

F33-EH Refrigerated/Heating Circulator

The first choice for routine and straightforward laboratory applications.

JULABO Refrigerated & Heating Circulators for heating and cooling are suitable for external temperature tasks and for temperature applications directly in the bath. A model from three different series' with different capacities can be selected. Powerful circulating pump systems and high heating and cooling capacities guarantee short heat-up and cool-down times. The inevitable dust accumulation that occurs in refrigeration systems is solved by means of an easily removed venting grill, which allows for easy cleaning. Depending on the model, the units are equipped with handles or castors for an easy transportation. All models have a drain screw on the front allowing the fluid to be drained easily. The compact assembly of each unit enables a space to be saved in the laboratory.



Made  in Germany 

Your advantages

- Bright LED temperature display, resolution 0.1 °C
- Keypad for setpoint, switches automatically to the actual value
- PID1 temperature control
- Adjustable high temperature cut-out
- Low liquid level protection
- ATC 1-point calibration
- Timer function


Technical Data

Order No.	9118633		
Model series	Economy		
Category	Refrigerated - Heating Circulators		
Working temperature range (°C)	-30 ... +150		
Temperature control	PID		
Temperature stability (°C)	±0.03		
Setting / display resolution	0.1 °C		
Temperature Display	LED		
Heating capacity (kW)	1		
Cooling capacity (Medium Ethanol)	°C	20	0 -20
	kW	0.5	0.32 0.12
Pump capacity flow rate (l/min)	15		
Pump capacity flow pressure (psi)	5.1		
Bath opening / bath depth (W x L / D inch)	9.1 x 5.5 / 7.9		
Pump connections	M10x1		
Barbed fittings diameter (inner dia. / mm)	8 / 10		
Filling volume liters	16		
Refrigerant	R134a		
Ambient temperature	5...40 °C		
Dimensions W x L x H (inch)	14.2 x 18.1 x 27.2		
Weight (LBS)	95		


Classification according to DIN12876-1	Classification III (FL)
Included with each unit	2 barbed fittings suitable for tubing 8 and 10 mm inner dia. (pump connections M10x1 female)
Cooling of compressor	Air
Power requirement V / Hz / A	115/60/15
Available voltage versions	230 V / 50 Hz 115 V / 60 Hz 230 V / 60 Hz

Characteristics


Display

 **Easy to read**
Large LED temperature display for actual value and setpoint (resolution 0.1 °C)


Technical Features

 **Automatic control of operating time**
Electronic countdown-timer function for timer-programmed unit shut-down, standby mode after programmed time expires


Operation


 **Clear and simple**
3-key operation for easy setpoint adjustment


Warning & Safety Functions

 **Protective functions**
Adjustable high temperature cut-off or dry-running protection


Temperature Control


 **Precise**
PID Temperature control with set control parameters, temperature stability $\pm 0.02 \dots \pm 0.2$ °C

 **For flammable bath fluids**
Classification III (FL) according to DIN 12876-1

 **High measuring accuracy**
'Absolute Temperature C alibration' for manual compensation of a temperature difference, 1-point calibration

Refrigeration Technology

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

 **100 % Cooling capacity**
'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures