



designed for scientists



## RC 2 GREEN basic

/// Data Sheet

Powerful, compact and energy-efficient circulating chiller for cooling applications up to -30 °C. The on-demand and speed-controlled compressor, operated with natural refrigerant, achieves a cooling capacity of 800 W at a minimum energy consumption.

The speed-controlled PEEK pump allows an indirect continuous adjustment of maximum pressure and flow rate. The integrated filling funnel and drain valve enable safe and clean handling of the thermofluid. With regular cleaning, the easily accessible stainless steel woven mesh air filter guarantees consistent performance.

The high-quality insulated 4 l bath reservoir allows the use of up to 2.5 l of thermofluid in the external cooling circle



designed for scientists

without refilling.

- highly efficient speed-controlled cooling unit with a cooling capacity of 800 W (@20 °C)
- natural refrigerant R290
- speed-controlled PEEK pump: (0.5 bar; 21 l/min)
- digital level indicator
- big LED-Display
- optical and acoustic warning functions
- easy-to-clean stainless steel mesh filter
- high quality insulated 4 l bath reservoir (minimum 1.5 l)

Interfaces:

- RS 232 and USB for controlling and monitoring the devices via labworldsoft® and to update the software online
- Calibrateable internal temperature sensor (3 point)

Scope of delivery

- RC 2 GREEN basic
- Olive for DN 8 hoses (2 pcs.)
- Olive for DN 12 hoses (2 pcs.)
- USB Cable - USB A to Micro-B, 2 m



designed for scientists

## Technical Data

|                                                         |                          |
|---------------------------------------------------------|--------------------------|
| Appliance type                                          | Recirculating chiller    |
| Cooling agent                                           | R290                     |
| Cooling agent quantity [g]                              | 69                       |
| Cooling agent pressure max. [bar]                       | 21                       |
| Cooling capacity (@20°C) [W]                            | 800                      |
| Cooling capacity (@10°C) [W]                            | 700                      |
| Cooling capacity (@0°C) [W]                             | 500                      |
| Cooling capacity (@-10°C) [W]                           | 400                      |
| Cooling capacity (@-20°C) [W]                           | 200                      |
| Cooling capacity (@-30°C) [W]                           | 90                       |
| Working temperature [°C]                                | -30 - room temp.         |
| Operating temperature min. [°C]                         | -30                      |
| Operating temperature max. (with external heating) [°C] | 70                       |
| Temperature display                                     | yes                      |
| Temperature stability DIN 12876 (@-10°C) [K]            | ±0.15                    |
| Working temperature sensor                              | PT 100                   |
| Working temperature display                             | LED                      |
| Safety temperature display                              | LED                      |
| Temperature stability DIN 12876 [K]                     | ±0.15                    |
| Display resolution [K]                                  | 0.1                      |
| Set temperature resolution [K]                          | 0.1                      |
| Warning function optical                                | yes                      |
| Warning function acoustic                               | yes                      |
| Warning function excess temperature                     | yes                      |
| Sub-level protection                                    | yes                      |
| Over-level protection                                   | yes                      |
| Filling volume [l]                                      | 1.4 - 4.0                |
| Pump type                                               | Pressure- / suction pump |
| Pump capacity adjustable                                | yes                      |
| Pump pressure max. (0 liters discharge flow) [bar]      | 0.5                      |
| Pressure pump (suction side) (0 liter flow) [bar]       | 0.25                     |
| Flow rate max. (0 bar back pressure) [l/min]            | 21                       |
| Pump connection                                         | M16x1                    |
| Calibration option                                      | yes                      |
| Technical data complies with the standard               | DIN 12876                |
| Noise level [dB(A)]                                     | 61                       |
| Dimensions (W x H x D) [mm]                             | 220 x 475 x 525          |
| Weight [kg]                                             | 25.5                     |
| 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                                           | Micro-USB                |
| Voltage [V]                                             | 230                      |
| Frequency [Hz]                                          | 50/60                    |
| Power input [W]                                         | 350                      |