



Technical data sheet

Recirculating Chiller F-100 / F-105

The F-100 and F-105 are environmentally friendly and compact recirculation chillers designed for one laboratory evaporator. The cooling temperature of the F-100 is fixed at 10 °C whereas the F-105 features an adjustable temperature with a higher cooling capacity. In addition, the F-105 offers ON/OFF regulation when used in conjunction with the Interface I-100.



Overview

The Recirculating Chiller F-100 and F-105 differ in their cooling capacity, temperature range and capability to communicate with the Interface I-100:

	F-100	F-105
Cooling capacity at 15 °C	---	530 W
Cooling capacity at 10 °C	300 W	390 W
Cooling capacity at 0 °C	---	120 W
Set temperature	10 °C (fix)	-10 °C to +25 °C
ON/OFF regulation with I-100	no	yes

* Measured at 20 °C ambient temperature. Typically required cooling capacity for a rotary evaporator is 400 W.

Scope of delivery

All configurations are supplied ready to use.

Components	F-100 / F-105
Hose clamp	4
Power cord	1
Instruction manual on CD	1
Hose barbs, GL-14; Ø 8 mm	2

Order Code

Choose the configuration according to your needs:

1 1 0 5 6 4 6 0

Recirculating Chiller F-100: 230 V
with fixed cooling temperature of 10 °C

1 1 0 5 6 4 6 3

Recirculating Chiller F-105: 115 V
with controllable cooling temperature
-10 °C to +25 °C

1 1 0 5 6 4 6 2

Recirculating Chiller F-105: 230 V
with controllable cooling temperature
-10 °C to +25 °C

Technical data

Recirculating Chiller

	F-100	F-105
Dimensions (W x D x H)	280 x 420 x 500 mm	280 x 420 x 500 mm
Weight	28 kg	30 kg
Power consumption (max.)	850 W	850 W
Heating emission	700 W	700 W
Cooling capacity at 15 °C*	-	530 W
Cooling capacity at 10 °C*	300 W	390 W
Cooling capacity at 0 °C*	-	120 W
Cooling capacity at -10 °C*	-	10 W
Set temperature range	fix at 10 °C	-10 °C to +25 °C
Connection voltage	230 VAC ± 10 % -	230 VAC ± 10 % or 115 VAC ± 10 %
Frequency at 230 V at 115 V	50 / 60 Hz -	50 / 60 Hz 60 Hz
Fuse at 230 V at 115 V	6.3 AT -	6.3 AT 8 AT
Temperature display	no display	digital, resolution 0.1 °C
Refrigerant	R513a (280 g)	R513a (320 g)
Temperature regulation accuracy	± 2 °C	± 1 °C
Tank volume	3 L	3 L
Tubing connection	8 mm (GL14)	8 mm (GL14)
Pump pressure (max.)	0.6 bar	0.6 bar
Flow rate	2.5 L/min	2.5 L/min
Compatibility with interface	-	I-100, V-850, V-855
Overvoltage category	II	II
IP Code	IP20	IP20
Pollution degree	2	2

* Measured at 20 °C ambient temperature. Typically required cooling capacity for a rotary evaporator is 400 W.

Ambient conditions

For indoor use only.

Max. altitude above sea level	2000 m
Ambient temperature	5 - 35 °C (25 °C)
Maximum relative humidity	80 % for temperatures up to 31 °C decreasing linearly to 50 % relative humidity at 40 °C

Storage temperature

max. 45 °C

Accessories

	Order no.	Image
Hose insulation, Kaiflex, 11/23 mm, 1 m, black	028696	

Feature comparison

The Recirculating Chiller F-105 offers the following features:

Feature	Description	With interface
Temperature setting on chiller	Set the temperature in 0.1 °C increments using the navigation knob. Actual and set temperature is shown on the integrated display.	
ON/OFF regulation with interface	The Interface I-100 and Vacuum Controller V-850 / V-855 switch the recirculation chiller automatically ON when distillation starts, and OFF when the process is terminated.	



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