AIR | GAS | THERMOTECHNIK

Analyzer Sample-Conditioning Systems | Compressor Sample Gas Coolers | Peristaltic Pumps | Pre-Separators | Moisture Sensors
Refrigeration Gas Dryers | Refrigeration Air Dryers | Compressed Air Filters | Compressed Air Separators

CONDITIONING SYSTEMS
BCR03

GENERAL
The BCR03 Sample Gas Cooler is designed to lower the sample dew point and separate water vapor from humid sample streams in gas analysis systems. A typical application is to provide and maintain a conditioned gas sample prior to gas analysis by moisture intolerant analysis equipment.

TECHNOLOGY
To achieve a stable dew-point at varying inlet conditions, an improved proportional temperature controller and a high performance heat exchanger have been designed. The cooling system features a continuously running non-CFC compressor motor filled with environmentally friendly R134a. The heat exchanger is built into an aluminum cylinder, which absorbs peak loads and utilises maximum heat transfer rate and guarantees leak free operation. A built- in condensate discharge pump removes the condensate continuously.

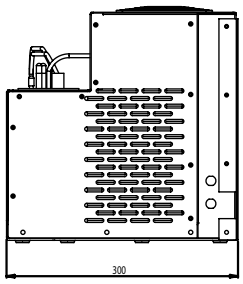
FEATURES
The BCR03 Cooler features a single or dual gas path with a choice of 3 different heat exchanger materials PVDF, Stainless Steel or Glass. A digital temperature display and an isolated contact providing unattended trouble free operation.

FEATURES

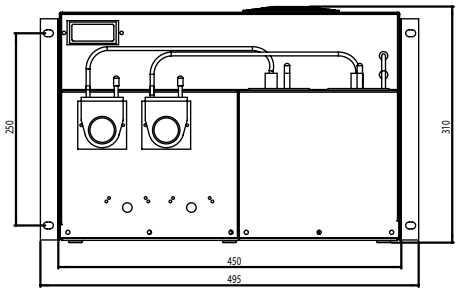
- Proven and reliable technology
- Built-in condensate discharge pump
- Stable dew-point +3°C
- Digital temperature display
- High performance heat exchanger
- Proportional temperature control
- Compact and robust
- Environment-friendly

TECHNICAL DATA

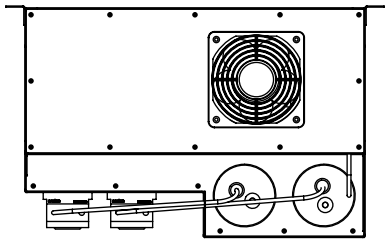
BCR03 Rear Panel Mounting



side



front



top

SPECIFICATIONS

Gas ducts		1			2			4	
Heat exchanger		1 x MONO			2 x MONO			2 x DUAL	
Material in contact with sample		PVDF	GLASS	SS316	PVDF	GLASS	SS316	PVDF	SS316
Gas flow [1]	L/h	250	300	500	2x250	2x300	2x500	4x125	4x150
Gas inlet dew-point (max.)	°C	70	65	80	70	65	80	70	80
Gas inlet temperature (max.)	°C	140	160	180	140	160	180	140	180
Gas outlet temperature	°C	3°C							
Gas pressure with peristaltic pump	bar	0,5 ... 1,5							
Gas pressure without peristaltic pump	bar	2,5	2	160	2,5	2	160	2,5	160
Gas connection	mm	Gas inlet and gas outlet tube 4/6 mm							
Dead volume per gas duct	ml	67	98	67	2x67	2x98	2x67	4x25	
Cooling power	W	300 Watt Ta 25°C							
Protection rate / electrical standards		IP 20 acc. EN 60529 / EN 61010							
Dimension	mm	450 x 300 x 300 (W x H x T)							
Temperature monitoring		Digital display and isolated alarm relay contacts							
Power supply		230V 50/60 Hz or 115V 50/60 Hz							
Power consumption	W	220W							
Weight	kg	21						23	

[1] At standard condition, dew-point 65°C inlet at 5...40°C ambient temperature.