

## FL1701 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

<b>Available voltage versions</b>		<b>Bath</b>	
Order No.	9 661 017	Bath tank	Stainless steel
<b>Available voltage versions:</b>			
9 661 017.03	230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)		
9 661 017.04	230V/50Hz (UK Plug Type BS1363A)		
9 661 017.02	115V/60Hz (Nema N5-20 Plug)		
9 661 017.13	230V/60Hz (Schuko Plug - CEE 7/4 Plug Type F)		
<b>Cooling</b>		<b>Other</b>	
Cooling of compressor	1-stage Air	Sound pressure level dbA	62
		Classification	Classification I (NFL)
		IP Code	IP 21
		Pump type	Centrifugal Pump
<b>Electronics</b>		<b>Dimensions and volumes</b>	
Temperature control	PID1	Weight kg	78
Temperature display	LED	Barbed fittings inner diameter	8/12 mm
Temperature setting	Keypad	Dimensions cm (W × L × H)	50 x 76 x 64
		Filling volume l	12 ... 17
		Pump connections	M16x1 male
<b>Temperature values</b>			
Setting the resolution of the temperature display °C	0.1		
Return flow temperature max. °C	80		
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	1.5	1.1	0.85	0.4
Refrigerant	R452A				
Filling volume g	570				
Global Warming Potential for R452A	2140				
Carbon dioxide equivalent t	1.22				
Pump capacity flow rate l/min	23				
Pump capacity flow pressure bar	1				

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

230V/50Hz					
Cooling capacity (Water Glycol)					
°C	20	10	0	-10	-20
kW	1.7	1.5	1.1	0.85	0.4
Refrigerant	R452A				
Filling volume g	570				
Global Warming Potential for R452A	2140				
Carbon dioxide equivalent t	1.22				
Pump capacity flow rate l/min	23				
Pump capacity flow pressure bar	1				

**115V/60Hz (Nema N5-20 Plug)**

115V/60Hz					
Cooling capacity (Water Glycol)					
°C	20	10	0	-10	-20
kW	1.7	1.4	1.1	0.8	0.35
Refrigerant	R449A				
Filling volume g	560				
Global Warming Potential for R449A	1397				
Carbon dioxide equivalent t	0.782				
Pump capacity flow rate l/min	23				
Pump capacity flow pressure bar	1				

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

208V/60Hz					
Cooling capacity					
°C	20	10	0	-10	-20
kW	1.7	1.6	1.1	0.8	0.35
Refrigerant	R449A				

230V/60Hz					
Cooling capacity					
°C	20	10	0	-10	-20
kW	1.7	1.6	1.1	0.8	0.35
Refrigerant	R449A				

Filling volume g	550	Filling volume g	550
Global Warming Potential for R449A	1397	Global Warming Potential for R449A	1397
Carbon dioxide equivalent t	0.768	Carbon dioxide equivalent t	0.768
Pump capacity flow rate l/min	23	Pump capacity flow rate l/min	23
Pump capacity flow pressure bar	1	Pump capacity flow pressure bar	1

## Benefits



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



**JULABO. Quality.**  
Highest standards of quality for a long product life.



**Green technology.**  
Development consistently applied environmentally friendly materials and technologies.



**Satisfied customers.**  
11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.



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**Services 24/7.**  
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