

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

| | | | |
|--|---|--------------------------------|------------------------|
| Available voltage versions | | Bath | |
| Order No. | 9 661 017 | Bath tank | Stainless steel |
| Available voltage versions: | | | |
| 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) | | |
| Cooling | | Other | |
| Cooling of compressor | 1-stage Air | Sound pressure level dbA | 62 |
| | | Classification | Classification I (NFL) |
| | | IP Code | IP 21 |
| | | Pump type | Centrifugal Pump |
| Electronics | | Dimensions and volumes | |
| 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 |
| 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 | | |

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 | 1.5 | 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

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

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

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 $\pm 0.02 \dots \pm 0.2$ °C