ME-12 Heating Circulator

The advanced all-rounder with a Pt100 external sensor connection

JULABO Refrigerated and Heating Circulators are suitable for temperature application to external systems with simultaneous operation in the bath tank. Models in different performance classes are available. The units provide high heating/cooling capacities to ensure rapid heat-up and cool-down times. With ‚Active Cooling Control' to +200 °C (not on ED models). ‚FP' models offer proportional cooling control to ensure energy-saving performance and to reduce heat generation to the environment. Convenient cleaning of dust by removable venting grid. Some models have a handle or castors to allow easy transport. All models provide a drain port on the front for conveniently draining the bath fluid. Typical applications: Temperature applications to external, closed systems, such as for example photometers, refractometers, viscometers, etc. For simultaneous application to small objects in the circulator bath.



Your advantages

- VFD COMFORT DISPLAY
- Keypad for setpoints, warning/safety values and menu functions
- PID3 cascade temperature control
- ATC3 3-Point-Calibration
- Pt100 External sensor connection for measurement and control
- SMART PUMP, electronically adjustable pump stages
- Early warning system for low liquid level (DBGM 203 06 059.8)
- Adjustable high temperature cut-out, visible via display
- RS232 interface for online communication
- Integrated programmer for 10 program steps
- Active Cooling Control

Technical Data

Order No.	9162512
Model series	TopTech
Category	Heating Circulators
Working temperature range (°C)	20 ... 200
Temperature stability (°C)	±0.01
Setting / display resolution	0.01 °C
Integrated programmer	1x10 steps
Temperature Display	VFD
Heating capacity (kW)	1
Pump capacity flow rate (l/min)	11-16

Pump capacity flow pressure (psi)	3.3-6.5
Bath opening / bath depth (W x L / D inch)	8.7 x 5.9 x 7.9
Pump connections	M10x1
Barbed fittings diameter (inner dia. / mm)	8 / 10
Filling volume liters	12
External Pt100 sensor connection	integrated
Digital interface	RS232 Optional Profibus
Ambient temperature	5...40 °C
Dimensions W x L x H (inch)	11.8 x 16.9 x 17.7
Weight (LBS)	28.6
Classification according to DIN12876-1	Classification III (FL)according to DIN 12876-1
Description	Built-in cooling coil for tap water connection for temperature applications below or near ambient temperatures are integrated.
Included with each unit	2 each barbed fittings for tubing 8 and 10 mm inner dia. (pump connections M10x1 female).
Cooling coil	integrated
Bath tank	Stainless steel

Available voltage versions

230 V / 50-60 Hz
100-115 V / 50-60 Hz

Characteristics



A perfect view
Ample, easy to read VFD Comfort display for simultaneous display of 3 values, warning functions, high temperature cut-off, pump stages (resolution 0.01 °C)



Pump stage and liquid level
Backlit indicator for selected pump stages and filling volume on Presto® PLUS, Magnum 91 & Forte HT



Comfortable and detailed
Comfortable keypad with additional menu functions for pump stages, calibration, control parameters, programmer, warnings, etc.



For higher demands
PID Temperature control with drift compensation and adjustable parameters, improved temperature stability for external applications, temperature stability ±0.01 °C internal, <±0.1 °C external

Highest measuring accuracy

Clever pump system



‘**A**bsolute **T**emperature **C**alibration’ for manual compensation of a temperature difference, 3-point calibration



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



Serial connection
RS232 interface for PC connection, e.g. for data communication and recording of measured values



Easy program control
Integrated programmer for the execution of time and temperature dependant profiles, 1 temperature profile with 10 steps max., with real time clock



Consistent cooling capacity
Easily removable venting grid for quick and easy cleaning

Other characteristics

For temperature applications near or below ambient temperature: use a cooling coil or JULABO immersion cooler. Low tap water consumption using the MVS controller and solenoid valve (accessories).

Technical changes without prior notification.
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