

FL4003 Powerful model in tower version

The FL models shown here have higher cooling capacity, powerful circulating pumps, and internal bath volumes of up to 30 liters. 2 variants: Air-cooled (FL) and water-cooled (FLW).

Optional heating function

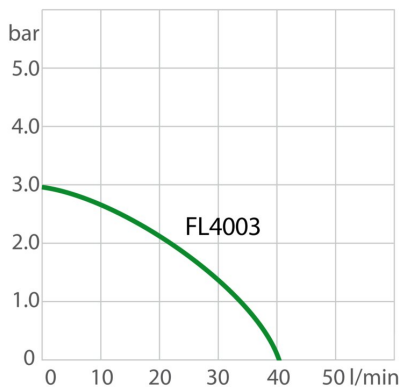
On request, we also offer our FL recirculating chillers with an additional integrated heating function and other special solutions. Our product experts will be happy to advise you individually in order to design a temperature control unit that is exactly right for your needs. Just give us a call!



Product features

- Ergonomic design and easy operation
- Splash-proof keypad
- Large, bright LED display
- Reliable Microprocessor PID temperature control
- Precise PID temperature control
- Powerful immersion pumps, suitable for continuous operation
- Permissible temperature in return line +80°C
- Easy filling from the top with hinged protective lid
- 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)
- Pressure Indicator

Pump capacity



Medium: Water

Performance values

400V/3PNPE/50Hz (Plug 16A CEE)

Pump capacity flow rate l/min	40
Pump capacity flow pressure bar	0.5 ... 3
Power consumption A	8

Order No. 9663040.07

Cooling capacity (Ethanol)

°C	20	10	0	-10	-20
kW ¹	4	3.4	2.4	1.5	0.65

Refrigerant stage 1

Refrigerant	R452A
Filling weight g	2220
Global Warming Potential for R452A	2140
Carbon dioxide equivalent t	4.7508

¹ Performance specifications measured in accordance with DIN 12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids.

Technical data

Available voltage versions

Order No. 9 663 040

Available voltage versions:

9663040.16	230V/3PPE/60Hz (Without Plug) (R449A)
9663040.07	400V/3PNPE/50Hz (Plug 16A CEE) (R452A)

Cooling

Cooling of compressor 1-stage Air

Bath

Bath tank Stainless steel

Other

Sound pressure level dbA	67
Classification	Classification I (NFL)
IP Code	IP 21
Pump type	Immersion Pump

Electronics

Interfaces	Alarm output, RS232, Stakei
Temperature control	PID1
Temperature display	LED
Temperature setting	Keypad

Dimensions and volumes

Weight kg	148
Barbed fittings inner diameter mm	¾"
Dimensions cm (W × L × H)	60 x 76 x 115
Filling volume l	24 ... 30
Pump connections	G¾" 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
Setting the resolution of the temperature display °C	0.1

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



Connection of additional equipment
Stakei connections for solenoid valve