

# FLW2503 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).

# **Optional heating function**

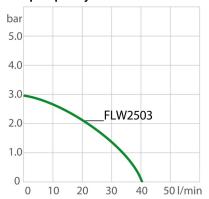
On request, we also offer our FL recirculating chillers with an additional integrated heating function and other special solutions. Our product experts will be happy to advise you individually in order to design a temperature control unit that is exactly right for your needs. Just give us a call!



## **Product features**

- 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
- 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

# **Pump capacity**



Medium: Water



# Performance values

230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)			
Pump capacity flow rate I/min	40		
Pump capacity flow pressure bar	0.5 3		
Power consumption A	12		

Order No.	9673025.03				
Cooling capacity (Ethanol)					
°C	20	10	0	-10	-20
kW <sup>1</sup>	2.7	2.5	1.7	1	0.4
Refrigerant stage 1					
Refrigerant	R452A				
Filling weight g	940				
Global Warming Potential for R452A	2140				
Carbon dioxide equivalent t	2.0116				

<sup>&</sup>lt;sup>1</sup> 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.

# **Technical data**

Available voltage	versions		Cooling	
Order No.	9 673 025		Cooling of compressor	1-stage Water
Available voltage versi	ons:		Cooling water pressure max. bar	6
9673025.03 230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F) (R452A)		Recommended cooling water properties		
9673025.04 230V/50Hz (UK Plug Ty (R452A)	1 Tyne RS1363Δ)	Cooling water temperature range °C	20	
	.g 1)pe 201000/.j	Cooling water difference pressure bar	2	
9673025.13	230V/60Hz (Nema	N6-20 Plug) (R404A)	Cooling water consumption I/min	4.1
Bath			Other	
Bath tank	Stainless steel	Sound pressure level dbA	61	
		Classification	Classification I (NFL)	
			IP Code	IP 21
		Pump type	Immersion Pump	
Electronics			Dimensions and volumes	
Interfaces Alarm output, RS232,	Weight kg	143		
	Stakei		0 1: 14: 0 :: :	
			Cooling Water Connection in	G¾
Temperature control		PID1	Barbed fittings inner diameter mm	G <sup>3</sup> ⁄ <sub>4</sub>
Temperature display		LED	•	
•			Barbed fittings inner diameter mm	3⁄4"
Temperature display		LED	Barbed fittings inner diameter mm  Dimensions cm (W × L × H)	3 <sub>4</sub> " 60 x 76 x 115
Temperature display	es	LED	Barbed fittings inner diameter mm  Dimensions cm (W × L × H)  Filling volume I	<sup>3</sup> / <sub>4</sub> " 60 x 76 x 115 24 30



Return flow temperature max. °C	80
Working temperature range °C	-20 +40
Temperature stability °C	±0.5
Ambient temperature °C	+5 +40
Setting the resolution of the temperature display °C	0.1

2 barbed fittings for tubing 3/4" inner dia. (pump connections 63/4" male). Cooling water connection 63/4" male with barbed fittings for tubing 1/2" inner dia.

# **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.



## Precise

PID Temperature control with set control parameters, temperature stability ±0.02...±0.2 °C



## Connection of additional equipment Stakei connections for solenoid valve