

CORIO CP-600F 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.	9 013 704	Bath tank	Stainless steel
Available voltage vers	sions:	Bath cover	integrated
9 013 704.01	100V/50-60Hz (Nema N5-15 Plug)	Usable bath opening cm (W x L / D)	22 x 15 / 15
9 013 704.02	115V/60Hz (Nema N5-15 Plug)		
9 013 704.33	200-230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F)		
9 013 704.04	200-230V/50-60Hz (UK Plug Type BS1363A)		
9 013 704.05	200-230V/50-60Hz (CH Plug Type SEV 1011)		
9 013 704.33.chn	200-230V/50-60Hz (Nema N5-15 Plug)		

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	35.7
Absolute temperature calibration	1 Point Calibration	Barbed fittings inner diameter	8/12 mm
Temperature display	LED	Dimensions cm (W \times L \times H)	33 x 47 x 69
Temperature setting	Keypad	Filling volume I	5 7.5
Electronic Timer hr:min	0 999	Pump connections	M16x1 male
Temperature values			

Temperature values	
Working temperature range °C	-35 +200
Temperature stability °C	±0.03
Ambient temperature °C	+5.0 +40.0
Temperature display resolution °C	0.01 0.1



Performance values

100V/50-60Hz (Nema N5-15 Plug)

100	√/50H	lz							100V	/60H	lz					
Heati	ng cap	acity k	W				0.8		Heating capacity kW						(0.8
Cooling capacity (Ethanol)						Cooling capacity (Ethanol)										
°C	200	20	10	0	-10	-20	-30		°C	200	20	10	0	-10	-20	-30
kW	0.6	0.6	0.54	0.5	0.33	0.19	0.07		kW	0.6	0.6	0.54	0.5	0.33	0.19	0.07
Visco	sity ma	x. cST	Γ				50		Viscos	sity ma	x. cS7	-			;	50
Refrig	gerant						R452A		Refrig	erant					ı	R452A
Filling	yolum	e g					150		Filling	volum	e g					150
Globa	ıl Warm	ning Po	otentia	l for R	452A	:	2140		Globa	Warm	ning Po	otentia	for R	452A	:	2140
Carbo	n diox	de equ	uivalen	t t			0.321		Carbo	n dioxi	de eq	uivalen	t t			0.321
Pump	сарас	ity flo	w rate l	l/min		;	8 27		Pump capacity flow rate I/min 8 27						8 27	
Pump	capac	ity flov	w pres	sure b	ar		0.1 0.7		Pump	capac	ity flo	w press	sure b	ar		0.1 0.7

115V/60Hz (Nema N5-15 Plug)

115V	//60H	Z						
Heatir	ng capa	acity k	N			•	1	
Cooling capacity (Ethanol)								
°C	200	20	10	0	-10	-20	-30	
kW	0.6	0.6	0.54	0.44	0.27	0.16	0.04	
Viscos	sity ma	x. cST				!	50	
Refrig	erant					ı	R449A	
Filling	volum	e g					150	
Global	l Warm	ing Po	tentia	for R4	149A	•	1397	
Carbo	n dioxi	de equ	iivalen	t t		(0.21	
Pump	capac	ity flov	v rate l	/min		8	3 27	
Pump	capac	ity flov	v press	sure ba	ar	(0.1 0.7	

200-230V/50-60Hz (Schuko Plug - CEE 7/4 Plug Type F)

200V/50Hz						200V	//60H	Z							
Heatir	ng capa	acity k	W				1.8	Heating capacity kW						1.8	
Cooling capacity (Ethanol)						Cooling capacity (Ethanol)									
°C	200	20	0	-10	-20	-30		°C	200	20	0	-10	-20	-30	
kW	0.6	0.6	0.44	0.27	0.16	0.04		kW	0.6	0.6	0.44	0.27	0.16	0.04	
Viscos	sity ma	x. cST	•				50	Viscos	sity ma	x. cST					50
Refrig	erant						R449A	Refrigerant R449A						R449A	
Filling	volum	e g					150	Filling volume g 150							150
Globa	l Warm	ing Po	tentia	l for R	149A		1397	Global Warming Potential for R449A 1397						1397	
Carbo	n dioxi	de equ	ıivalen	t t			0.21	Carbo	n dioxi	de equ	ıivalen	t t			0.21
Pump	capac	ity flov	v rate l	/min			8 27	Pump	capaci	ty flov	v rate l	/min		;	8 27
Pump	capac	ity flov	v press	sure ba	ar		0.1 0.7	Pump capacity flow pressure bar 0.1 0.7						0.1 0.7	
230V/50Hz						230V/60Hz									



Heatin	ng capa	acity kW 2					2	Heating capacity kW						2	2
Coolir	Cooling capacity (Ethanol)							Cooling capacity (Ethanol)							
°C	200	20	0	-10	-20	-30		°C	200	20	0	-10	-20	-30	
kW	0.6	0.6	0.44	0.27	0.16	0.04		kW	0.6	0.6	0.44	0.27	0.16	0.04	
Visco	sity ma	x. cST	-				50	Viscos	sity ma	x. cST				!	50
Refrig	erant					!	R449A	Refrigerant						ı	R449A
Filling	volum	e g					150	Filling volume g						•	150
Globa	l Warm	ning Po	otentia	l for R	149A		1397	Global Warming Potential for R449A						•	1397
Carbo	n dioxi	de equ	uivalen	t t			0.21	Carbon dioxide equivalent t 0.21						0.21	
Pump	capac	ity flov	w rate	l/min		:	8 27	Pump	capaci	ty flov	v rate l	/min		8	8 27
Pump	capac	ity flov	w pres	sure ba	ar		0.1 0.7	Pump capacity flow pressure bar						(0.1 0.7

200-230V/50-60Hz (UK Plug Type BS1363A)

200V/50Hz		200V/60Hz						
Heating capacity kW	1.8	Heating capacity kW 1.8						
Cooling capacity (Ethanol)		Cooling capacity (Ethanol)						
°C 200 20 0 -10 -20 -3	0	°C 200 20 0 -10 -20 -30						
kW 0.6 0.6 0.44 0.27 1.6 0.0)4	kW 0.6 0.6 0.44 0.27 0.16 0.04						
Viscosity max. cST	50	Viscosity max. cST 50						
Refrigerant	R449A	Refrigerant R449A						
Filling volume g	150	Filling volume g 150						
Global Warming Potential for R449A	1397	Global Warming Potential for R449A 1397						
Carbon dioxide equivalent t	0.21	Carbon dioxide equivalent t 0.21						
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						
230V/50Hz		230V/60Hz						
230V/50Hz Heating capacity kW	2	230V/60Hz Heating capacity kW 2						
	2							
Heating capacity kW		Heating capacity kW 2						
Heating capacity kW Cooling capacity (Ethanol)	0	Heating capacity kW 2 Cooling capacity (Ethanol)						
Heating capacity kW Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -3	0	Heating capacity kW 2 Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -30						
Heating capacity kW Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -3 kW 0.6 0.6 0.44 0.27 0.16 0.0	0	Heating capacity kW 2 Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -30						
Heating capacity kW Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -3 kW 0.6 0.6 0.44 0.27 0.16 0.0 Viscosity max. cST	0 04 50	Heating capacity kW 2 Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -30 kW 0.6 0.6 0.44 0.27 0.16 0.04 Viscosity max. cST 50						
Heating capacity kW	0 04 50 R449A	Heating capacity kW 2						
Heating capacity kW Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -3 kW 0.6 0.6 0.44 0.27 0.16 0.6 Viscosity max. cST Refrigerant Filling volume g	0 04 50 R449A 150	Heating capacity kW 2						
Heating capacity kW	0 04 50 R449A 150 1397	Heating capacity kW 2 Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -30 kW 0.6 0.6 0.44 0.27 0.16 0.04 Viscosity max. cST 50 Refrigerant R449A Filling volume g 150 Global Warming Potential for R449A 1397						

200-230V/50-60Hz (CH Plug Type SEV 1011)

200\	200V/50Hz					200V/60Hz								
Heati	ng capa	acity k	W			•	1.8	Heatir	ng capa	city k	W			•
Coolii	ng capa	city (F	thano	l)				Coolin	ıg capa	city				
°C	200	20	0	-10	-20	-30		°C	200	20	0	-10	-20	-30
kW	0.6	0.6	0.44	0.27	0.16	0.04		kW	0.6	0.6	0.44	0.27	0.16	0.04
Visco	sitv ma	x. cST	-			į	50	Visco	sitv ma	x. cST				į



Refrigerant	R449A	Refrigerant R449A
Filling volume g	150	Filling volume g 150
Global Warming Potential for R449A	1397	Global Warming Potential for R449A 1397
Carbon dioxide equivalent t	0.21	Carbon dioxide equivalent t 0.21
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
230V/50Hz		230V/60Hz
Heating capacity kW	2	Heating capacity kW 2
Cooling capacity		Cooling capacity (Ethanol)
°C 200 20 0 -10 -20 -30)	°C 200 20 0 -10 -20 -30
kW 0.6 0.6 0.44 0.27 0.16 0.0	4	kW 0.6 0.6 0.44 0.27 0.16 0.04
Viscosity max. cST	50	Viscosity max. cST 50
Refrigerant	R449A	Refrigerant R449A
Filling volume g	150	Filling volume g 150
Global Warming Potential for R449A	1397	Global Warming Potential for R449A 1397
Carbon dioxide equivalent t	0.21	Carbon dioxide equivalent t 0.21
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

200-230V/50-60Hz (Nema N5-15 Plug)

200V/50Hz	200\	V/60Hz						
Heating capacity kW 1.8	8 Heati	ng capacity l	(W				1.8	
Cooling capacity (Ethanol)	Coolin	Cooling capacity (Ethanol)						
°C 200 20 0 -10 -20 -30	°C	200 20	0	-10	-20	-30		
kW 0.6 0.6 0.44 0.27 0.16 0.04	kW	0.6 0.6	0.44	0.27	0.16	0.04		
Viscosity max. cST 50	0 Visco	sity max. cS	Т			!	50	
Refrigerant R4	449A Refrig	gerant				ı	R449A	
Filling volume g 15	50 Filling	g volume g				•	150	
Global Warming Potential for R449A 13	Globa Globa	al Warming P	otential	l for R4	149A	-	1397	
Carbon dioxide equivalent t 0.2	21 Carbo	on dioxide eq	uivalen	t t		(0.21	
Pump capacity flow rate I/min 8 .	27 Pump	capacity flo	w rate l	/min		8	8 27	
Pump capacity flow pressure bar 0.1	1 0.7 Pump	capacity flo	w press	sure ba	ır	(0.1 0.7	
230V/50Hz	230\	V/60Hz						
230V/50Hz Heating capacity kW 1.8		V/60Hz ng capacity l	ίW			2	2	
	8 Heatin			1)		2	2	
Heating capacity kW 1.8	8 Heatin	ng capacity l		l) -10	-20	-30	2	
Heating capacity kW 1.8 Cooling capacity (Ethanol)	8 Heatii Coolii	ng capacity l	Ethanol		-20 0.16	-30	2	
Heating capacity kW 1.8 Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -30	8 Heatin Coolin °C kW	ng capacity l ng capacity (200 20	0 0 0.44	-10		-30 0.04	2	
Heating capacity kW 1.8 Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -30 kW 0.6 0.6 0.44 0.27 1.6 0.04 Viscosity max. cST 50	8 Heatin Coolin °C kW	ng capacity I ng capacity (200 20 0.6 0.6	0 0 0.44	-10		-30 0.04		
Heating capacity kW 1.8 Cooling capacity (Ethanol) °C 200 20 0 -10 -20 -30 kW 0.6 0.6 0.44 0.27 1.6 0.04 Viscosity max. cST 50	8 Heating Cooling of the Cooling of	ng capacity I ng capacity (200 20 0.6 0.6	0 0 0.44	-10		-30 0.04	50	
Heating capacity kW	Heating Cooling C kW O Visco 449A Refrig	ng capacity I ng capacity (200 20 0.6 0.6 sity max. cS	Ethanol 0 0.44	-10 0.27	0.16	-30 0.04	50 R449A	
Heating capacity kW	8 Heatin Coolin °C kW 0 Visco 449A Refrig 50 Filling 397 Globa	ng capacity I ng capacity (200 20 0.6 0.6 sity max. cS gerant g volume g	Ethanol 0 0.44 T	-10 0.27	0.16	-30 0.04	50 R449A 150	
Heating capacity kW	Heating Cooling C kW O Visco 449A Refrig 50 Filling 397 Globa 21 Carbo	ng capacity I ng capacity (200 20 0.6 0.6 sity max. cS gerant g volume g	Ethanol 0 0.44 T otential	-10 0.27	0.16	-30 0.04	50 R449A 150 1397	



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.



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



Ouick 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.



Early warning system for low liquid level

Maximum safety for applications, optical and audible alarm, allows user to refill bath fluid before the unit shuts down



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.