

# FL1201 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
- 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**

Ambient temperature °C

Available voltage versions		Bath	
Order No. 9 661 012		Bath tank	Stainless steel
Available voltage versions:			
9 661 012.02			
9 661 012.03			
9 661 012.04			
9 661 012.05			
9 661 012.13			
Cooling		Other	
Cooling of compressor	1-stage Air	Sound pressure level dbA	61
		Classification	Classification I (NFL)
		IP Code	IP 21
		Pump type	Centrifugal Pump
Electronics		Dimensions and volumes	
Temperature control	PID1	Weight Ibs	172
Temperature displayTemperature display	LED	Barbed fittings inner diameter	8/12 mm
Temperature settingTemperature setting	Keypad	Dimensions in. (W $\times$ L $\times$ H)	19.7 x 29.9 x 25.2
		Filling volume l	12 17
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		

5 ... 40





## Performance values

Array				
Cooling capacity				
°C 20 10 0	-10	-20		
kW 1.2 1 0.9		0.3		
Refrigerant			R449A	
Filling volume g			585	
Global Warming Potenti	al for R4	149A	1397	
Carbon dioxide equivale			0.817	
Pump capacity flow pre		ar	14.5	
Array				
Cooling capacity (Water				
°C 20 10 0	-10	-20		
kW 1.2 1 0.9	0.6	0.3		
Refrigerant			R449A	
Filling volume g			570	
Global Warming Potenti		149A	1397	
Carbon dioxide equivale			0.796	
Pump capacity flow pre	ssure ba	ar	14.5	
Array				
Cooling capacity (Water	r Glycol)			
°C 20 10 0	-10	-20		
kW 1.2 1 0.9	0.6	0.3		
Refrigerant			R449A	
Filling volume g	570			
Global Warming Potenti	1397			
Carbon dioxide equivale	0.796			
Pump capacity flow pre	14.5			
Array				
Cooling capacity (Water	Glycol)			
°C 20 10 0	-10	-20		
kW 1.2 1 0.9	0.6	0.3		
Refrigerant			R449A	
Filling volume g			570	
Global Warming Potenti	1397			
Carbon dioxide equivalent t			0.796	
Pump capacity flow pressure bar			14.5	
Array				
Cooling capacity (Water Glycol)				
°C 20 10 0	-10	-20		
kW 1.2 1 0.9	0.6	0.3		
Refrigerant			R449A	
Filling volume g			570	
-				

Array	/					
Cooling capacity						
°C	20	10	0	-10	-20	
kW	1.2	1	0.9	0.6	0.3	
Refrigerant R449A						
Filling volume g					570	



Global Warming Potential for R449A	1397	Global Warming Potential for R449A	1397
Carbon dioxide equivalent t	0.796	Carbon dioxide equivalent t	0.796
Pump capacity flow pressure bar	14.5	Pump capacity flow pressure bar	14.5

## All Benefits



#### 100% Checked.

100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.



#### JULABO. Quality.

Highest standards of quality for a long product life.



# Satisfied customers.

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



# Precise

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



#### Green technology.

Development consistently applied environmentally friendly materials and technologies.



#### Quick start.

Individual JULABO consultation and comprehensive manuals at your disposal.

### Services 24/7.

Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.