

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 bar	0.35
Power consumption A	12

Order No.	9400340.03			
Cooling capacity (Ethanol)				
°C	20	0	-20	-30
kW	0.47	0.4	0.28	0.12
* 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.				
Refrigerant stage 1				
Refrigerant	R452A			
Filling weight g	170			
Global Warming Potential for R452A	2140			
Carbon dioxide equivalent t	0.364			

Technical data

Available voltage versions		Bath	
Order No.	9 400 340	Bath tank	Stainless steel
Available voltage versions:		Bath cover	integrated
9400340.13	230V/60Hz (Nema N6-20 Plug) (R449A)	Usable bath opening cm (W x L / D)	19 x 3 / 19
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		Other	
Cooling of compressor	1-stage Air	Classification	Classification III (FL)
		IP Code	IP 21
		Pump type	Immersion Pump
Electronics		Dimensions and volumes	
Temperature control	PID1	Weight kg	44
Temperature display	LED	Barbed fittings inner diameter	8/12 mm
		Dimensions cm (W x L x H)	28 x 46 x 46
		Filling volume l	4 ... 5.5
		Pump connections	M16x1 male
Temperature values		Included in delivery	
Working temperature range °C	-40 ... +150	2 Barbed fittings for tubing 8 and 12 mm ID. (Pump connections M16x1 male)	
Temperature stability °C	±0.03		
Ambient temperature °C	+5 ... +40		
Temperature display resolution °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 $\pm 0.02 \dots \pm 0.2 \text{ }^\circ\text{C}$