

## Product data sheet

# CF30 Cryo-compact circulator

The basis for routine work and standard tasks in the laboratory

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

## Performance values

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

Heating capacity kW	2
Viscosity max. cSt	30
Pump capacity flow pressure l/min	15
Pump capacity pressure bar	0.35
Power consumption A	10
Voltage Tolerance %	230V   ±10

Order number including voltage version (230V/50Hz)		9400330.03	
Cooling capacity (Ethanol)			
°C	20	0	-20
kW <sup>1</sup>	0.32	0.25	0.15
Refrigerant stage 1			
Refrigerant		R134a	
Filling weight g		150	
Global Warming Potential for R134a		1430	
Carbon dioxide equivalent t		0.2145	

<sup>1</sup> 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.	9400330
Available voltage versions:	
9400330.13	230V 60Hz (Nema N6-20 Plug) (R134a)
9400330.02	115V 60Hz (Nema N5-20 Plug) (R134a)
9400330.03	230V 50Hz (Schuko Plug - CEE 7/4 Plug Type F) (R134a)
9400330.04	230V 50Hz (UK Plug Type BS1363A) (R134a)

Cooling	
Cooling of compressor	1-stage Air

Bath	
Bath tank	Stainless steel
Bath cover	integrated
Usable bath opening cm (W x L / D)	16 x 3 / 14

Electronics	
Temperature control	PID1
Temperature display	LED

Dimensions and volumes	
Weight kg	35
Barbed fittings inner diameter mm	8/12 mm
Total dimensions cm (W x L x H)	24 x 46 x 40
Filling volume l	2 ... 3.5
Pump connections	M16x1 male

## Temperature values

Working temperature range °C	-30 ... +150
Temperature stability °C	±0.03
Ambient temperature °C	+5 ... +40
Temperature display resolution °C	0.1

## Other

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

## 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](http://www.julabo.com).



### Precise

PID Temperature control with set  
control parameters, temperature  
stability  $\pm 0.02 \dots \pm 0.2 \text{ }^{\circ}\text{C}$

Refer to [www.julabo.com](http://www.julabo.com) for more information regarding the entire JULABO product portfolio. Technical changes without prior notification.  
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