



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 |
| Frequency [Hz] | 50/60 |
| Power input [W] | 1100 |