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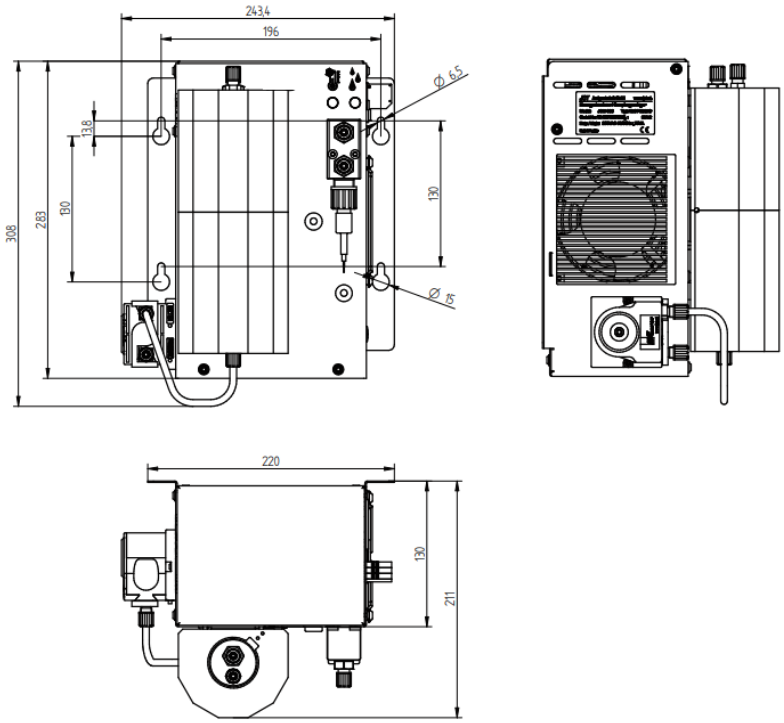
MADE IN GERMANY

PELTIER SAMPLE GAS COOLER

Item-No.: Z6-000030

- **Extractive gas analysis**
- **Emission and process monitoring**
- **Continuous drying of sample gas to a precise low and constant outlet dew point**
- **Minimises water vapour cross sensitivities and volumetric errors**



Application examples	Customizing options
Emission monitoring CEMS	High performance corrosion resistant sample gas pump
Biogas	Easy to maintain robust fine dust filter
Process control	Corrosion resistant flowmeter with precise needle valve
Fruit ripening	Reliable condensate monitoring
High voltage	Acid dosing pump

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Accessory I Peltier Sample Gas Cooler I Z6-000030

General features

Performance	standard
Cooling principle	Peltier cooling
Number of gas paths	1
Number of Peltier elements	1
Integrated condensate pump	option
Integrated condensate monitoring	option

Operation

Gas flow per gas path*	max. 250 Nl/hr
Gas wetted materials	PTFE, PP, fluor polymer
Gas inlet temperature*	max. 140 °C; SS heat exchanger: max. 180 °C
Gas inlet dew point*	max. 80°C
Gas outlet dew point	5 °C (factory default); adjustable from 0.5 °C to 7.5 °C
Dew point stability (for constant inlet conditions)	±0.1 K
Gas inlet temperature*	max. 140 °C; SS heat exchanger: max. 180 °C
Ambient temperature	5° to 45 °C
Cooling capacity total	max. 15 W
Operating pressure with condensate pump	0.2 to 2.2 bar
Max. operating pressure without condensate pump	4.0 bar; SS heat exchanger: max. 19 bar
Ready for operation	< 30 min
Pressure drop at max. flow rate	3 mbar

Construction

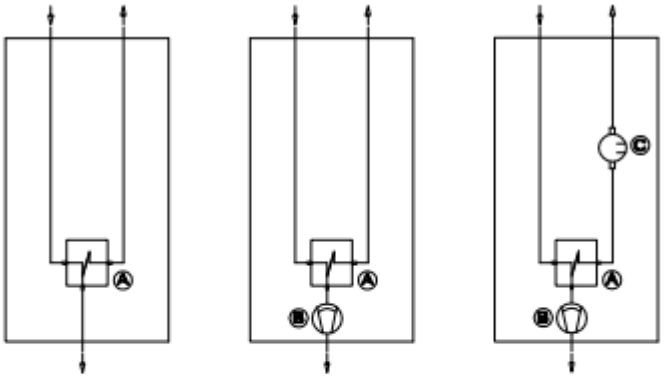
Dimensions over all (W x H x D)	244 x 308 x 211 mm
Installation	wall mounting
Mounting position	horizontal
Weight**	approx. 6.5 kg
Housing / Colour	stainless steel / natural
Gas wetted materials (depending on configuration)	PVDF, SS316Ti, FFKM, Duran glass
Dead volume per gas path	67 ml
Connection sample gas and condensate outlet with condensate pump	PVDF-hose fitting DN 4/6 for SS: pipe 6 mm
Condensate outlet without condensate pump	1/4“ NPTf or 3/8“ NPTf for SS: pipe 12 mm
Approvals / Signs	CE
Dimensions over all (W x H x D)	244 x 308 x 211 mm

* Results from the effective cooling capacity at 20 °C ambient temperature and 5 °C outlet dew point and can be influenced by further operational parameters.
** Dependent on configuration

Electrics

Power supply	230 VAC 50/60 Hz +/- 10 % or 115 VAC 50/60 Hz +/- 10 %
Power consumption (depending on load and ambient temperature)	30 to 160 VA
Connection power	IEC plug
Protection class (in default mounting position)	IP 20 (EN 60529)
Fusing	lead fuse T2A in IEC plug
On time	100 %
Diagnostic / Operation indicator	1 x bicolour LED with condensate detector: 2 x bicolour LEDs
Status threshold	< 0 / > +10 °C
Status delay	0.5 s
Status relay	volt free contact, 230 VAC / 2 A, min. 5 VADC / 5 mA
Connection terminals / Clamping range	spring type terminals 0.5 mm2 to 2.5 mm2
Threshold condensate detector	factory setting 12 kΩ adjustable 2 to 30 kΩ

Gas Flow Diagrams



A	Actively cooled heat exchanger
B	Condensate pump (option)
C	Condensate monitoring (option)

For more information, please visit www.smartgas.eu or contact us at sales@smartgas.eu
Please consult smartGAS sales for parts specified with other temperature and measurement ranges. At first initiation and depending on application and ambient conditions recalibration is recommended. Recurring cycles of recalibration are recommended.