

CORIO CP-800F 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.

With a working temperature range of -40 ... +200 °C, the Refrigerated / heating circulator CORIO CP-800F delivers an outstanding cooling capacity of 0.84 kW at 20 °C despite its compact design.

This cooling machine works with natural, environmentally-friendly refrigerant and was developed with a focus on energy efficiency. This means significant savings on the operating costs for numerous applications, which also means rapid amortization of the procurement cost. At the same time, the lower energy consumption positively contributes to climate protection.



Energy-efficient temperature control

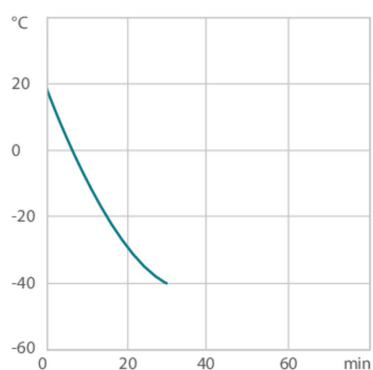
You can really save money with our energy-efficient refrigerated circulators. Thanks to speed-controlled components, power consumption is significantly reduced. This reduces electricity costs by up to 70% over the entire product life cycle. By minimizing energy requirements, you also make a positive contribution to protecting the environment.



Product features

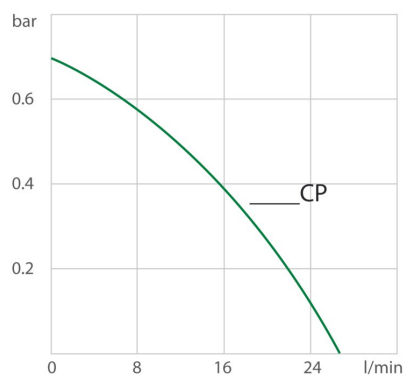
- Models for internal and external applications
- Bright, white, easy to read display
- Very quiet
- powerful and infinitely adjustable pressure pump
- USB connection
- RS232 interface for online communication
- Bath lid and drain tap included
- Removable ventilation grid
- Refrigeration unit without 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 provides more usable space in the bath tank
- early warning system for low liquid level

Cool-down time



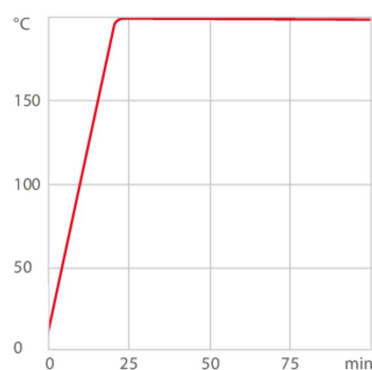
Medium: Ethanol

Pump capacity



Medium: Water

Heat-up time



Medium: Thermal

Performance values

115V/60Hz (Nema N5-20 Plug)

Heating capacity kW	1
Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure psi	1.5 ... 10.2
Power consumption A	12

9013715.N1.22

Cooling capacity 1 (Ethanol)

°C	20	0	-20	-30	-40
kW ¹	0.84	0.74	0.39	0.24	0.1

Note about natural refrigerants:

Temperature control units using natural refrigerants are often subject to regulatory requirements regarding the installation site, operation, transport or disposal of the units. If you have any questions, we will be happy to advise you.

Refrigerant stage 1

Refrigerant	R1270
Filling weight g	85
Global Warming Potential for R1270	2
Carbon dioxide equivalent t	0.00017

¹ 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.

100V/60Hz (Nema N5-20 Plug)

Heating capacity kW	0.8
Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure psi	1.5 ... 10.2
Power consumption A	11

9013715.N1.22					
Cooling capacity 2 (Ethanol)					
°C	20	0	-20	-30	-40
kW ²	0.84	0.74	0.39	0.24	0.1

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115V/50Hz (Nema N5-20 Plug)

Heating capacity kW	1
Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure psi	1.5 ... 10.2
Power consumption A	12

9013715.N1.22					
Cooling capacity 3 (Ethanol)					
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Pump capacity pressure psi	1.5 ... 10.2
Power consumption A	11

9013715.N1.22

Cooling capacity 4 (Ethanol)

°C	20	0	-20	-30	-40
kW ⁴	0.84	0.74	0.39	0.24	0.1

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200V/50Hz (Schuko Plug - CEE 7/4 Plug Type F)

Heating capacity kW	1.5
Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure psi	1.5 ... 10.2
Power consumption A	10

9013715.N1.33

Cooling capacity 1 (Ethanol)

°C	20	0	-20	-30	-40
kW ⁵	0.84	0.74	0.39	0.24	0.1

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Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure psi	1.5 ... 10.2
Power consumption A	10

9013715.N1.33

Cooling capacity 2 (Ethanol)

°C	20	0	-20	-30	-40
kW ⁶	0.84	0.74	0.39	0.24	0.1

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

Heating capacity kW	2
Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
Pump capacity pressure psi	1.5 ... 10.2
Power consumption A	11

9013715.N1.33

Cooling capacity 3 (Ethanol)

°C	20	0	-20	-30	-40
kW ⁷	0.84	0.74	0.39	0.24	0.1

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Viscosity max. cSt	50
Pump capacity flow pressure l/min	8 ... 27
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Power consumption A	11

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Technical data

Available voltage versions		Cooling	
9013715		Cooling of compressor	1-stage Air
Available voltage versions:			
9013715.N1.22	100-115V/50-60Hz (Nema N5-20 Plug) (R1270)		
9013715.N1.04	200-230V/50-60Hz (UK Plug Type BS1363A) (R1270)		
9013715.N1.05	200-230V/50-60Hz (CH Plug Type SEV 1011) (R1270)		
9013715.N1.33	200-230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F) (R1270)		
9013715.N1.33.chn	200-230V/50-60Hz (CN Plug) (R1270)		
Bath		Other	
Bath tank	Stainless steel	Classification	Classification III (FL)
Bath cover	integrated	IP Code	IP 21
Usable bath opening in. (W x L / D)	7.1 x 5.1 / 5.9	Pump function	Pressure Pump
		Pump type	Immersion Pump
Electronics		Dimensions and volumes	
Interfaces	RS232, USB	Weight lbs	92.6
Temperature control	PID1	Barbed fittings inner diameter mm	8/12 mm
Absolute temperature calibration	3 Point Calibration	Total dimensions in. (W x L x H)	13 x 18.5 x 27.6
Temperature display	LED	Filling volume l	5 ... 7.5
Temperature setting	Keypad	Pump connections	M16x1 male
Electronic Timer h:min	0 ... 999		

Temperature values		Included in delivery
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	-40 ... +200	
Temperature stability °C	±0.03	
Ambient temperature °C	+5 ... +40	
Temperature display resolution °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 (M16x1) 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.