

## FC1600T Chiller

FC recirculating coolers with a particularly powerful pump and Pt100 connection are preferably used for precise temperature control of large-volume external applications. They can be integrated into process control systems via the permanently integrated analog connection.

#### Your advantages

- · Adjustable ratio for feed/return temperatures
- · Easy filling system located at the front
- Activation of pump for filling
- Bright MULTI-DISPLAY (LED)
- · Upper and lower temperature warning functions with interval tone
- Integrated freezing protection and dry-running protection
- · Rapid and easy operation via seamless, splash-proof keypad
- Liquid level indication on the front
- · Self-test, reciprocal sensor monitoring, pump motor and compressor overload
- protection
- Complete shut-down with audible signal in case of an alarm
- Removable venting grid for simplified removal of dust
- RS232 interface for PC connection
- High temperature stability
- Integrated heater with 1.2 kW capacity
- Pressure Indicator
- Connections for external Pt100 sensor
- Analog Connections for programming (0..10V / 0...24mA) and temperature

recorder ( $0V = 0^{\circ}C$ )

### **Technical data**

Available volta	age versions		Bath			
Order No.	9 600 166		Bath tank	Stainless steel		
Available voltage	versions:					
9 600 166.03	230V/50Hz (Schuko Type F)	o Plug - CEE 7/4 Plug				
9 600 166.13	230V/60Hz (Schuko Type F)	o Plug - CEE 7/4 Plug				
9 600 166.05	230V/50Hz (CH Plu	g Type SEV 1011)				
9 600 166.04	230V/50Hz (UK Plu	g Type BS1363A)				
Cooling			Other			
Cooling of compressor 1-st		1-stage Air	Sound pressure level dbA	58		
			Classification	Classification III (FL)		
			IP Code	IP 21		
			Pump type	Immersion Pump		
Electronics			Dimensions and volumes	Dimensions and volumes		
Digital interface RS232		RS232	Weight kg	67		
External pt100 sensor connection integ		integrated	Barbed fittings inner diameter	8/12 mm		
Temperature control PID1		PID1	Dimensions cm ( $W \times L \times H$ )	46 x 61 x 49		
Temperature display 2x LED		2x LED	Filling volume l	8 11		
Temperature setting Keypad		Pump connections	M16x1 male			
Temperature	values					
Temperature display resolution °C 0.1						





### Performance values

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

230V/50Hz								
Heatir	ng capa	acity k\	1.2					
Coolin	Cooling capacity (Water Glycol)							
°C	20	10						
kW	1.45	1.05						
Refrigerant						R134a		
Filling volume g						380		
Globa	l Warm	ning Po	1430					
Carbo	n dioxi	de equ	0.543					
Pump	capac	ity flov	28					
Pump	np capacity flow pressure bar 3.5							

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

230V/60Hz							
сара	acity k\	1.2					
Cooling capacity (Water Glycol)							
20	10						
.45	1.05						
ant		R134a					
olum	e g	380					
Varm	ing Po	1430					
on dioxide equivalent t 0.543			0.543				
apaci	ity flow	28					
capacity flow pressure bar 3.5			3.5				
	capa capa 20 .45 ant Jum /arm dioxi apac	capacity KV capacity (V 20 10 .45 1.05 ant olume g Varming Po dioxide equ apacity flow	capacity kW capacity (Water 0 20 10 5 .45 1.05 0.8 ant blume g Varming Potential dioxide equivalen apacity flow rate l	capacity kW capacity (Water Glycol) 20 10 5 0 .45 1.05 0.8 0.65 ant blume g Varming Potential for R1 dioxide equivalent t apacity flow rate l/min	capacity kW capacity (Water Glycol) 20 10 5 0 45 1.05 0.8 0.65 0.25 ant blume g Varming Potential for R134a dioxide equivalent t apacity flow rate l/min		

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

230V/50Hz								
Heatir	ng capa	acity kV	1.2					
Coolin	Cooling capacity (Water Glycol)							
°C	20	10						
kW	1.45	1.05						
Refrig	erant		R134a					
Filling	volum	e g	380					
Globa	Warm	ing Po	1430					
Carbo	n dioxi	de equ	0.543					
Pump	capac	ity flow	28					
Pump	capac	ity flow	3.5					

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

230V/50Hz	
Heating capacity kW	1.2



Cooling capacity (Water Glycol)						
°C	20	10	5	0	-10	
kW	1.45	1.05	0.8	0.65	0.25	
Refrig	erant		R134a			
Filling	volum	e g	380			
Globa	l Warm	ning Po	1430			
Carbo	n dioxi	de equ	0.543			
Pump	capac	ity flov	28			
Pump	ump capacity flow pressure bar 3.5				3.5	

### Benefits



JULABO. Quality.

Highest standards of quality for a long product life.



Satisfied customers.

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



### Quick start.

Individual JULABO consultation and comprehensive manuals at your disposal.



## 100 % Cooling capacity

'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures



**Control from the external application** External Pt100 sensor connection for precise measurement and control directly in the external application



**Connection of additional equipment** Stakei connections for solenoid valve, HSP booster pump and HST booster heater



Green technology.

Development consistently applied environmentally friendly materials and technologies.



#### 100% Checked.

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



#### Services 24/7.

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



#### For higher demands

PID Temperature control with drift compensation and adjustable parameters, improved temperature stability for external applications, temperature stability ±0.01 °C internal, <±0.1 °C external.



For flammable bath fluid Classification III (FL) according to DIN 12876-1



Early warning system for high/low temperature limits Maximum safety for applications, optical and

audible alarm, convertible to automated cut-off function