# Julabo

# CORIO CD-900F Refrigerated - Heating Circulator

Refrigerated / Heating Circulators of the new CORIO series distinguish themselves with a great price-to-performance ratio. They are ideal for all standard tasks and routine work in laboratories and industry.

#### Your advantages

- · Models for internal and external applications
- Very quiet
- Bright, white, easy to read display
- · Easy pump change-over between internal and external circulation
- USB connection
- External pump connections
- Class III (FL) according to DIN 12876-1
- Space-saving cooling coil design yields more usable space in the bath tank
- $\boldsymbol{\cdot}$  High-quality bath tanks made of stainless steel with bath lid and drain tap
- Bath lid and drain tap included
- Removable ventilation grid
- Refrigeration unit without side vents



#### **Technical data**

Temperature stability °C

Available voltage	versions		Bath	
Order No.	9 012 706		Bath tank	Stainless steel
Available voltage vers	sions:		Bath cover	integrated
9 012 706.02	115V/60Hz (Nema	a N5-20 Plug)	Usable bath opening cm (W x L / D)	26 x 35 / 20
9 012 706.03	230V/50Hz (Schuł Type F)	ko Plug - CEE 7/4 Plug		
9 012 706.03.chn	230V/50Hz (CN PI	ug)		
9 012 706.04	230V/50Hz (UK Pl	ug Type BS1363A)		
9 012 706.05	230V/50Hz (CH PI	ug Type SEV 1011)		
9 012 706.13	230V/60Hz (Schuł Type F)	ko Plug - CEE 7/4 Plug		
9 012 706.12	200V/50-60Hz (Ne	ema N6-20 Plug)		
Cooling			Other	
Cooling of compress	or	1-stage Air	Classification	Classification III (FL)
			IP Code	IP 21
			Pump function	Pressure Pump
			Pump type	Immersion Pump
Electronics			Dimensions and volumes	
Temperature control		PID1	Weight kg	52
Absolute temperature	e 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 l	21 30
			Pump connections	M16x1 male
Temperature valu	Jes			
Setting the resolution display °C	of the temperature	0.1		
Working temperature	range °C	-40 +150		

±0.03



Ambient temperature °C	+5 +40
Temperature display resolution °C	0.01 0.1

## Performance values

# 115V/60Hz (Nema N5-20 Plug)

# 115V/60Hz

Heatir	ng capa	acity k	N				1	
Cooling capacity								
°C	20	10	0	-10	-20	-30	-40	
kW	0.9	0.9	0.8	0.55	0.35	0.15	0.02	
Viscosity max. cST 50								
Refrig	erant					I	R449A	
Filling	volum	e g				:	220	
Globa	l Warm	ning Po	tentia	l for R4	149A		1397	
Carbon dioxide equivalent t 0.307								
Pump capacity flow rate I/min 16								
Pump	capac	ity flov	v pres	sure ba	ar		0.33	

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

230\	//50H	lz							
Heating capacity kW 2									
Cooling capacity (Ethanol)									
°C	20	10	0	-10	-20	-30	-40		
kW	0.9	0.9	0.8	0.55	0.35	0.15	0.02		
Visco	sity ma	ix. cST				ļ	50		
Refrig	erant					I	R449A		
Filling	volum	e g				:	220		
Globa	l Warm	ning Po	otentia	l for R4	149A		1397		
Carbon dioxide equivalent t 0.307									
Pump capacity flow rate I/min 15									
Pump	capac	ity flov	v pres	sure ba	ar	(	0.35		

# 230V/50Hz (CN Plug)

230V	//50H	lz							
Heating capacity kW 2									
Cooling capacity (Ethanol)									
°C	20	10	0	-10	-20	-30	-40		
kW	0.9	0.9	0.8	0.55	0.35	0.15	0.02		
Viscos	sity ma	ix. cST				į	50		
Refrig	erant					I	R449A		
Filling volume g 220									
Global Warming Potential for R449A 1397									
Carbo	n dioxi	de equ	iivalen	tt		(	0.307		

Pump capacity flow rate I/min	15
Pump capacity flow pressure bar	0.35

# 230V/50Hz (UK Plug Type BS1363A)

#### 230V/50Hz

Heatir	ng capa	acity k\	N			:	2	
Cooling capacity (Ethanol)								
°C	20	10	0	-10	-20	-30	-40	
kW	0.9	0.9	0.8	0.55	0.35	0.15	0.02	
Viscosity max. cST 50								
Refrig	erant					l	R449A	
Filling	volum	e g				:	220	
Globa	l Warm	ning Po	tentia	l for R4	149A		1397	
Carbo	n dioxi	de equ	ivalen	tt			0.307	
Pump capacity flow rate I/min 15								
Pump capacity flow pressure bar 0.35								

# 230V/50Hz (CH Plug Type SEV 1011)

230\	//50H	z						
Heating capacity kW 2								
Cooling capacity (Ethanol)								
°C	20	10	0	-10	-20	-30	-40	
kW	0.9	0.9	0.8	0.55	0.35	0.15	0.02	
Viscosity max. cST 50								
Refrig	erant					I	R449A	
Filling	volum	e g				:	220	
Globa	l Warm	ing Po	otentia	l for R4	149A		1397	
Carbon dioxide equivalent t 0.307								
Pump capacity flow rate I/min 15								
Pump	capac	ity flov	v pres	sure ba	ar	(	0.35	

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

230V/60Hz								
Heating capacity kW 2								
Cooling capacity (Ethanol)								
°C	20	10	0	-10	-20	-30	-40	
kW	kW 0.9 0.9 0.8 0.55 0.35 0.15 0.02							
Viscos	sity ma	ix. cST				!	50	
Refrig	erant					I	R449A	
Filling	volum	e g				:	220	
Global	Warm	ning Po	otentia	l for R4	149A		1397	
Carbo	n dioxi	de equ	ivalen	tt		(	0.307	
Pump capacity flow rate I/min 15								
Pump	сарас	ity flov	v pres	sure ba	ar	(	0.35	

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# 200V/50-60Hz (Nema N6-20 Plug)

200	200V/50Hz 200V/60Hz											
Heatir	ig capa	acity k\	N				1.5		Heatin	g capa	acity k	W
Cooling capacity (Ethanol)									Coolin	g capa	acity (E	ŧł
°C	20	10	0	-10	-20	-30	-40		°C	20	10	
kW	0.9	0.9	0.8	0.55	0.35	0.15	0.22		kW	0.9	0.9	
Viscos	sity ma	x. cST					50		Viscos	sity ma	ix. cST	
Refrig	erant						R449A		Refrigerant			
Filling	volum	e g					220		Filling volume g			
Globa	Warm	ing Po	tentia	l for R4	149A		1397		Global Warming Pote			
Carbo	rbon dioxide equivalent t 0.307 Carbon dioxide equi						Carbon dioxide equivalent t				١i	
Pump	Pump capacity flow rate I/min 12 Pump capacity flow							v				
Pump	capac	ity flov	v pres	sure ba	ar		0.3		Pump capacity flow			v

200V	′/60H	Z						
Heating capacity kW 1.5								
Cooling capacity (Ethanol)								
°C	20	10	0	-10	-20	-30	-40	
kW	0.9	0.9	0.8	0.55	0.35	0.15	0.22	
Viscos	sity ma	x. cST				;	50	
Refrig	erant					I	R449A	
Filling	volum	e g				:	220	
Globa	Warm	ing Po	tentia	l for R4	149A		1397	
Carbo	n dioxi	de equ	ivalen	tt		(	0.307	
Pump capacity flow rate l/min 14								
Pump	capac	ity flov	v pres	sure ba	ar	(	0.33	

## All Benefits



# 100% Checked.

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



# Handle with ease.

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



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.



### Green technology.

Development consistently applied environmentally friendly materials and technologies.



#### 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.



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





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.

# Modern. Reliable.

High-grade components in every JULABO Circulator - platinum sensors, proven motor technology, CAN-Bus communication and much more.

#### Satisfied customers.

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



More bath. Designed for more comfort. Thanks to the recessed cooling coil, the internal bath

provides more space.







Services 24/7.

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



**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.



Quick start. Individual JULABO consultation and comprehensive manuals at your disposal.



**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.



Locked in.

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



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



Solid. Minimized energy loss through high-quality insulation.



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



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



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.

#### 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.



Connectivity. Remote control made easy. CORIO CD circulators feature a USB connection.