CORIO CP-200F 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 -20 ... +200 °C, the Refrigerated / heating circulator CORIO CP-200F delivers an outstanding cooling capacity of kW at 20°C despite its compact design. The optimized design of the bath tank and cooling coil makes the bath more spacious and user-friendly for the operator. Ventilation slots and connections are located on the front and rear, allowing several units to be placed next to each other in order to save space.
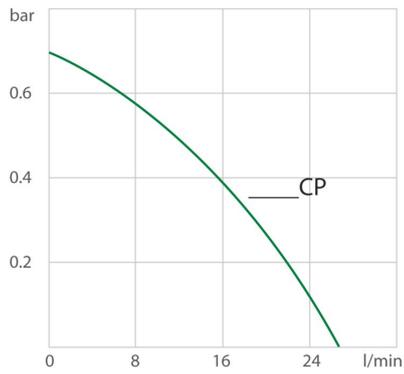
With natural refrigerant

The CORIO CP-200F is available with natural refrigerant. Order No. 9013701.N1.33

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

Pump capacity

Medium: Water

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 consumption A	14

Refrigerant variants

Order No.			9013701.02		
Cooling capacity (Ethanol)					
°C	20	10	0	-10	-20
kW	0.2	0.17	0.15	0.1	0.02

*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.

Refrigerant stage 1	
Refrigerant	R134a
Filling weight g	70
Global Warming Potential for R134a	1430
Carbon dioxide equivalent t	0.1001

Order No.			9013701.N1.02		
Cooling capacity (Ethanol)					
°C	20	10	0	-10	-20
kW	0.2	0.17	0.15	0.1	0.02

*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.

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	R290
Filling weight g	25
Global Warming Potential for R290	3
Carbon dioxide equivalent t	7.5E-5

Technical data

Available voltage versions

Order No.	9 013 701
Available voltage versions:	
9013701.33.chn	230V/50-60Hz (CN Plug) (R134a)
9013701.N1.33.chn	230V/50-60Hz (CN Plug) (R290)
9013701.33	230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F) (R134a)
9013701.N1.33	230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F) (R290)
9013701.05	230V/50-60Hz (CH Plug Type SEV 1011) (R134a)
9013701.N1.05	230V/50-60Hz (CH Plug Type SEV 1011) (R290)
9013701.04	230V/50-60Hz (UK Plug Type BS1363A) (R134a)
9013701.N1.04	230V/50-60Hz (UK Plug Type BS1363A) (R290)

Bath

Bath tank	Stainless steel
Bath cover	integrated
Usable bath opening in. (W x L / D)	5.1 x 5.9 / 5.9

Julabo

9013701.02	115V/60Hz (Nema N5-15 Plug) (R134a)
9013701.N1.02	115V/60Hz (Nema N5-15 Plug) (R290)
9013701.01	100V/50-60Hz (Nema N5-15 Plug) (R134a)
9013701.N1.01	100V/50-60Hz (Nema N5-15 Plug) (R290)

Cooling

Cooling of compressor	1-stage Air

Other

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

Electronics

Interfaces	RS232, USB
Temperature control	PID1
Absolute temperature calibration	3 Point Calibration
Temperature display	LED
Temperature setting	Keypad
Electronic Timer hr:min	0 ... 999

Dimensions and volumes

Weight lbs	57.3
Barbed fittings inner diameter	8/12 mm
Dimensions in. (W × L × H)	9.1 x 15.4 x 25.6
Filling volume l	3 ... 4
Pump connections	M16x1 male

Temperature values

Setting the resolution of the temperature display °C	0.1
Working temperature range °C	-20 ... +200
Temperature stability °C	±0.03
Ambient temperature °C	+5 ... +40
Temperature display resolution °C	0.01 ... 0.1

Included in delivery

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

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.