

CORIO CP-900F 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 versions		Bath	
Order No. 9	013 706	Bath tank	Stainless steel
Available voltage versions:		Bath cover	integrated
9 013 706.02		Usable bath opening cm (W x L / D)	26 x 35 / 20
9 013 706.04			
9 013 706.05			
9 013 706.33			
9 013 706.33.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	52
Absolute temperature calibration	1 Point Calibration	Barbed fittings inner diameter	8/12 mm
Temperature display	LED	Dimensions cm (W \times L \times H)	39 x 62 x 75
Temperature setting	Keypad	Filling volume I	21 30
Temperature setting Electronic Timer hr:min	Keypad 0 999	Filling volume I Pump connections	21 30 M16x1 male
		5	
Electronic Timer hr:min		5	
Electronic Timer hr:min Temperature values	0 999	5	
Electronic Timer hr:min Temperature values Working temperature range °C	0 999 -38 +200	5	
Electronic Timer hr:min Temperature values Working temperature range °C Temperature stability °C	0 999 -38 +200 ±0.03	5	

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Performance values

115V	160L												
			A/				1						
	• •	acity kV		N			I						
°C	g capa 20	acity (E 10	unano 0	י) -10	-20	-30							
kW	0.9	0.85	0.8	0.52	-	0.11	-						
			0.0	0.52	0.51	0.11							
	-	ax. cST					50 R449A						
Refrige													
Filling		ie g ning Po	tontia	l for D/	140 4		220 1397						
		de equ			149A		0.307						
		ity flow					8 27						
		ity flow			ar		0.1 0.7						
								0001					
200V									'/60H				
	• •	acity kV					1.5			acity kV			
	• •	acity (E								acity (E [.]			
°C	20	10	0	-10	-20	-30	_	°C	20	10	0	-10	-2
kW	0.9	0.85	0.8	0.52	0.31	0.11		kW	0.9	0.85	0.8	0.52	0.3
	,	ax. cST					50			x. cST			
Refrige							R449A	Refrig					
Filling							220		volum				
		ning Po			149A		1397			ing Po			149/
		de equ					0.307			de equ			
		ity flow					8 27			ity flow			
Pump	сарас	ity flow	/ press	sure ba	ar		0.1 0.7	Pump	сарас	ity flow	pres	sure ba	ar
230V	/50⊦	lz						230V	7/60H	z			
Heatin	g cap	acity kV	N				1.8	Heatin	ig capa	acity kV	V		
Coolin	g capa	acity (E	thano	I)				Coolin	g capa	acity (E [.]	thano	I)	
°C	20	10	0	-10	-20	-30		°C	20	10	0	-10	-2
kW	0.9	0.85	0.8	0.52	0.31	0.11		kW	0.9	0.85	0.8	0.52	0.3
Viscos	ity ma	ax. cST					50	Viscos	sity ma	x. cST			
Refrige	erant						R449A	Refrig	erant				
Filling	volum	e g					220	Filling	volum	e g			
Global	Warm	ning Po	tentia	l for R4	149A		1397	Global	Warm	ing Po	tentia	l for R4	149/
Carbo	n dioxi	de equ	ivalen	t t			0.307	Carbon dioxide equivalent t					
Pump capacity flow rate l/min							8 27	Pump capacity flow rate l/min					
Pump	сарас	ity flow	/ press	sure ba	ar		0.1 0.7	Pump capacity flow pressure ba					ar
200V	/50⊦	lz						200V	/60H	Z			
Heatin	g cap	acity kV	N				1	Heatin	ig capa	acity kV	V		
Coolin	g capa	acity (E	thano	I)				Coolin	g capa	acity (E	thano	I)	
°C	20	10	0	-10	-20	-30		°C	20	10	0	-10	-2
kW	0.9	0.85	0.8	0.52	0.31	0.11		kW	0.9	0.85	0.8	0.52	0.3
Viscos	ity ma	ax. cST					50	Viscos	sity ma	x. cST			
Refrige	erant						R449A	Refrig	erant				
								_					

200V	//60H	lz					
Heatir	ng capa	acity k\	N				1.5
Coolin	ng capa	acity (E	thano)			
°C	20	10	0	-10	-20	-30	
kW	0.9	0.85	0.8	0.52	0.31	0.11	
Viscos	sity ma	ax. cST					50
Refrig	erant						R449A
Filling	volum	ie g					220
Globa	l Warm	ning Po	tentia	for R4	49A		1397
Carbo	n dioxi	de equ	ivalen	t t			0.307
Pump	сарас	ity flow	/ rate l	/min			8 27
Pump	сарас	ity flow	v press	sure ba	ar		0.1 0.7
230V	//60H	lz					
Heatir	ng capa	acity k\	N				1.8
Coolin	ng capa	acity (E	thano)			
°C	20	10	0	-10	-20	-30	
kW	0.9	0.85	0.8	0.52	0.31	0.11	
Viscos	sity ma	ax. cST					50
Refrig	erant						R449A
Filling	volum	ie g					220
Globa	l Warm	ning Po	tentia	for R4	49A		1397
Carbo	n dioxi	de equ	ivalen	t t			0.307
Pump	сарас	ity flow	v rate l	/min			8 27
Pump	сарас	ity flow	v press	sure ba	ar		0.1 0.7
200V	//60H	lz					
Heatir	ng capa	acity k\	N				1.5
Coolin	ig capa	acity (E	thano)			
°C	20	10	0	-10	-20	-30	
kW	0.9	0.85	0.8	0.52	0.31	0.11	
							50

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R449A



Filling volume g	220	Filling volume g	220
Global Warming Potential for R449A	1397	Global Warming Potential for R449A	1397
Carbon dioxide equivalent t	0.307	Carbon dioxide equivalent t	0.307
Pump capacity flow rate l/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
Fump capacity now pressure bar	0.1 0.7	Fump capacity now pressure bar	0.1 0.7
230V/50Hz		230V/60Hz	
Heating capacity kW	1	Heating capacity kW	1
Cooling capacity (Ethanol)		Cooling capacity (Ethanol)	
°C 20 10 0 -10 -20 -30		°C 20 10 0 -10 -20 -30	
kW 0.9 0.85 0.8 0.52 0.31 0.1	1	kW 0.9 0.85 0.8 0.52 0.31 0.1	1
Viscosity max. cST	50	Viscosity max. cST	50
Refrigerant	R449A	Refrigerant	R449A
Filling volume g	220	Filling volume g	220
Global Warming Potential for R449A	1397	Global Warming Potential for R449A	1397
Carbon dioxide equivalent t	0.307	Carbon dioxide equivalent t	0.307
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	
Heating capacity kW	1.5	Heating capacity kW	1.5
Cooling capacity (Ethanol)		Cooling capacity (Ethanol)	
°C 20 10 0 -10 -20 -30)	°C 20 10 0 -10 -20 -30)
kW 0.9 0.85 0.8 0.52 0.31 0.1	_	kW 0.9 0.85 0.8 0.52 0.31 0.1	
Viscosity max. cST	50	Viscosity max. cST	50
Refrigerant	R449A	Refrigerant	R449A
Filling volume g	220	Filling volume g	220
Global Warming Potential for R449A	1397	Global Warming Potential for R449A	1397
Carbon dioxide equivalent t	0.307	Carbon dioxide equivalent t	0.307
·	0 07		
Pump capacity flow rate I/min	827	Pump capacity flow rate I/min	8 27
·	8 27 0.1 0.7		
Pump capacity flow rate I/min		Pump capacity flow rate I/min	8 27
Pump capacity flow rate l/min Pump capacity flow pressure bar		Pump capacity flow rate l/min Pump capacity flow pressure bar	8 27
Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/50Hz	0.1 0.7	Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/60Hz	8 27 0.1 0.7
Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/50Hz Heating capacity kW	0.1 0.7 2	Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/60Hz Heating capacity kW	8 27 0.1 0.7 2
Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/50Hz Heating capacity kW Cooling capacity (Ethanol)	2 0.1 0.7	Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/60Hz Heating capacity kW Cooling capacity (Ethanol)	8 27 0.1 0.7 2
Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/50Hz Heating capacity kW Cooling capacity (Ethanol) °C 20 10 0 -10 -20 -30	2 0.1 0.7	Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/60Hz Heating capacity kW Cooling capacity (Ethanol) °C 20 10 0 -10 -20 -30	8 27 0.1 0.7 2
Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/50Hz Keating capacity (Ethanol a) °C 20 10 0 -10 -20 -30 kW 0.9 0.85 0.8 0.52 0.31 0.1	2 1	Pump capacity flow rate l/min Pump capacity flow pressure bar 230V/60Hz Keating capacity kW Cooling capacity (Ethamold) °C 20 10 0 -10 -20 -30 kW 0.9 0.85 0.8 0.52 0.31 0.1	8 27 0.1 0.7 2 1
Pump capacity flow pressure bar Pump capacity flow pressure bar 230V/50Hz Heating capacity (Ethanol) °C 20 10 0 -10 -20 -30 kW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity max. cST Viscosity max. Viscosity max. Viscosity max. Viscosity max. Viscosity max.	2 50	Pump capacity flow pressure bar Pump capacity flow pressure bar 230V/60Hz Elevation of the pressure bar Pump capacity flow pressure bar Cooling capacity (Ethanol) °C 20 10 0 -10 -20 -30 Wiscosity max-cst	8 27 0.1 0.7 2 1 50
Pump capacity flow rate l/min Pump capacity flow rate l/min 230V/50Hz Heating capacity (Etherning) *Cooling capacity (Etherning) <tr< td=""><td>2 2 50 R449A</td><td>Pump capacity flow pressure bar Pump capacity flow pressure bar COOIDJE Cooling capacity (Ethanoling) °C 20 10 0 -10 -20 -30 kW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity max. cST Efficience Efficience</td><td>8 27 0.1 0.7 2 50 R449A</td></tr<>	2 2 50 R449A	Pump capacity flow pressure bar Pump capacity flow pressure bar COOIDJE Cooling capacity (Ethanoling) °C 20 10 0 -10 -20 -30 kW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity max. cST Efficience	8 27 0.1 0.7 2 50 R449A
Pump capacity flow rate l/minPump capacity flow pressure bar230V/50HzColspan="6">Colspan="6">100 $^{\circ}$ C20100100-10-20200.850.80.520.31Viscosity max: cSTRefrigerantFilling volume g	0.1 0.7 2 1 50 R449A 220	Pump capacity flow rate l/minPump capacity flow pressure bar230V/60HzElevative flow pressure barCooling capacity (Ethanol)°C20100-10-20-30 kW 0.90.850.80.520.310.1Viscosity max: cSTRefrigerative filling volume g	8 27 0.1 0.7 2 50 R449A 220
Pump capacity flow pressure bar Pump capacity flow pressure bar 230V/50Hz Heating capacity (Ethanold (Construction)) °C 20 10 0 -10 -20 -30 °C 20 10 0 -10 20 -30 kW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity max-cst E 5 5 5 5 5 5 Refrigerant E E 5	2 2 2 50 R449A 220 1397	Pump capacity flow pressure bar Pump capacity flow pressure bar 230V/60Hz Heating capacity (Ethanold (Construction)) °C 20 10 0 -10 -20 -30 °C 20 10 0 -10 -20 -30 rW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity Vistor	8 27 0.1 0.7 2 50 R449A 220 1397
Pump capacity flow rate l/minPump capacity flow pressure barPump capacity flow pressure bar230V/50HzCalob lCooling capacity (Ethanol)°C20100-10-20-30°C20100-10-20-30KW0.90.850.80.520.310.1Viscosity max. cSTFilling volume gGlobal Warming Potential for R449ACarbo uisuite equivalent t	0.1 0.7 2 2 50 R449A 220 1397 0.307	Pump capacity flow pressure bar Pump capacity flow pressure bar 230V/60Hz Heating capacity (Ethanol 1) °C 20 10 0 10 20 30 °C 20 10 0 10 20 30 °KW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity Viscosi	8 27 0.1 0.7 2 50 R449A 220 1397 0.307
Pump capacity flow rate l/minPump capacity flow pressure barPump capacity flow pressure barCalo a100-10-20-30Cooling capacity (Ethanol)°C20100-10-20-30KW0.90.80.80.520.310.1Viscosity max: cstFilling volume gCarbon dioxide equivalent tPump capacity flow pressure barPump capacity flow pressure bar	2 2 2 50 8 449A 220 1397 0.307 8 27	Pump capacity flow rate l/minPump capacity flow pressure barPump capacity flow pressure barCall of all of a	8 27 0.1 0.7 2 50 R449A 220 1397 0.307 8 27
Pump capacity flow pressure bar Pump capacity flow pressure bar 230V/50Hz Heating capacity (Ethanol 1) °C 20 10 0 10 20 30 °C 20 10 0 10 20 30 kW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity max-cst State State 10 10 10 10 Refrigerational state State 10.8 0.85 0.8 0.52 0.31 0.1 State State State 10.8 0.85 0.8 0.52 0.31 0.1 Viscosity max-cst State State 10.1 10 10 10 10 10 Global Warming Potential Kork State State 10 10 10 10 Carbon dioxide State State State 10 10 10 Pump capacity State State 10 10 10 10 10 State State St	2 2 2 50 8 449A 220 1397 0.307 8 27	Pump capacity flow pressure bar Pump capacity flow pressure bar 230V/60Hz Heating capacity (Ethanol 1) °C 20 10 0 10 20 30 °C 20 10 0 10 20 30 °KW 0.9 0.85 0.8 0.52 0.31 0.1 Viscosity Viscosi	8 27 0.1 0.7 2 50 R449A 220 1397 0.307 8 27

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Coolin	g capa	acity (E	thano	I)				Coolin	g capa	acity (E	thano	I)			
°C	20	10	0	-10	-20	-30		°C	20	10	0	-10	-20	-30	
kW	0.9	0.85	0.8	0.52	0.31	0.11		kW	0.9	0.85	0.8	0.52	0.31	0.11	
Viscos	sity ma	ax. cST					50	Viscos	sity ma	ix. cST					50
Refrige	erant						R449A	Refrige	erant						R449A
Filling	volum	ne g					220	Filling	volum	e g					220
Global	Warm	ning Po	tentia	l for R4	149A		1397	Global	Warm	ning Po	tentia	l for R4	49A		1397
Carbo	n dioxi	ide equ	ivalen	t t			0.307	Carbo	n dioxi	de equ	ivalen	tt			0.307
Pump capacity flow rate I/min					8 27	Pump	сарас	ity flov	v rate l	/min			8 27		
Pump	capac	ity flow	press	sure ba	ar		0.1 0.7	Pump	capac	ity flov	v press	sure ba	ar		0.1 0.7
230V	/50⊦	lz						230V	/60H	z					
Heatin	g cap	acity kV	V				2	Heatin	ig capa	acity k\	N				2
Coolin	g capa	acity (E	thano	I)				Coolin	g capa	acity (E	thano	I)			
°C	20	10	0	-10	-20	-30		°C	20	10	0	-10	-20	-30	
kW	0.9	0.85	0.8	0.52	0.31	0.11		kW	0.9	0.85	0.8	0.52	0.31	0.11	
Viscos	sity ma	ax. cST					50	Viscos	sity ma	ix. cST					50
Refrige	erant						R449A	Refrigerant							R449A
Filling	volum	ne g					220	Filling volume g						220	
Global	Warm	ning Po	tentia	l for R4	149A		1397	Global Warming Potential for R449A						1397	
Carbo	n dioxi	ide equ	ivalen	t t			0.307	Carbon dioxide equivalent t						0.307	
Pump	capac	ity flow	rate	l/min			8 27	Pump	сарас	ity flov	v rate l	/min			8 27

All Benefits



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



Handle with ease.

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



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



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.



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



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.



Solid. Minimized energy loss through high-quality insulation.

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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



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



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



JULABO. Quality. Highest standards of quality for a long product



Satisfied customers.

life.

11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.



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.



Brilliant.

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



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



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



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



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



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



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



Ouick start.

Individual JULABO consultation and comprehensive manuals at your disposal.



Services 24/7.

Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.



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



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



Powerful. Adjustable. Strong pressure pump, continuously adjustable.



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

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