



Product data sheet

MAGIO MX-1800F Refrigerated / heating circulator

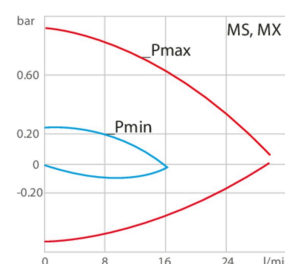
Our most powerful laboratory circulators with the highest cooling and heating capacity

High resolution TFT touch display

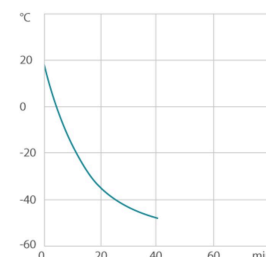
The modern TFT touch display gives you all the important information at a glance. Three large, predefined main screens clearly display data and graphics with various application priorities. Menu navigation is self-explanatory, arranged by relevance to daily operations and easy to operate with the touch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



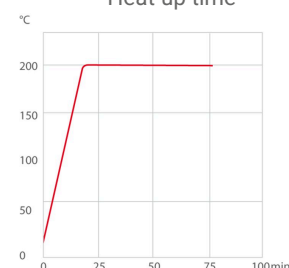
Pump capacity Medium: Water



Cool-down time



Heat-up time



Product Features

- Modbus TCP/IP
- USB connection
- Class III (FL) according to DIN 12876-1
- RS232 interface for online communication
- Integrated programmer
- Integrated external Pt100 connection
- Ethernet
- analog interfaces (accessory)

Performance values

200V/60Hz (Multiple Plugs (EU / US))

Heating capacity kW	2.3
Viscosity max. cSt	70
Pump capacity flow pressure l/min	16 ... 31
Pump capacity pressure psi	3.5 ... 10.2
Maximum suction psi	-0.4 ... -5.8
Power consumption A	12
Voltage Tolerance %	200V ±10

Order number including voltage version (200V/60Hz)

9033751.N1.33

Cooling capacity 1 (Ethanol)

°C	20	0	-20	-30	-40
kW ¹	1.87	1.57	0.77	0.47	0.3

Cooling capacity 2 (Ethanol)

°C	20	0	-20	-30	-40
kW ¹	1.8	1.5	0.7	0.4	0.23

Note about natural refrigerants:

Temperature control units using natural refrigerants are often subject to regulatory requirements regarding the installation site, operation, transport or disposal of the units. If you have any questions, we will be happy to advise you.

Refrigerant stage 1

Refrigerant R1270

Filling weight g 99

Global Warming Potential for R1270 2

Carbon dioxide equivalent t 0.000198

¹ Performance specifications measured in accordance with DIN 12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids. Cooling capacity 1 = capacity at minimum pump level, cooling capacity 2 = capacity at maximum pump level

Technical data

Available voltage versions

Order No. 9033751

Available voltage versions:

9033751.N1.33.chn 200-230V 50/60Hz (CN Plug) (R1270)

9033751.N1.33 200-230V 50/60Hz (Multiple Plugs (EU / US)) (R1270)

9033751.N1.04 200-230V 50/60Hz (UK Plug Type BS1363A) (R1270)

Cooling

Cooling of compressor 1-stage Air

Bath

Bath tank Stainless steel

Bath cover integrated

Usable bath opening in. (W x L / D) 7.1 x 5.1 / 7.9

Electronics

Interfaces Ethernet, Modbus TCP/IP, RS232, RS485, Stakej, 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

Electronic Timer h:min 00:00 ... 99:59

Dimensions and volumes

Weight lbs 134.5

Total dimensions in. (W x L x H) 15.7 x 19.7 x 35

Filling volume l 6.5 ... 11

Pump connections M16x1 male

Temperature values

Setting the resolution of the temperature display °C 0.01

Working temperature range °C -50 ... +200

Temperature stability °C ±0.01

Ambient temperature °C +5 ... +40

Temperature display resolution °C 0.01

Other

Classification Classification III (FL)

IP Code IP 20

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

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 (M16×1) 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

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.EN-US9033751/250730