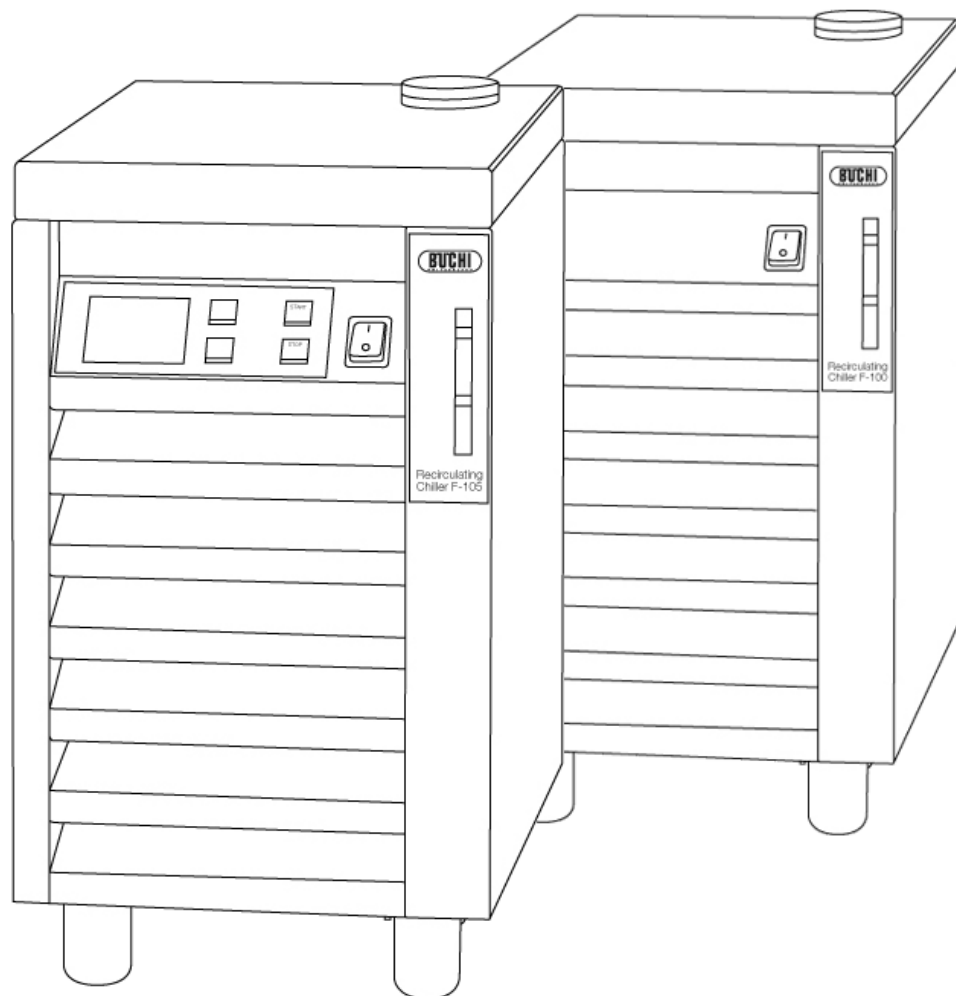




Recirculating Chiller F-100 / F-105

Technical data sheet

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.

Order Code

Choose the configuration according to your needs:

1 1 0 6 1 3 5 2

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

1 1 0 6 0 0 0 1

Recirculating Chiller F-100: 115 V
with fixed cooling temperature of 10 °C

1 1 0 6 0 0 0 0

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

1 1 0 6 1 3 5 3

Recirculating Chiller F-105: 100 V
with controllable cooling temperature
from -10 °C to +25 °C

1 1 0 6 0 0 0 3

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

1 1 0 6 0 0 0 2

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

Scope of delivery

The recirculating chillers are delivered ready to use and is complete of:

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

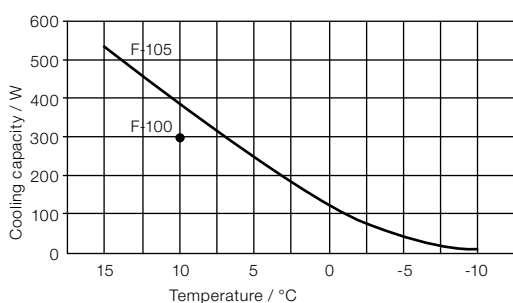
Technical data

	F-100	F-105
Dimensions (W x H x D)		
230 V	280 x 500 x 420 mm	280 x 500 x 420 mm
100 V / 115 V	280 x 590 x 420 mm	280 x 590 x 420 mm
Weight		
230 V	28 kg	30 kg
100 V / 115 V	37 kg	40 kg
Cooling capacity		
at 15 °C	---	530 W
at 10 °C	300 W	390 W
at 0 °C	---	120 W
at -10 °C	---	10 W
Set temperature range	fix at 10 °C	-10 °C – +25 °C
Power consumption (max.)	850 W	850 W
Supply voltage	230 VAC ± 10 % or 115 VAC ± 10 % 100 VAC ± 10 %	230 VAC ± 10 % or 115 VAC ± 10 % 100 VAC ± 10 %
Frequency	50/60 Hz	50/60 Hz
Temperature display	no display	digital, resolution 0.1 °C
Ambient temperature	5 – 35 °C	5 – 35 °C
Refrigerant	R 134a	R 134a
Temperature regulation accuracy	± 2 °C	± 1 °C
Tank volume	3 L	3 L
Tubing connection	8 mm (GL14)	8 mm (GL14)
Pump pressure	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

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

Temperature dependence of cooling capacity

The following graph shows the relation between cooling capacity and temperature at 20 °C ambient conditions; the lower the temperature, the lower the cooling capacity. In addition to the ambient temperature, the cooling capacity is influenced by humidity, tubing length, tubing diameter etc.



Accessories

Order number

Tubing. Synthetic rubber, Ø 11/23 mm, black, per m

028696

Use: insulation of cooling tubing

Features

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.	●