation of the bath tanks
- Very quiet
- Easy operation
- Strong heating capacity of 9kW at 230V or 7.4kW at 208V
- Connections for solenoid valve
- Integrated pump connection M16×1

Performance values

200-230V/3PPE/50-60Hz (60Hz shipped bare wire, MX plugs into HST control box)	
Heating capacity kW	9kW at 230V 7.4kW at 208V
Viscosity max. cSt	70
Pump capacity flow rate l/min	16 ... 31
Pump capacity flow pressure psi	3.5 ... 13.3
Maximum suction psi	-0.4 ... -5.8
Power consumption A	28A

Technical data

Available voltage versions	
Order No.	9033512.16.HST 9033512.16.HST.CSA/UL (with CSA C22.2 and UL 61010-1 NRTL approvals)
Available voltage versions:	
9033512.16.HST	200-230V/3PPE/60Hz (Bare wire)

Bath	
Bath tank	Stainless steel
Usable bath opening in. (W x L / D)	8.7 x 5.9 / 7.9 (without HST installed)

Cooling	
Cooling coil	integrated

Other	
Classification	Classification III (FL)
IP Code	IP 21
Pump function	Pressure/Suction Pump
Pump type	Immersion Pump
User Interface Language	Chinese, Czech, Dutch, English, French, German, Italian, Japanese, Korean, Polish, Portuguese, Russian, Spanish, Turkish

Electronics	
Interfaces	Ethernet, Modbus TCP/IP, RS232, RS485, Stakei, USB
External pt100 sensor connection	integrated
Integrated programmer	8x60 steps
Temperature control	ICC
Absolute temperature calibration	10 Point Calibration
Temperature display	7" TFT Touchscreen
Temperature setting	Touchscreen
	00:00 ... 99:59

Dimensions and volumes	
Weight lbs	50
Dimensions in. (W x L x H) MX-BC12 w/HST in bath opening HST control box	13 x 19.3 x 18.5 7.9 x 6.7 x 7.5
Filling volume l	8.5 ... 12
Pump connections	M16x1 male

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

Included in delivery

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

All Benefits



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



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.



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.



Maximum safety.
Classification III according to DIN12876-1 enables safe operation, even with flammable fluids. Automatic switch-off in the event of high temperature or low liquid level.



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.



Multi-lingual.
Operation in multiple languages.



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



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 control of the dynamic, access to all important control parameters for individual process optimization.



Stable. Mobile.



Energy-saving.

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



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.



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.



Wide range.

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



Condensation protection.

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



Connection. Easy.

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



Highest measuring accuracy

'Absolute Temperature Calibration' for manual compensation of a temperature difference, 10-point calibration



100% Checked.

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



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.