

CF40 Cryo-Compact Circulator

The Cryo-Compact Circulators of the CF Series provide powerful cooling and heating capabilities in a space-saving, compact design. The instruments feature 2 kW heating capacity and classification III according to DIN 12876-1. The Cryo-Compact Circulators have pump connections for external temperature control applications and a bath opening for temperature control of small objects.

Product features

- Ergonomic design and easy operation
- Small overall dimensions for lowest space requirement
- Splash-proof keypad
- Large, bright LED display
- Precise PID temperature control
- RS232 interface for PC connection
- Adjustable high temperature cut-out, visible via display
- Pump connections for external temperature applications
- Bath opening for temperature control of small objects in the bath
- Front drain
- Extra bright displays, easy to read from a distance
- Precise temperature control
- Unique early warning system for low liquid level
- ATC3 3-Point-Calibration
- Class III (FL) according to DIN 12876-1



Performance values

230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)	
Heating capacity kW	2
Viscosity max. cSt	30
Pump capacity flow rate l/min	15
Pump capacity flow pressure psi	5.1
Power consumption A	12

Order No. 9400340.03

Cooling capacity (Ethanol)

°C	20	0	-20	-30
kW ¹	0.47	0.4	0.28	0.12

Refrigerant stage 1

Refrigerant	R452A
Filling weight g	170
Global Warming Potential for R452A	2140
Carbon dioxide equivalent t	0.3638

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. 9 400 340

Available voltage versions:

9400340.13	230V/60Hz (Nema N6-20 Plug) (R449A)
9400340.02	115V/60Hz (Nema N5-15 Plug) (R449A)
9400340.03	230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F) (R452A)
9400340.04	230V/50Hz (UK Plug Type BS1363A) (R452A)

Cooling

Cooling of compressor 1-stage Air

Bath

Bath tank	Stainless steel
Bath cover	integrated
Usable bath opening in. (W x L / D)	7.5 x 1.2 / 7.5

Other

Classification	Classification III (FL)
IP Code	IP 21
Pump type	Immersion Pump

Electronics

Temperature control	PID1
Temperature display	LED

Dimensions and volumes

Weight lbs	97
Barbed fittings inner diameter mm	8/12 mm
Dimensions in. (W x L x H)	11 x 18.1 x 18.1
Filling volume l	4 ... 5.5
Pump connections	M16x1 male

Temperature values

Working temperature range °C	-40 ... +150
Temperature stability °C	±0.03
Ambient temperature °C	+5 ... +40
Setting the resolution of the temperature display °C	0.1

Included in delivery

2 Barbed fittings for tubing 8 and 12 mm ID. (Pump connections M16x1 male)

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 $\pm 0.02 \dots \pm 0.2 \text{ } ^\circ\text{C}$