



designed for scientists



RC 5 basic

/// Data Sheet

Powerful recirculating chiller, designed for external cooling applications up to -30°C .

The energy-efficient chiller is operated with an eco-friendly refrigerant and reaches a high power density. This results in a comparatively small working space in the lab.

The speed-controlled PEEK pump allows an indirect, continuous adjustment of the maximum pressure and flow rate. Due to its excellent temperature stability of about $\pm 0,1\text{ K}$, the RC 5 can handle even sophisticated applications. The isolated, high-quality 7l bath has an integrated hopper and drain valve, ensuring a safe and clean handling of the thermofluid. A hose can be connected to empty the bath in order to avoid direct contact with the thermofluid. The easy-to-open front flap allows an easy cleaning of the cooling unit's air filter.



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Key Features

- Speed-controlled refrigeration system with 1400 W cooling capacity (@20°C)
- Natural thermofluid R290
- Designed for cooling applications up to -30°C - RT
- Extended operating temperature range until 80°C
- Excellent temperature stability of about $\pm 0,1\text{K}$ (@-10°C)
- Speed-controlled pump made of PEEK: (0,6 bar; 31l/min)
- Digital level indicator

Interfaces:

- RS 232 and USB



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Technical Data

Appliance type	Recirculating chiller
Cooling agent	R290
Cooling agent quantity [g]	90
Cooling agent pressure max. [bar]	21
Cooling capacity (@20°C) [W]	1400
Cooling capacity (@10°C) [W]	1200
Cooling capacity (@0°C) [W]	950
Cooling capacity (@-10°C) [W]	650
Cooling capacity (@-20°C) [W]	450
Cooling capacity (@-30°C) [W]	200
Working temperature [°C]	-30 - room temp.
Operating temperature min. [°C]	-30
Operating temperature max. (with external heating) [°C]	80
Temperature display	yes
Temperature control	PT 100
Working temperature sensor	PT 100
Working temperature display	LED
Temperature stability DIN 12876 [±K]	0.2
Display resolution [K]	0.1
Warning function optical	yes
Warning function acoustic	yes
Warning function excess temperature	yes
Sub-level protection	yes
Filling volume [l]	5.0 - 7.0
Pump type	Pressure- / suction pump
Pump capacity adjustable	yes
Pump pressure max. (0 liters discharge flow) [bar]	0.61
Pressure pump (suction side) (0 liter flow) [bar]	0.45
Flow rate max. (0 bar back pressure) [l/min]	31
Pump connection	M16x1
Calibration option	yes
Technical data complies with the standard	DIN 12876
Permissible ON time [%]	100
Dimensions (W x H x D) [mm]	310 x 546 x 490
Weight [kg]	37.5
Permissible ambient temperature [°C]	5 - 32
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 21
RS 232 interface	yes
USB interface	yes
Voltage [V]	230 / 100 - 115
Frequency [Hz]	50/60
Power input [W]	1100