

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 7	04	Bath tank	Stainless steel						
Available voltage versions:		Bath cover	integrated						
9 013 704.01		Usable bath opening cm (W x L / D)	22 x 15 / 15						
9 013 704.02									
9 013 704.33									
9 013 704.04									
9 013 704.05									
9 013 704.33.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	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									
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

°C

kW

200 20

0.6

Viscosity max. cST

Refrigerant Filling volume g

0.6

Global Warming Potential for R449A

Carbon dioxide equivalent t

Pump capacity flow rate I/min

10

-10 -20

50

R449A

150

1397 0.21

8 ... 27

0.54 0.44 0.27 0.16 0.04

100V/50Hz		100V/60Hz								
Heating capacity kW	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							
Viscosity max. cST	50	Viscosity max. cST	50							
Refrigerant	R452A	Refrigerant	R452A							
Filling volume g	150	Filling volume g	150							
Global Warming Potential for R452A	2140	Global Warming Potential for R452A	2140							
Carbon dioxide equivalent t	0.321	Carbon dioxide equivalent t	0.321							
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							
115V/60Hz										
Heating capacity kW	1									
Cooling capacity (Ethanol)										

Pump capacity flow pressure bar 0.1 0.7															
200V/50Hz								200V/60Hz							
Heating capacity kW 1.8								Heating capacity kW 1.8							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	
Visco	sity ma	x. cST	-				50	Viscosity max. cST 50							
Refri	gerant						R449A	Refrigerant R449A							
Filling	g volum	e g					150	Filling volume g 150							150
Global Warming Potential for R449A 1397							1397	Global Warming Potential for R449A 1397							1397
Carbo	on dioxi	de equ	uivalen	t t			0.21	Carbon dioxide equivalent t 0.21							0.21
Pump	сарас	ity flov	v rate	l/min			8 27	Pump capacity flow rate I/min							8 27
Pump	сарас	ity flov	v pres	sure ba	ar		0.1 0.7	Pump capacity flow pressure bar 0.1 0.7						0.1 0.7	
230	V/50H	lz						230V/60Hz							
Heati	ng capa	acity k	W			:	2	Heating capacity kW 2							2
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	
Viscosity max. cST 50								Viscosity max. cST							50
Refrigerant R449A								Refrigerant R449A							R449A



Filling	ing volume g 150								volum		150						
Global Warming Potential for R449A 1							1397	Global Warming Potential for R449A							1397		
Carbo	Carbon dioxide equivalent t 0.21								n dioxi			0.21					
Pump	capac	ity flov	v rate	l/min			8 27	Pump	capac		8 27						
Pump capacity flow pressure bar 0.1 0.7							0.1 0.7	Pump capacity flow rate I/min Pump capacity flow pressure bar							0.1 0.7		
							, .										
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	-30		°C	200	20	0	-10	-20	-30			
kW	0.6	0.6		0.27	1.6	0.04		kW	0.6	0.6		0.27	0.16	0.04			
Viscos	sity ma	ax. cST					50	Viscosity max. cST							50		
Refrig	erant						R449A	Refrig	erant						R449A		
Filling	volum	ie g					150	Filling	volum	e g					150		
Global	l Warm	ning Po	tentia	I for R4	149A		1397	Global	Warm	ing Po	otentia	l for R	149A		1397		
Carbo	n dioxi	ide equ	ıivalen	t t		-	0.21	Carbo	n dioxi	de equ	uivalen	t t			0.21		
Pump	capac	ity flov	v rate	l/min		1	8 27	Pump	capac	ity flo	w rate	l/min			8 27		
Pump	capac	ity flov	v pres	sure ba	ar		0.1 0.7	Pump	capac	ity flo	w pres	sure ba	ar		0.1 0.7		
230V	//50H	lz						230V	//60H								
Heatir	ng capa	acity k	W			:	2	Heating capacity kW							2		
Coolin	ıg capa	acity (E	thano	l)				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	ax. cST					50	Viscos	sity ma	x. cST	Г				50		
Refrig	erant						R449A	Refrigerant							R449A		
Filling	volum	ie g					150	Filling volume g							150		
Global	l Warm	ning Po	tentia	I for R4	149A		1397	Global Warming Potential for R449A							1397		
Carbo	n dioxi	ide equ	uivalen	t t			0.21	Carbon dioxide equivalent t							0.21		
Pump	capac	ity flov	v rate	l/min			8 27	Pump capacity flow rate I/min							8 27		
Pump	capac	ity flov	v pres	sure ba	ar		0.1 0.7	Pump capacity flow pressure bar							0.1 0.7		
200V	//50H	lz						200V/60Hz									
Heatin	ng capa	acity k	W				1.8	Heating capacity kW 1.8									
Coolin	ig capa	acity (E	thano	l)				Cooling capacity									
°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	ax. cST					50	Viscos	sity ma	x. cST					50		
Refrig	•						R449A	Refrigerant							R449A		
Filling	volum	ie g					150	Filling volume g							150		
Global	l Warm	ning Po	tentia	l for R4	149A		1397	Global Warming Potential for R449A							1397		
Carbo	n dioxi	ide equ	uivalen	t t			0.21	Carbo	n dioxi	de equ	uivalen	t t			0.21		
Pump	capac	ity flov	v rate	l/min			8 27	Pump	capac	ity flo	w rate	/min			8 27		
Pump	capac	ity flov	v pres	sure ba	ar		0.1 0.7	Pump capacity flow rate I/min Pump capacity flow pressure bar							0.1 0.7		
230V	//50⊢	17						230V/60Hz									
			W				2						2				
Heating capacity kW 2 Heating capacity kW 2										_							



Cooling	ı capa	acity						Coolir	ng capa	acitv (E	thanol)				
_	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		
Viscosi	ty ma	ıx. cST				į	50	Visco	sity ma	x. cST					50	
Refrige	rant					1	R449A	Refrig	erant						R449A	
Filling v	olum	e g					150	Filling	volum	e g					150	
Global \	Warm	ing Po	otentia	l for R4	149A		1397	Globa	l Warm	ing Po	tential	for R4	49A		1397	
Carbon	dioxi	de equ	uivalen	t t		(0.21	Carbo	n dioxi	de equ	uivalent	t t			0.21	
Pump c	apac	ity flov	w rate l	/min		8	8 27	Pump	сарас	ity flov	v rate l	/min			8 27	
Pump c	apac	ity flov	w press	sure ba	ar	(0.1 0.7	Pump	сарас	ity flov	v press	sure ba	ır		0.1 0.7	
200V/	′50H	z						200\	//60H	Z						
Heating	ј сара	acity k	W				1.8	Heati	ng capa	acity k	W				1.8	
Cooling	ј сара	acity (E	thano	l)				Coolir	ng capa	acity (E	thanol)				
°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		
Viscosi	ty ma	ıx. cST	-			!	50	Viscosity max. cST							50	
Refrige	rant					ı	R449A	Refrigerant							R449A	
Filling v	olum	e g					150	Filling volume g							150	
Global \	Warm	ing Po	otentia	l for R4	149A		1397	Global Warming Potential for R449A							1397	
Carbon	dioxi	de equ	uivalen	t t		(0.21	Carbon dioxide equivalent t							0.21	
Pump c	apac	ity flov	w rate l	/min		8	8 27	Pump capacity flow rate I/min							8 27	
Pump c	apac	ity flov	w press	sure ba	ar	(0.1 0.7	Pump capacity flow pressure bar 0.1 0.7							0.1 0.7	
230V/	′50H	z						230V/60Hz								
Heating	ј сара	acity k	W				1.8	Heating capacity kW							2	
Cooling	ј сара	acity (E	thano	l)				Coolir	ng capa	acity (E	thanol)				
°C	200	20	0	-10	-20	-30		°C	200	20	0	-10	-20	-30		
kW	0.6	0.6	0.44	0.27	1.6	0.04		kW	0.6	0.6	0.44	0.27	0.16	0.04		
Viscosi	ty ma	x. cST	-				50	Viscosity max. cST							50	
Refrige	rant					ı	R449A	Refrigerant							R449A	
Filling v	olum	e g					150	Filling volume g							150	
Global \	Warm	ing Po	otentia	l for R4	149A		1397	Global Warming Potential for R449A							1397	
Carbon	dioxi	de equ	uivalen	t t		(0.21	Carbon dioxide equivalent t							0.21	
Pump c	apac	ity flov	w rate l	/min		8	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								

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.



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.

fluid in time.

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



Connectivity.

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