

Product data sheet



CORIO CP-300F Refrigerated / heating circulator

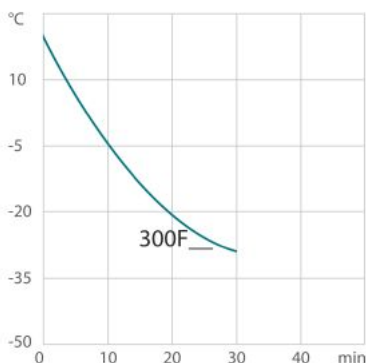
Refrigerated circulators from the CORIO CP range are suitable for applications with a temperature range up to +200°C. The enhanced pump performance ensures they are suitable for easy temperature control tasks in combination with external applications.

Product features

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



Cool-down time



Medium: Ethanol

Performance values

115V/60HZ (Nema N5-15 Plug)	
Heating capacity kW	1
Viscosity max. cST	50
Pump capacity flow rate l/min	8 ... 27
Pump capacity flow pressure psi	1.5 ... 10.2
Power A	12

Order No.	9013703.02				
Cooling capacity (Ethanol)					
°C	20	10	0	-10	-20
kW	0.3	0.3	0.27	0.19	0.08
* Performance specifications measured in accordance with DIN12876. 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	R134a				
Filling volume g	100				
Global Warming Potential for R134a	1430				
Carbon dioxide equivalent t	0.143				

230V/60Hz (Nema N6-20 Plug)

Heating capacity kW	2
Viscosity max. cST	50
Pump capacity flow rate l/min	8 ... 27
Pump capacity flow pressure psi	1.5 ... 10.2
Power A	12

Order No.	9013703.13				
Cooling capacity (Ethanol)					
°C	20	10	0	-10	-20
kW	0.3	0.3	0.27	0.19	0.08
* Performance specifications measured in accordance with DIN12876. 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	R134a				
Filling volume g	100				
Global Warming Potential for R134a	1430				
Carbon dioxide equivalent t	0.143				

208V/60Hz (Nema N6-20 Plug)

Heating capacity kW	1.6
Viscosity max. cST	50
Pump capacity flow rate l/min	8 ... 27
Pump capacity flow pressure psi	1.5 ... 10.2
Power A	11

Order No.	9013703.13				
Cooling capacity (Ethanol)					
°C	20	10	0	-10	-20
kW	0.3	0.3	0.27	0.19	0.08
* Performance specifications measured in accordance with DIN12876. 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	R134a				
Filling volume g	100				
Global Warming Potential for R134a	1430				
Carbon dioxide equivalent t	0.143				

Technical data

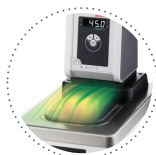
Available voltage versions		Bath	
Order No.	9 013 703	Bath tank	Stainless steel
Available voltage versions:		Bath cover	integrated
9013703.01	100V/50-60Hz (Nema N5-15 Plug) (R134a)	Usable bath opening in. (W x L / D)	5.1 x 5.9 / 5.9
9013703.02	115V/60Hz (Nema N5-15 Plug) (R134a)		
9013703.03	230V/50Hz (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)		
Cooling		Other	
Cooling of compressor	1-stage Air	Classification	Classification III (FL)
		IP Code	IP 21
		Pump function	Pressure Pump
		Pump type	Immersion Pump
Electronics		Dimensions and volumes	
Digital interface	RS232, USB	Weight lbs	61.7
Temperature control	PID1	Barbed fittings inner diameter	8/12 mm
Absolute temperature calibration	3 Point Calibration	Dimensions in. (W x L x H)	9.4 x 16.5 x 26
Temperature displayTemperature display	LED	Filling volume l	3 ... 4
Temperature settingTemperature setting	Keypad	Pump connections	M16x1 male
Electronic Timer hr:min	0 ... 999		
Temperature values		Included in delivery	
Working temperature range °C	-25 ... +200		

Temperature stability °C	±0.03
Ambient temperature °C	+5 ... +40
Temperature display resolution °C	0.01 ... 0.1

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



All Benefits



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 CORIO around by using the ergonomic handles (front and rear).



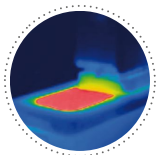
Internal. External.
The pump is controlled via a lever located directly below the display. Easily change between internal and external circulation.



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.



Services 24/7.
Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.us.



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



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



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



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



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.



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.



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.