

1 Introduction

1.1 Intended use

This unit is intended for industrial use in gas analysis systems. It's an essential component for conditioning the sample gas to protect the analysis instrument from residual moisture in the sample gas.

Please note the specifications in the data sheet on the specific intended use, existing material combinations, as well as pressure and temperature limits.

1.2 Overview

The compact RC 1.2 Rack system is a 19" rack-mount unit with sample gas cooler and condensate removal, particle filter and humidity sensor for up to two gas paths.

The RC 1.2+ Rack series has been specially designed for the requirements of so-called automatic measuring systems (AMS) in accordance with EN 15267-3. The series connection of the heat exchangers will cool in two cycles to minimise wash-out effects.

The compressor coolers are distinguished by two types based on the cooling nests. This classification is reflected in the type designation. The exact item number of the model defined by you is determined by the model code in the ordering information category.

Application	Cooler model	Heat exchanger
Standard	RC 1.2 Rack	1 or 2 heat exchangers
Gas cooling optimised for washout	RC 1.2+ Rack	2 heat exchangers in series

Additional components which every conditioning system should feature can optionally be integrated:

- Peristaltic pump for condensate separation,
- Filter,
- Moisture detector.

In addition, we offer a range of signal outputs:

- Status output,
- Analogue output, 4...20 mA, incl. status output,
- Modbus RTU digital output, incl. status output.

This allows for various configurations of the cooler and its options. Here the approach is to simplify the creation of a complete system in a cost-efficient way using pre-installed components with hoses connected. In addition, easy access to wear and consumable components has been ensured.

1.3 Scope of delivery

- Cooler
- Product documentation
- Connection-/mounting accessories (optional)

1.4 Ordering instructions

1.4.1 Gas cooler with one or two heat exchangers

The item number is a code for the configuration of your unit. Please use the following model code:

4596	3	X	2	0	X	X	X	X	X	X	0	0	0	0	0	0	Product characteristic
																	Housing type
	4																19" housing for wall mounting
	5																19" rack mount housing
																	Power supply
		1															115 V AC / 60 Hz
		2															230 V AC, 50/60 Hz
																	Gas paths
			1														1 gas path
			2														2 gas paths
																	Heat exchanger
				1	0												Stainless steel, PTS, metric
				1	5												Stainless steel, PTS-I, US
				2	0												Duran glass, PTG, metric
				2	5												Duran glass, PTG, US
				3	0												PVDF, PTV, metric
				3	5												PVDF, PTV-I, US
																	Condensate drain
					0												without condensate drain
					1												1 CPsingle with hose nipple, angled
					5												2 CPsingle with hose nipple, angled ¹⁾
					6												1 CPsingle with hose nipple, straight
					7												2 CPsingle with hose nipple, straight ¹⁾
																	Filter and moisture detector
						0	0										without filter, without moisture detector
						5	0										1 filter, without moisture detector
						5	1										1 filter, 1 moisture detector ¹⁾
						6	0										2 filters, without moisture detector ¹⁾
						6	1										2 filters, 1 moisture detector ¹⁾
						6	2										2 filters, 2 moisture detectors ¹⁾
																	Signal outputs
								0									status output only
								1									Analogue output, 4..20 mA, incl. status output
								2									Modbus RTU digital output, incl. status output

¹⁾ Option only available if two gas paths present.

1.4.2 Gas cooler with two heat exchangers in series

The item number is a code for the configuration of your unit. Please use the following model code:

4596	3	X	2	0	X	1	X	X	X	0	X	X	X	0	0	0	0	0	Product characteristic
Housing type																			
4																			
19" housing for wall mounting																			
5																			
19" rack mount housing																			
Power supply																			
1																			
115 V AC, 60 Hz																			
2																			
230 V AC, 50/60 Hz																			
Heat exchanger																			
1 2 2																			
Duran glass, PTG-2, metric																			
1 2 7																			
Duran glass, PTG-2-I, US																			
1 3 2																			
PVDF, PTV-2, metric																			
1 3 7																			
PVDF, PTV-2-I, US																			
Condensate drain																			
0																			
without condensate drain																			
2																			
2 CPsingle with hose nipple, angled																			
4																			
2 CPsingle with hose nipple, straight																			
Filter and moisture detector																			
0 0																			
without filter, without moisture detector																			
5 0																			
1 filter, without moisture detector																			
5 1																			
1 filter, 1 moisture detector																			
Signal outputs																			
0																			
status output only																			
1																			
Analogue output, 4..20 mA, incl. status output																			
2																			
Modbus RTU digital output, incl. status output																			