

## FL2503 Powerful model in tower version

The FL models shown here have higher cooling capacity, powerful circulating pumps, and internal bath volumes of up to 30 liters. 2 variants: Air-cooled (FL) and water-cooled (FLW).



### Your advantages

- Ergonomic design and easy operation
- Splash-proof keypad
- Large, bright LED display
- Reliable Microprocessor PID temperature control
- Precise PID temperature control
- Powerful immersion pumps, suitable for continuous operation
- Permissible temperature in return line +80°C
- Easy filling from the top with hinged protective lid
- Low liquid level protection with optical and audible alarm signal
- Integrated stainless steel bath tanks
- Removable ventilation grid
- Front drain
- No side vents, instruments can be placed right next to other equipment
- RS232 interface for PC connection
- IP class according to IEC 60529: 21
- Alarm output, potential-free change-over contact (max. 30 VA)
- Pressure Indicator
- By-pass valve to adjust pump pressure

### Technical data

<b>Available voltage versions</b>		<b>Bath</b>	
Order No.	9 663 025	Bath tank	Stainless steel
Available voltage versions:			
9 663 025.13	230V/60Hz (Nema N6-20 Plug)		
9 663 025.03	230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)		
9 663 025.04	230V/50Hz (UK Plug Type BS1363A)		
<b>Cooling</b>		<b>Other</b>	
Cooling of compressor	1-stage Air	Sound pressure level dbA	64
		Classification	Classification I (NFL)
		IP Code	IP 21
		Pump type	Immersion Pump
<b>Electronics</b>		<b>Dimensions and volumes</b>	
Temperature control	PID1	Weight lbs	321.9
Temperature display	LED	Barbed fittings inner diameter	3/4"
Temperature setting	Keypad	Dimensions in. (W x L x H)	23.6 x 29.9 x 45.3
		Filling volume l	24 ... 30
		Pump connections	G3/4" male
<b>Temperature values</b>			
Setting the resolution of the temperature display °C	0.1		
Return flow temperature max. °C	80		
Working temperature range °C	-20 ... +40		
Temperature stability °C	±0.5		

Ambient temperature °C 5 ... 40

Temperature display resolution °C 0.1

**Performance values**

**230V/60Hz (Nema N6-20 Plug)**

**208V/60Hz**

Cooling capacity (Water Glycol)

°C	20	10	0	-10	-20
kW	2.5	2.2	1.5	1.2	0.5

Refrigerant R449A

Filling volume g 1400

Global Warming Potential for R449A 1397

Carbon dioxide equivalent t 1.956

Pump capacity flow rate l/min 40

Pump capacity flow pressure psi 7.3 ... 43.5

**230V/60Hz**

Cooling capacity (Water Glycol)

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**230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)**

**230V/50Hz**

Cooling capacity (Water Glycol)

°C	20	10	0	-10	-20
kW	2.5	2.2	1.5	1.2	0.55

Refrigerant R452A

Filling volume g 1510

Global Warming Potential for R452A 2140

Carbon dioxide equivalent t 3.231

Pump capacity flow rate l/min 40

Pump capacity flow pressure psi 7.3 ... 43.5

**230V/50Hz (UK Plug Type BS1363A)**

**230V/50Hz**

Cooling capacity (Water Glycol)

°C	20	10	0	-10	-20
kW	2.5	2.2	1.5	1.2	0.55

Refrigerant R452A

Filling volume g 1510

Global Warming Potential for R452A 2140

Carbon dioxide equivalent t 3.231

Pump capacity flow rate l/min 40

Pump capacity flow pressure psi 7.3 ... 43.5

## All Benefits



**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](http://www.julabo.com).



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