

## CORIO CP-300F Refrigerated / heating circulator

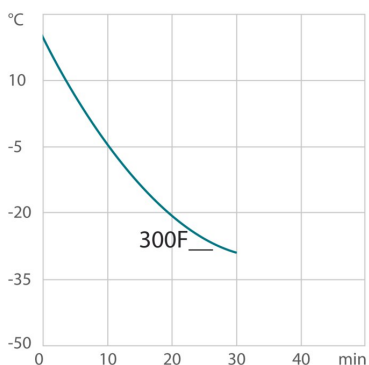
Refrigerated circulators from the CORIO CP range are suitable for applications with a temperature range up to +200°C. The enhanced pump performance ensures they are suitable for easy temperature control tasks in combination with external applications.



### Product features

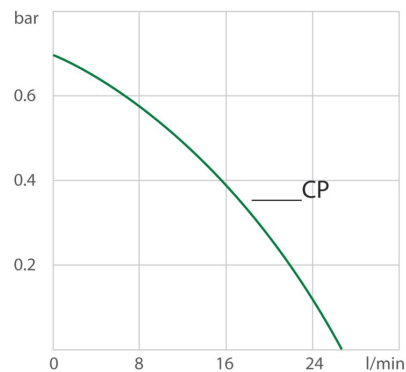
- Models for internal and external applications
- Bright, white, easy to read display
- Very quiet
- powerful and infinitely adjustable pressure pump
- USB connection
- RS232 interface for online communication
- Bath lid and drain tap included
- removable ventilation grid
- Refrigeration unit without side vents
- Class III (FL) according to DIN 12876-1
- easy switching between internal and external circulation
- Integrated pump connection M16×1
- Space-saving cooling coil design yields more usable space in the bath tank
- early warning system for low liquid level

### Cool-down time



Medium: Ethanol

### Pump capacity



Medium: Water

### Performance values

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

Heating capacity kW	2
Viscosity max. cSt	50
Pump capacity flow rate l/min	8 ... 27
Pump capacity flow pressure bar	0.1 ... 0.7
Power consumption A	12

Order No.	9013703.03				
Cooling capacity (Ethanol)					
°C	20	10	0	-10	-20
kW <sup>1</sup>	0.3	0.3	0.27	0.19	0.08
Refrigerant stage 1					
Refrigerant	R134a				
Filling weight g	100				
Global Warming Potential for R134a	1430				
Carbon dioxide equivalent t	0.143				

<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

<b>Available voltage versions</b>		<b>Cooling</b>	
Order No.	9 013 703	Cooling of compressor	1-stage Air
Available voltage versions:			
9013703.01	100V/50-60Hz (Nema N5-15 Plug) (R134a)		
9013703.02	115V/60Hz (Nema N5-15 Plug) (R134a)		
9013703.03	230V/50Hz (Schuko Plug - CEE 7/4 Plug Type F) (R134a)		
9013703.03.chn	230V/50Hz (CN Plug) (R134a)		
9013703.04	230V/50Hz (UK Plug Type BS1363A)		
9013703.05	230V/50Hz (CH Plug Type SEV 1011) (R134a)		
9013703.13	230V/60Hz (Nema N6-20 Plug) (R134a)		
<b>Bath</b>		<b>Other</b>	
Bath tank	Stainless steel	Classification	Classification III (FL)
Bath cover	integrated	IP Code	IP 21
Usable bath opening cm (W x L / D)	13 x 15 / 15	Pump function	Pressure Pump
		Pump type	Immersion Pump
<b>Electronics</b>		<b>Dimensions and volumes</b>	
Interfaces	RS232, USB	Weight kg	28
Temperature control	PID1	Barbed fittings inner diameter mm	8/12 mm
Absolute temperature calibration	3 Point Calibration	Dimensions cm (W x L x H)	24 x 42 x 66
Temperature display	LED	Filling volume l	3 ... 4
Temperature setting	Keypad	Pump connections	M16x1 male
Electronic Timer h:min	0 ... 999		
<b>Temperature values</b>		<b>Included in delivery</b>	
Setting the resolution of the temperature display °C	0.1	2 Barbed fittings for tubing 8 and 12 mm ID. (Pump connections M16x1 male)	
Working temperature range °C	-25 ... +200		
Temperature stability °C	±0.03		

Ambient temperature °C	+5 ... +40
Setting the resolution of the temperature display °C	0.01 ... 0.1

## All Benefits



**Brilliant.**  
Very bright display makes it easy to read even from a distance.



**Switch on. And off you go.**  
Intelligent operating concept. Ready for operation with just a few quick and easy steps.



**Timer. Integrated.**  
CORIO circulators include an integrated timer function. When the set time has elapsed, a signal sounds and the device switches off. Setting range: 0 ... 999 minutes.



**Everything at the front.**  
All operating controls and safety functions are accessed easily and comfortably from the front.



**Exact.**  
You can rely on it. PID1 control and 'Active Cooling Control' make the new CORIO precise and perfect.



**Locked in.**  
The lockable power plug guarantees safe connection. More process safety.



**Connection. Easy.**  
Inclined pump connections (M16×1) facilitate the connection of applications. Each unit includes 2 barbed fittings of 8/12 mm diameter each.



**Powerful. Adjustable.**  
Strong pressure pump, continuously adjustable.



**Early warning system for low liquid level.**  
Maximum safety for your application. Optical and audible alarm allows user to refill bath fluid in time.



**Connectivity.**  
Remote control made easy. CORIO CP circulators feature a USB connection and RS232 interface.



**Condensation protection.**  
Superb design solution. Integrated ventilation directs air over the bath lid and minimizes condensation.



**Handle with ease.**  
Makes day-to-day work easy. Comfortably move your JULABO Circulator around by using the ergonomic handles (front and rear).



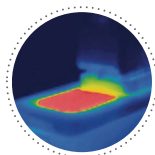
**Internal. External.**  
The pump is controlled via a lever located directly below the display. Easily change between internal and external circulation.



**More bath.**  
Designed for more comfort. Thanks to the recessed cooling coil, the internal bath provides more space.



**Safety.**  
CORIO CD and CP comply with Class III (FL) according to DIN 12876-1 and switches off automatically in case of high temperature or low liquid level alarm.



**Solid.**  
Minimized energy loss through high-quality insulation.



**Space saving. Free up space.**  
Place your JULABO Circulator right next to an application, another unit, or wall. That saves space. This is made possible by eliminating vents and connections on the sides.



**Stable.**  
Rubber feet allow for a secured footing of your CORIO to prevent damage to your laboratory equipment.



**Tidy.**  
The special drain tap for easy draining of bath fluids without tools.



**Touching permitted.**  
Optimum safety. The ergonomic plastic handle protects your fingers from hot surfaces.



**100% Checked.**  
100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.



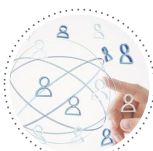
**Green technology.**  
Development consistently applied environmentally friendly materials and technologies.



**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.



**Highest measuring accuracy**  
'Absolute Temperature Calibration' for manual compensation of a temperature difference, 3-point calibration



**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).



**Quick support**  
If an error occurs, the integrated Black-Box function permits fast diagnosis by the JULABO service team