

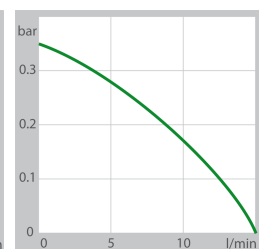
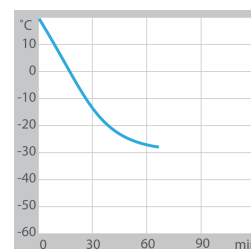
## F25-ED Refrigerated/Heating Circulator

### The Base for routine 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.

### 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 / dry-running protection



- Cool-down time (Ethanol)
- Pump capacity (H2O)

### Technical Data

Order No.	9116625		
Model series	Economy		
Category	Refrigerated - Heating Circulators		
Working temperature range (°C)	-28 ... +100		
Temperature stability (°C)	±0.03		
Setting / display resolution	0.1 °C		
Temperature Display	LED		
Heating capacity (kW)	2		
Cooling capacity (Medium Ethanol)	°C	20	0 -20
	kW	0.26	0.2 0.06
Pump capacity flow rate (l/min)	15		
Pump capacity flow pressure (bar)	0.35		

Barbed fittings diameter (inner dia. / mm)	8 / 10
Filling volume liters	4.5
Refrigerant	R134a
Ambient temperature	5...40 °C
Dimensions W x L x H (cm)	23 x 42 x 68
Weight (kg)	30
Classification according to DIN12876-1	Classification I (NFL)
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	230/50/12
Available voltage versions	230V / 50Hz 115V / 60Hz 100V / 50-60Hz 230V / 60Hz

## Characteristics

### Display



#### Easy to read

Large LED temperature display for actual value and setpoint (resolution 0.1 °C)

### Operation



#### Clear and simple

3-key operation for easy setpoint adjustment

### Temperature Control



#### Precise

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

### 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

### Warning & Safety Functions



#### Protective functions

Adjustable high temperature cut-off or dry-running protection



#### Only for non-flammable bath fluids

Classification I (NFL) according to DIN 12876-1