

CORIO CP-1000F 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.

Your advantages

- · 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 yields more usable space in the bath tank
- Bath lid and drain tap included
- · Removable ventilation grid
- Refrigeration unit without side vents
- Class III (FL) according to DIN 12876-1



Technical data

Available voltage vers	sions	Bath	
Order No.	9 013 707	Bath tank	Stainless steel
Available voltage versions:		Bath cover	integrated
9 013 707.02		Usable bath opening cm (WxL/D) 18x13/15
9 013 707.04			
9 013 707.05			
9 013 707.33			
9 013 707.33.chn			

9 013 707.33.chn			
Cooling		Other	
Cooling of compressor	1-stage Air	Classification	Classification III (FL)
		Pump function	Pressure Pump
		Pump type	Immersion Pump
Electronics		Dimensions and volumes	
Temperature control	PID1	Weight kg	51.5
Absolute temperature calibration	1 Point Calibration	Barbed fittings inner diameter	8/12 mm
Temperature display	LED	Dimensions cm $(W \times L \times H)$	42 x 49 x 70
Temperature setting	Keypad	Filling volume I	5 7.5
Electronic Timer hr:min	0 999	Pump connections	M16x1 male
Temperature values			
Working temperature range °C	-50 200		
Temperature stability °C	±0.03		
Ambient temperature °C	5 40		



0.01 ... 0.1

Temperature display resolution °C



Performance values

115V/60Hz												
Heating capacity kW 1												
Cooling capacity (Ethanol)												
°C	20	10	0	-10	-20	-30	-40					
kW	1	1	0.96	0.73	0.51	0.25	0.11					
Viscos	sity ma	x. cST					50					
Refrig	erant					- 1	R449A					
Filling	volum	e g					190					
Global	l Warm	ing Po	tentia	for R4	149A		1397					
Carbon dioxide equivalent t 0.265												
Pump capacity flow rate I/min 8 27												
Pump	capac	ity flov	v press	sure ba	ar	(0.1 0.7					

200\	//50H	lz							200V	//60H	Z					
Heati	ng capa	acity k	W				1.5		Heatin	ıg capa	acity k	W				1.5
Coolir	ng capa	acity (E	thano	l)					Coolin	g capa	acity (E	Ethano	l)			
°C	20	10	0	-10	-20	-30	-40		°C	20	10	0	-10	-20	-30	-40
kW	1	1	0.96	0.73	0.51	0.25	0.11		kW	1	1	0.96	0.73	0.51	0.25	0.11
Visco	sity ma	ax. cST	-			;	50		Viscos	sity ma	x. cST	-			į	50
Refrig	erant					ı	R449A		Refrige	erant					ı	R449A
Filling	volum	ie g					190		Filling	volum	e g				-	190
Globa	l Warm	ning Po	otentia	l for R4	149A		1397		Global	Warm	ing Po	otentia	l for R4	149A		1397
Carbo	n dioxi	ide equ	uivalen	t t		(0.265		Carbo	n dioxi	de equ	uivalen	t t		(0.265
Pump	capac	ity flov	w rate	l/min		;	8 27		Pump	capac	ity flo	w rate	/min		8	3 27
Pump	сарас	ity flov	w pres	sure ba	ar	(0.1 0	7	Pump	capac	ity flo	w pres	sure ba	ar	(0.1 0.7

230	V/50⊢	lz							230V	/60H	Z					
Heati	ng cap	acity k	W				1.8		Heatin	ig capa	acity k	W				1.8
Cooli	ng capa	acity (E	thano	l)					Coolin	g capa	acity (E	thano	l)			
°C	20	10	0	-10	-20	-30	-40		°C	20	10	0	-10	-20	-30	-40
kW	1	1	0.96	0.73	0.51	0.25	0.11		kW	1	1	0.96	0.73	0.51	0.25	0.11
Visco	sity ma	ax. cST	-				50		Viscos	sity ma	x. cST	-				50
Refrig	gerant					- 1	R449A		Refrige	erant						R449A
Filling	y volum	ie g					190		Filling	volum	e g					190
Globa	al Warm	ning Po	tentia	l for R4	149A		1397		Global	Warm	ing Po	otentia	for R4	149A		1397
Carbo	on diox	ide equ	uivalen	t t		(0.265		Carbo	n dioxi	de equ	uivalen	t t			0.265
Pump	сарас	ity flov	v rate	l/min		;	8 27		Pump	capac	ity flov	v rate l	/min			8 27
Pump	сарас	ity flov	v pres	sure ba	ar	(0.1 0.	7	Pump	capac	ity flov	w press	sure ba	ar	(0.1 0

	очрио	,	, p. cc.	Ju. 0 D				 	oupuo	,	. р. сс.	Ju. 0 D			0
200\	//50H	Z						200\	//60H	Z					
Heati	ng capa	acity k	W				1.5	Heatir	ng capa	acity k	W				1.5
Cooli	ng capa	acity (E	Ethano	l)				Coolir	ng capa	acity (E	thano	l)			
°C	20	10	0	-10	-20	-30	-40	°C	20	10	0	-10	-20	-30	-40
kW	1	1	0.96	0.73	0.51	0.25	0.11	kW	1	1	0.96	0.73	0.51	0.25	0.11
Visco	sity ma	x. cST	-			ļ	50	Visco	sity ma	x. cST	-			;	50
Refrig	erant					I	R449A	Refrig	erant					1	R449A





50 R449A 190 1397 0.265 8 ... 27 0.1 ... 0.7



Carbon dioxide Quivalent	Fillia a continua a		100		-:::::							100
Carbon dioxide equivalent t	Filling volume g	4404	190	,	J				· (D	4.40.4		
Pump capacity flow rate lything	3	(449A					•			149A		
Pump capacity flow pressure bar 2 30V/60Hz Heating capacity KW 2 1 1 0 0 0 10 02 030 40 KW 1 1 1 0 09 0.73 0.51 0.25 0.11 Viscosity max. cST 50 Viscosity max. cST 50 Feffigerant 6 100 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	·											
Part												
Heating capacity Kethano Cooling capacity Cooling capacity Cooling capacity Kethano Cooling capacity Cooling capacity	Pump capacity flow pressure t	ar	0.1 .	0.7	Pump capacity flow pressure bar							0.1 0.7
Cooling capacity (Ethanol) **C	230V/50Hz				230V	/60H	Z					
°C 20 10 0 -10 -20 -30 -40 KW 1 1 0.96 0.73 0.51 0.25 0.11 KW 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST S S 0.11 KW 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST S S R449A Refrigerant R449A Refrigerant R449A Refrigerant R449A Refrigerant R449A Refrigerant R449A Refrigerant S 0.265 Carbon dioxide equivalent to 0.265 S 0.265 Carbon dioxide equivalent to 0.265 S 0.27 0.27 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20 0.20	Heating capacity kW		2		Heatin	g capa	city k	W			:	2
KW	Cooling capacity (Ethanol)				Coolin	g capa	city (E	thanol)			
Viscosity max. cST	°C 20 10 0 -10	-20	-30 -4	0	°C	20	10	0	-10	-20	-30	-40
Refrigerant	kW 1 1 0.96 0.73	0.51	0.25 0.1	1	kW	1	1	0.96	0.73	0.51	0.25	0.11
Filling volume Fill	Viscosity max. cST		50		Viscos	sity ma	x. cST					50
Global Warming Potential for R449A	Refrigerant		R449	9A	Refrige	erant						R449A
Global Warming Potential for R449A	Filling volume g		190		Filling	volum	e g					190
Carbon dioxide equivalent t		449A	1397	7			_	tential	for R4	149A		1397
Pump capacity flow rate l/min S 27	Carbon dioxide equivalent t		0.26	5			•				(0.265
200V/50Hz Heating capacity kW 1.5 Heating capacity kW 1.5 Cooling capacity (Ethanol) **C 20 10 0 -10 -20 -30 -40 **C 20 10 0 -70 -20 -30 -40 **X 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST Refrigerant R449A Filling volume g Global Warming Potential for R449A Filling valume dapacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 1.5 Heating capacity kW 1 1 0.96 0.73 0.51 0.25 0.11 1.5 Cooling capacity (Ethanol) **X 1 1 0.96 0.73 0.51 0.25 0.11 **X 1990 Filling volume g 190 Filling volume g 190 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Pump capacity flow rate l/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.20 10 0 10 0 10 -20 -30 -40 **X 1990 **X 1990 Cooling capacity (Ethanol) **C 20 10 0 0 -10 -20 -30 -40 **X 1990 KW 1 1 0.96 0.73 0.51 0.25 0.11 KW 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST 50 Viscosity max. cST 50 Viscosity max. cST 50 Viscosity max. cST 50 Filling volume g Fillin	Pump capacity flow rate I/min		8 :	27	Pump	capaci	ty flov	v rate l	/min			8 27
Heating capacity kw	Pump capacity flow pressure b	ar	0.1 .	0.7	Pump	capaci	ty flov	v press	sure ba	ar	(0.1 0.7
Cooling capacity (Ethanol) 'C 20 10 0 -10 -20 -30 -40	200V/50Hz				200V	7/60H	Z					
°C 20 10 0 -10 -20 -30 -40 °C 20 10 0 -10 -20 -30 -40 kW 1 1 0.96 0.73 0.51 0.25 0.11 kW 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST 50 Viscosity max. cST R449A Refrigerant R449A Refrigerant R449A Filling volume g 190 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity (Ethanot) 2 Carbon dioxide equivalent t 2 Capacity (Ethanot) 2 Capacity (Ethanot) 2 Capacity (Ethanot) 2 Capacity (Ethanot) 2 Capacity (Eth	Heating capacity kW		1.5		Heatin	ıg capa	city k	W				1.5
°C 20 10 0 -10 -20 -30 -40 °C 20 10 0 -10 -20 -30 -40 kW 1 1 0.96 0.73 0.51 0.25 0.11 kW 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST 50 Viscosity max. cST R449A Refrigerant R449A Refrigerant R449A Filling volume g 190 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity (Ethanot) 2 Carbon dioxide equivalent t 2 Capacity (Ethanot) 2 Capacity (Ethanot) 2 Capacity (Ethanot) 2 Capacity (Ethanot) 2 Capacity (Eth	Cooling capacity (Ethanol)				Cooling capacity (Ethanol)							
No. No.		-20	-30 -4	0						-20	-30	-40
Refrigerant R449A Refrigerant R449A Filling volume g 190 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate l/min 8 27 Pump capacity flow rate l/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 230V/50Hz Beating capacity (Ethanol) 2 Heating capacity (Ethanol) 2 Cooling capacity (Ethanol) ° °												
Filling volume g 190 Filling volume g 190 Global Warming Potential for R449A 1397 Global Warming Potential for R449A 1397 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Pump capacity flow rate l/min 8 27 Pump capacity flow rate l/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity (Ethanol) **C 20 10 0 10 0 10 0.20 30 0.01 0.25 0.11	Viscosity max. cST		50		Viscos	sity ma	x. cST					50
Global Warming Potential for R449A 1397 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate l/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 Carbon dioxide equivalent t 0.265 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7	Refrigerant		R449	9A	Refrige	erant					ı	R449A
Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min by End processor of the pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 230V/50Hz Heating capacity (Ethanol) °C 20 10 0 -10 -20 -30 -40 20 -30 -40 1 0 0 -10 0 -10 0 -20 0 -30 0 -40 20 0 10 0 0 -10 0 0 0 0 0 0 0 0 0 0 0 0 0	Filling volume g		190		Filling	volum	e g					190
Pump capacity flow rate I/min	Global Warming Potential for F	449A	1397	7	Global	Warm	ing Po	tential	for R4	149A		1397
Pump capacity flow pressure bar	Carbon dioxide equivalent t		0.26	5	Carbo	n dioxi	de equ	ıivalen	t t		(0.265
Pump capacity flow pressure bar	Pump capacity flow rate I/min		8 :	27	Pump	capaci	ty flov	v rate l	/min			8 27
Heating capacity kW 2 Heating capacity kW 2		ar	0.1 .	0.7						ar	(0.1 0.7
Heating capacity kW 2 Heating capacity kW 2	230V/50Hz				230V	7/60H	Z					
Cooling capacity (Ethanol) *C 20 10 0 -10 -20 -30 -40 kW 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST 50 Refrigerant *R449A *Refrigerant *G 20 10 0 -10 -20 -30 -40 kW 1 1 0.96 0.73 0.51 0.25 0.11 *Wiscosity max. cST 50 *Refrigerant *R449A *Refrigerant *Refrigerant *G 20 10 0 -10 -20 -30 -40 *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A *Refrigerant *R449A			2					W				2
°C 20 10 0 -10 -20 -30 -40 kW 1 1 0.96 0.73 0.51 0.25 0.11 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST 50 Viscosity max. cST 50 Refrigerant R449A Filling volume g 190 Filling volume g 190 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate l/min 8 27 Pump capacity flow pressure bar 0.1 0.7 200V/60Hz	· , ,		_			٠.	,)			
kW 1 1 0.96 0.73 0.51 0.25 0.11 Viscosity max. cST 50 Viscosity max. cST 50 Refrigerant R449A Refrigerant R449A Filling volume g 190 Filling volume g 190 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 200V/50Hz Viscosity max. cST 50 R449A Refrigerant R449A 190 Filling volume g 190 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 200V/60Hz		-20	-30 -4	0						-20	-30	-40
Refrigerant R449A Refrigerant R449A Filling volume g 190 Filling volume g 190 Global Warming Potential for R449A 1397 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 200V/50Hz 200V/60Hz											_	
Filling volume g 190 Filling volume g 190 Global Warming Potential for R449A 1397 Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7	Viscosity max. cST		50		Viscos	sity ma	x. cST					50
Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 200V/50Hz	Refrigerant		R449	9A	Refrige	erant						R449A
Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 200V/50Hz Global Warming Potential for R449A 1397 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 200V/60Hz	Filling volume g		190		Filling	volum	e g					190
Carbon dioxide equivalent t 0.265 Carbon dioxide equivalent t 0.265 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 200V/50Hz 200V/60Hz		449A	1397	7			_	tential	for R4	149A		1397
Pump capacity flow rate I/min 8 27 Pump capacity flow rate I/min 8 27 Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 200V/50Hz 200V/60Hz	Carbon dioxide equivalent t		0.26	5			•				(0.265
Pump capacity flow pressure bar 0.1 0.7 Pump capacity flow pressure bar 0.1 0.7 200V/50Hz 200V/60Hz	·											
		ar								ar		
	200V/50Hz				200V	7/60H	Z					
			1 5					W				1 5





Coolir	ng capa	acity (E	thano	I)				Cooling capacity (Ethanol)							
°C	20	10	0	-10	-20	-30	-40	°C	20	10	0	-10	-20	-30	-40
kW	1	1	0.96	0.73	0.51	0.25	0.11	kW	1	1	0.96	0.73	0.51	0.25	0.11
Visco	sity ma	ax. cST				į	50	Viscos	ity ma	x. cST	-				50
Refrig	erant					ı	R449A	Refrige	erant					1	R449A
Filling	volum	ie g					190	Filling	volum	e g					190
Globa	l Warm	ning Po	tentia	I for R4	149A		1397	Global	Warm	ing Po	otentia	for R4	149A		1397
Carbo	n diox	ide equ	uivalen	t t		(0.265	Carbor	n dioxi	de equ	uivalen	t t		(0.265
Pump	capac	ity flov	v rate	l/min		8	8 27	Pump	сарас	ity flov	v rate l	/min		;	3 27
Pump	capac	ity flov	v pres	sure ba	ar	(0.1 0.7	Pump capacity flow pressure bar 0.1 0.7							
230\	//50H	lz						230V	/60H	lz					
Heati	ng cap	acity k	W			:	2	Heating capacity kW 2							
Coolir	ng capa	acity (E	thano	I)				Cooling capacity (Ethanol)							
°C	20	10	0	-10	-20	-30	-40	°C	20	10	0	-10	-20	-30	-40
kW	1	1	0.96	0.73	0.51	0.25	0.11	kW	1	1	0.96	0.73	0.51	0.25	0.11
Visco	sity ma	ax. cST	-			!	50	Viscosity max. cST 50						50	
Refrig	erant					ı	R449A	Refrigerant R449A						R449A	
Filling volume g 190							190	Filling volume g 19						190	
Global Warming Potential for R449A 1397							Global Warming Potential for R449A 1397							1397	
Carbon dioxide equivalent t 0.265							0.265	Carbon dioxide equivalent t 0.265							0.265
Pump capacity flow rate I/min 8 27							8 27	Pump capacity flow rate I/min 8 27						3 27	
Pump	capac	ity flov	v pres	sure ba	ar	(0.1 0.7	Pump capacity flow pressure bar 0.1 0.7							

All Benefits



ATC

Absolute Temperature Calibration, 1-point calibration (CD).



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.



Mobile

Extra easy handling. Integrated castors for easy repositioning of refrigerated circulators.



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



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.com.



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.



Connection. Easy.

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



Brilliant

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



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.



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.

