# Julabo

# FLW1703 Recirculating Coolers for installation below a lab bench

The compact FL models are suited for a wide variety of cooling tasks. Installation under a lab bench saves valuable space. 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
- · Powerful immersion pumps, suitable for continuous operation
- Permissible temperature in return line +80°C
- Easy filling and Drain tap easily accessible
- · 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)

#### **Technical data**

Available volta	age versions		Bath				
Order No.	9 673 017		Bath tank	Stainless steel			
Available voltage	versions:						
9 673 017.03	230V/50Hz (Schuko P Type F)	lug - CEE 7/4 Plug					
9 673 017.04	230V/50Hz (UK Plug T	ype BS1363A)					
9 673 017.13	230V/60Hz (Schuko P Type F)	lug - CEE 7/4 Plug					
Cooling			Other				
Cooling of compr	essor	1-stage Water	Sound pressure level dbA	60			
Cooling water pre	essure max. bar	87	Classification	Classification I (NFL)			
Cooling water diff	ference pressure psi	29 87	IP Code	IP 21			
1.0Cooling water	consumption l/min	2.8	Pump type	Centrifugal Pump			
Electronics			Dimensions and volumes				
Temperature cont	trol	PID1	Weight Ibs 194				
Temperature disp	layTemperature display	LED	Cooling Water Connection in G <sup>3</sup> / <sub>4</sub>				
Temperature settingTemperature setting Keypad			Barbed fittings inner diameter 3/4"				
			Dimensions in. (W $\times$ L $\times$ H)	19.7 x 29.9 x 25.2			

Filling volume I

Pump connections

Temperature values								
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							



12 ... 17 G¾" male



Ambient temperature °C	5 40
Temperature display resolution °C	0.1

### Performance values

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

#### 230V/50Hz

Cooling capacity (Water Glycol)										
°C	20	10	0	-10	-20					
kW	1.7	1.4	1	0.75	0.3					
Refrig	Refrigerant R452A									
Filling volume g 320										
Global	2140									
Carbo	n dioxi	de equ	0.685							
Pump	capac	ity flov	40							
Pump capacity flow pressure psi 7.3 43.5										

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230V/50Hz									
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kW	1.7 1.4 1 0.75 0.3								
Refrigerant R452A									
Filling volume g 320									
Global Warming Potential for R452A 2140									
Carbon dioxide equivalent t 0.685									
Pump capacity flow rate I/min 40									
Pump capacity flow pressure psi 7.3 43.5									

## 230V/60Hz (Schuko Plug - CEE 7/4 Plug Type F)

208V/60Hz					230\	230V/60Hz							
Cooling capacity (Water Glycol)					Coolii	Cooling capacity (Water Glycol)							
°C	20	10	0	-10	-20		°C	20	10	0	-10	-20	
kW	1.7	1.4	1	0.75	0.3		kW	1.7	1.4	1	0.75	0.3	
Refrigerant R404					R404A	Refrig	erant		R404A				
Filling volume g 320						320	Filling	Filling volume g					320
Global Warming Potential for R404A					104A	3922	Globa	l Warm	ning Po	3922			
Carbon dioxide equivalent t 1					1.255	Carbo	n diox	ide equ	1.255				
Pump capacity flow rate l/min 40					40	Pump	Pump capacity flow rate l/min					40	
Pump capacity flow pressure psi					si	7.3 43.5	Pump	Pump capacity flow pressure psi					7.3 43.5



#### All Benefits



## Precise

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



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worldwide guarantee fast and qualified JULABO support.



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