













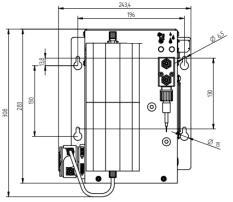


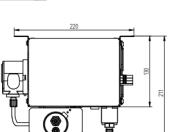
Peltier Sample Gas Cooler

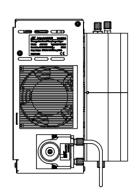
smartGAS item number: Z6-000030

- 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











General features

Performance standard
Cooling principle Peltier cooling

Number of gas paths1Number of Peltier elements1Integrated condensate pumpoption

Operation

Gas flow per gas path* max. 250 NI/hr

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

option

Dew point stability

(for constant inlet conditions) $\pm 0.1 \text{ K}$ Ambient temperature 5° to 45° C
Cooling capacity total $\max. 15 \text{ W}$ Operating pressure with condensate pump 0.2 to 2.2 bar

Max. operating pressure without

Integrated condensate monitoring

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

Wounting position

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

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 %

1 x bicolour LED with condensate detector: 2 x bicolour

Diagnostic / Operation indicator LEDs

Status threshold $< 0 / > +10 \,^{\circ}C$

Status delay 0.5 s

Status relay volt free contact, 230 VAC / 2 A, min. 5 VADC / 5 mA



Connection terminals / Clamping range

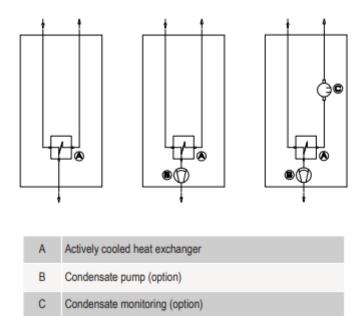
Threshold condensate detector

spring type terminals 0.5 mm² to 2.5 mm² factory setting 12 k Ω adjustable 2 to 30 k Ω

* 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

Gas Flow Diagrams



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For more information, please visit $\underline{www.smartgas.eu} \text{ or contact us at } \underline{sales@smartgas.eu}$

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.