



# All stainless steel Ministats® set the standard in the compact class

Exceptionally compact and powerful, Ministats have been the smallest cooling thermostats in the world since 1976. Their compact form allows them to be placed in small spaces, e.g. in a laboratory extraction hood. All three Ministats are now available with air or water cooling. Compliance with DIN 12876-1, class 3 allows them to be used unsupervised in continual operation. The maximum ambient temperature is 40 °C. The powerful variable speed pressure/suction pump can thermoregulate objects in the bath or external applications. The maximum pressure can be controlled using an optional pressure sensor – VPC (Variable Pressure Control) – which protects delicate glassware. The small volume and high power of the Ministats means exceptionally rapid heating and cooling rates are achieved. Optional displacement inserts reduce the bath volume by approximately 50 % amplifying this effect and reducing moisture absorption in the thermal fluid. All models have Active Cooling Control for cooling power control at the maximum working temperature and an automatic cooling power regulation for energy saving operation and reduced heat dissipation into the lab. The bath opening is large enough to allow small objects to be thermoregulated within. All parts in contact with

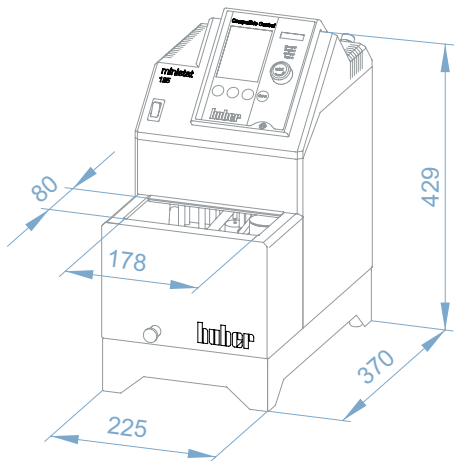
the thermal fluid are made of stainless steel or Polycarbonate.

Ministats have the CC-Pilot with Plug & Play Technology (proven since 1980). In the event of service the controller can be simply swapped. Using a data cable the Ministat can be remotely controlled. The CC-Pilot has a state of the art microprocessor controller and a high precision temperature measurement system for exact and reproducible temperature control. The functionality and TFT-display are supported by Easy Control. Ministats can be fitted with a Com.G@te (NAMUR Standard) allowing them to be integrated into a process control system.

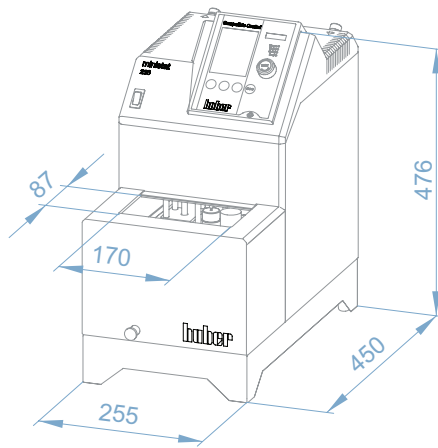
Typical applications for the smallest cooling thermostat in the world are external closed systems e.g. photometer, refractometer and viscosimeter.

**Increased functionality with optional accessories:**

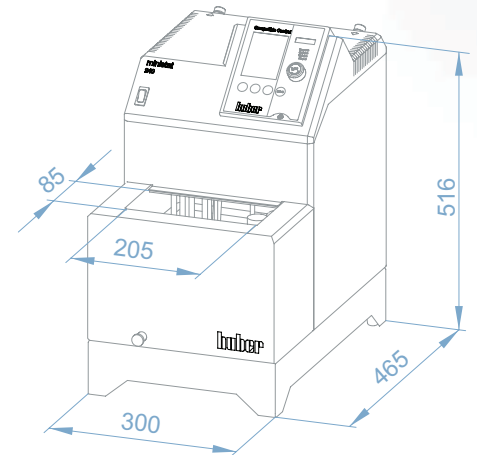
- External pressure sensor for VPC pressure control
- Com.G@te (NAMUR Standard): RS232, RS485, programmable volt-free contact, ECS (external control signal), Level monitoring
- Calibration and displacement inserts



| ministat® 125-cc®-NR |



| ministat® 230-cc®-NR |



| ministat® 240-cc®-NR |

Model	Working Temperature Range (°C)	Bath		Heating Power (kW)	Pump Data				Cooling Power (kW) at (°C)				Cat.No	G	Price
		Volume (ltr)	Depth (mm)		max. Pressure (l/min) (bar)	max. Suction (l/min) (bar)	20	0	-20	-30					
ministat® 125-cc®-NR	-25...150	2,75/1,3*	120	1,0	27	0,7	20	0,4	0,30	0,21	0,05	–	2014.0011.04	2	
ministat® 125w-cc®-NR	-25...150	2,75/1,3*	120	1,0	27	0,7	20	0,4	0,30	0,20	0,10	–	2014.0006.04	2	
ministat® 230-cc®-NR	-40...200	3,2/1,7*	135	2,0	27	0,7	20	0,4	0,42	0,38	0,25	0,14	2015.0005.04	2	
ministat® 230w-cc®-NR	-40...200	3,2/1,7*	135	2,0	27	0,7	20	0,4	0,42	0,38	0,25	0,14	2015.0007.04	2	
ministat® 240-cc®-NR	-45...200	4,9/2,8*	157	2,0	27	0,7	20	0,4	0,60	0,55	0,35	0,20	2016.0005.04	2	
ministat® 240w-cc®-NR	-45...200	4,9/2,8*	157	2,0	27	0,7	20	0,4	0,60	0,55	0,35	0,20	2016.0006.04	2	

\* with displacement insert

Temperature Stability to DIN 12876: 0,02 K



| ministat® 240-cc®-NR |

| ministat® 230-cc®-NR |

| ministat® 125-cc®-NR\*\* |

Baths and Circulators

## Features

- Compact ergonomic design
- CC-Pilot with Plug & Play Technology, Large TFT-display, bright LCD-display with zoom function and display resolution 0,1 °C, EASY Control
- RS232 interface and connection for optional Com.G@te (NAMUR Standard)
- Steplessly variable pump speed for homogeneous temperature distribution in bath or optimal circulation and heat transfer in external applications
- Active Cooling Control
- Pt100 External-Sensor
- Calibratable temperature sensor
- Adjustable over temperature and level protection
- Compliant with DIN12876-1 class 3
- Pump connections for external applications
- Bath opening for thermoregulation of objects in bath
- Drain tap on front (option)\*\*

**VPC**  
Variable Pressure Control

**DIN 12876**  
Our cooling powers are always quoted at full pump speed

**Plug & Play**  
3 years warranty

## Cooling Power to DIN

DIN – Deutsches Institut für Normung, is the national standards body for Germany. The standard, DIN 12876, demands that the quoted cooling capacity is to be measured during full pump power. Reducing the pump power reduces the heat entering the system. This leads to more net cooling capacity and makes lower temperatures possible. Ministats have an unusually strong pump. Reducing the pump speed increases in cooling power can be obtained from 30 to 50 Watts and over up to 5 °C lower end temperatures. We always quote the cooling power at full pump power.

