

# Cryo-Compact Circulators at a Glance

## Economy



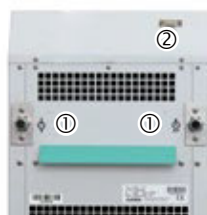
**CF30 / CF40**  
-40 °C ... +150 °C

Basic models for routine and standard applications in the lab



### Rear view

- ① Pump connections
- ② RS232 interface

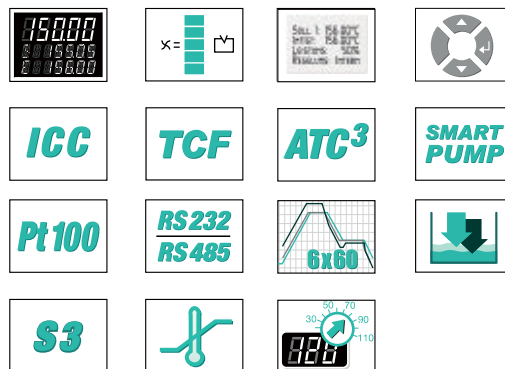


## HighTech



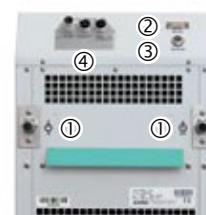
**CF31 / CF41**  
-40 °C ... +200 °C

Superior models for most demanding applications in any environment



### Rear view

- ① Pump connections
- ② RS232/RS485 interface
- ③ Connection for external Pt100 sensor
- ④ Electronic module (Optional)



Please refer to the beginning of the brochure for a description of the icons shown above.



CF30



CF41

### Applications

External temperature control applications, distillation apparatuses and miniplant installations, especially for installations with limited space, e.g. in fume hoods

## Cryo-Compact Circulators

for working temperatures from -40 °C to +200 °C

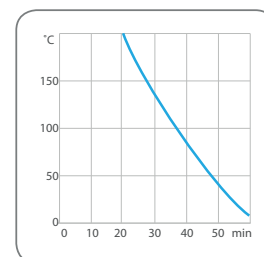
The Cryo-Compact Circulators of the CF Series provide powerful cooling and heating capabilities in a space-saving, compact design. The instruments feature 2 kW heating capacity and classification III according to DIN 12876-1. The Cryo-Compact Circulators have pump connections for external temperature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

### Cryo-Compact Circulators, CF Series

- Extra compact dimensions for space saving installation
- Cooling capacities up to 470 W
- Permissible ambient temperature up to +40 °C
- Splash-proof keypad
- Pump connections for external temperature control applications
- Internal bath to immerse small objects, e.g. temperature sensors

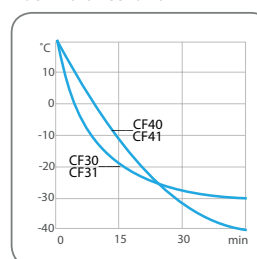
### Heat-up/cool-down time

Bath fluid: thermal



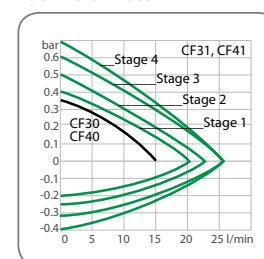
### Cool-down time

Bath fluid: ethanol



### Pump capacity

Bath fluid: water



Order No.	Model	Working temperature range °C	Temp. stab. °C	Heat. cap. kW	Cooling capacity kW (Bath fluid: ethanol)				Pump capacity			Bath opening/ Bath depth W x L / D cm	Fill. vol. liters	Dimensions W x L x H cm
					+20	0	-20	-30 °C	Flow rate / Pressure / Suction	l/min.	bar			
9 400 330	CF30	-30 ... +150	±0.03	2	0.32	0.25	0.15	--	15	0.35	--	16 x 3 / 14	3.5	24 x 46 x 40
9 400 340	CF40	-40 ... +150	±0.03	2	0.47	0.4	0.28	0.12	15	0.35	--	19 x 3 / 19	5.5	28 x 46 x 46
9 400 331	CF31	-30 ... +200	±0.02	2	0.32	0.25	0.15	--	22-26	0.4-0.7	0.2-0.4	16 x 3 / 14	3.5	24 x 46 x 40
9 400 341	CF41	-40 ... +200	±0.02	2	0.47	0.4	0.28	0.12	22-26	0.4-0.7	0.2-0.4	19 x 3 / 19	5.5	28 x 46 x 46

Included in delivery: 2 barbed fittings each for tubing 8 and 12 mm ID (pump connections M16x1 male)