

## FL300 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.	9 660 003	Bath tank	Stainless steel
<b>Available voltage versions:</b>			
9 660 003.01	100V/50-60Hz (Nema N5-15 Plug)		
9 660 003.13	230V/60Hz (Schuko Plug - CEE 7/4 Plug Type F)		
9 660 003.02	115V/60Hz (Nema N5-15 Plug)		
9 660 003.03	230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)		
9 660 003.04	230V/50Hz (UK Plug Type BS1363A)		
9 660 003.05	230V/50Hz (CH Plug Type SEV 1011)		
<b>Cooling</b>		<b>Other</b>	
Cooling of compressor	1-stage Air	Sound pressure level dbA	55
		Classification	Classification I (NFL)
		IP Code	IP 21
		Pump type	Centrifugal Pump
<b>Electronics</b>		<b>Dimensions and volumes</b>	
Temperature control	PID1	Weight lbs	77.2
Temperature display	LED	Barbed fittings inner diameter	8/12 mm
Temperature setting	Keypad	Dimensions in. (W × L × H)	9.8 x 19.7 x 23.6
		Filling volume l	3 ... 4.5
		Pump connections	M16x1 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**

**100V/50-60Hz (Nema N5-15 Plug)**

100V/50Hz	
Cooling capacity (Water Glycol)	
°C	20 10 0 -10 -20
kW	0.3 0.25 0.2 0.15 0.1
Refrigerant	R134a
Filling volume g	140
Global Warming Potential for R134a	1430
Carbon dioxide equivalent t	0.2
Pump capacity flow rate l/min	15
Pump capacity flow pressure bar	5.1

100V/60Hz	
Cooling capacity (Water Glycol)	
°C	20 10 0 -10 -20
kW	0.3 0.25 0.2 0.15 0.1
Refrigerant	R134a
Filling volume g	140
Global Warming Potential for R134a	1430
Carbon dioxide equivalent t	0.2
Pump capacity flow rate l/min	15
Pump capacity flow pressure bar	5.1

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

220V/60Hz	
Cooling capacity (Water Glycol)	
°C	20 10 0 -10 -20
kW	0.3 0.25 0.2 0.15 0.1
Refrigerant	R134a
Filling volume g	160
Global Warming Potential for R134a	1430
Carbon dioxide equivalent t	0.229
Pump capacity flow rate l/min	15
Pump capacity flow pressure bar	5.1

**115V/60Hz (Nema N5-15 Plug)**

115V/60Hz	
Cooling capacity (Water Glycol)	
°C	20 10 0 -10 -20
kW	0.3 0.25 0.2 0.15 0.1
Refrigerant	R134a
Filling volume g	155
Global Warming Potential for R134a	1430
Carbon dioxide equivalent t	0.222
Pump capacity flow rate l/min	15
Pump capacity flow pressure bar	5.1

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

## 230V/50Hz

Cooling capacity (Water Glycol)

°C	20	10	0	-10	-20
kW	0.3	0.25	0.2	0.15	0.1

Refrigerant R134a

Filling volume g 133

Global Warming Potential for R134a 1430

Carbon dioxide equivalent t 0.19

Pump capacity flow rate l/min 15

Pump capacity flow pressure bar 5.1

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

## 230V/50Hz

Cooling capacity (Water Glycol)

°C	20	10	0	-10	-20
kW	0.3	0.25	0.2	0.15	0.1

Refrigerant R134a

Filling volume g 133

Global Warming Potential for R134a 1430

Carbon dioxide equivalent t 0.19

Pump capacity flow rate l/min 15

Pump capacity flow pressure bar 5.1

## 230V/50Hz (CH Plug Type SEV 1011)

## 230V/50Hz

Cooling capacity (Water Glycol)

°C	20	10	0	-10	-20
kW	0.3	0.25	0.2	0.15	0.1

Refrigerant R134a

Filling volume g 133

Global Warming Potential for R134a 1430

Carbon dioxide equivalent t 0.19

Pump capacity flow rate l/min 15

Pump capacity flow pressure bar 5.1

## All Benefits



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



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