



SS5C

## Gas Conditioning Unit series PSS®

Versions SS5C-19" in 19" enclosure, SS5C, SS5C/2 and SS5C/3 mounted on a plate, universally equipped for 150 or 350 NI/h gas flow rate

### Special Features

- **Low maintenance and self-monitoring**
- **Outlet dew point adjustable from +2 °C to +15 °C**
- **Dew point stability < ±0.1 °C**
- **Operational in 3 minutes**
- **Compact construction**
- **Optimum reliability**
- **Jet Stream heat exchangers in 3 standard materials**
- **Universal equipment possible**

### Application

The SS5C-19" is mounted in a 19" enclosure and the SS5C, SS5C/2 and SS5C/3 units are mounted on an aluminium plate.

All units provide completely pre-installed gas conditioning for continuous use that can be excellently integrated within gas analysis systems.

The compact construction of the gas conditioning units takes up very little space. The units are ready for use in a few minutes. These completely pre-installed units make the usual costly procurement of individual components and small parts and their assembly a thing of the past.

Typical application examples for the SS5C-19", SS5C, SS5C/2 and SS-5C/3 units are flue-gas and process-gas conditioning.

For special problems like aerosols, various solvents, explosive gases in hazardous areas, we can provide you with other solutions.

The SR 25.2 peristaltic pump ensures a constant condensate removal, which makes a long term measurement possible without problems.

For corresponding particle filtration the filter FP-2T with a 2 µm filter element is used.

These components make the SS5C-19", SS5C, SS5C/2 and SS-5C/3 units to complete gas conditioning systems suitable for most analyzers.

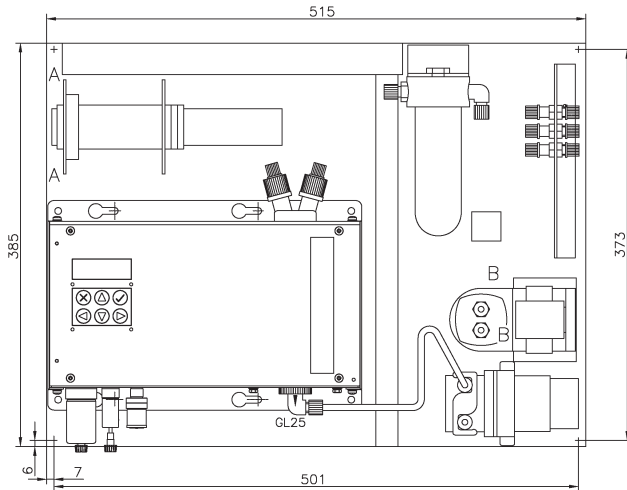
### Description

The SS5C-19" and SS5C gas conditioning units are equipped with the ECP1000C Peltier cooler. The SS5C/3 is equipped with the ECP3000C and the SS5C/2 with the ECP2000C Peltier cooler. These Peltier coolers are factory set to cool the sample gas constantly to a temperature of +5 °C [41 °F] independent of the specified ambient temperature.

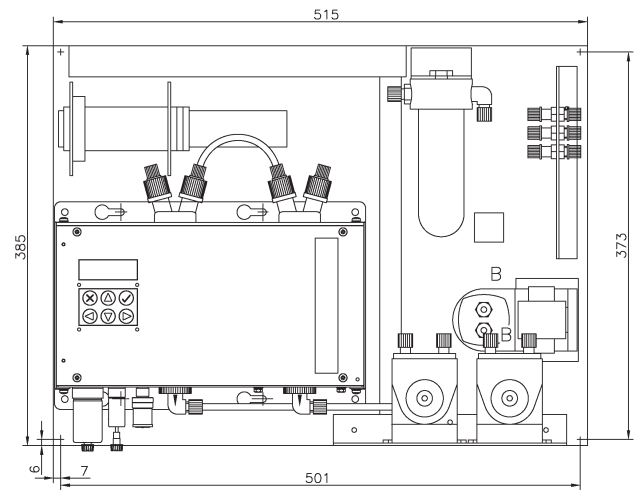
After start-up, as soon as the operating temperature of < +8 °C [46.4 °F] is reached, the gas pump N3KPE or N9KPE is switched on automatically via the status contact of the gas cooler.

## Dimensions

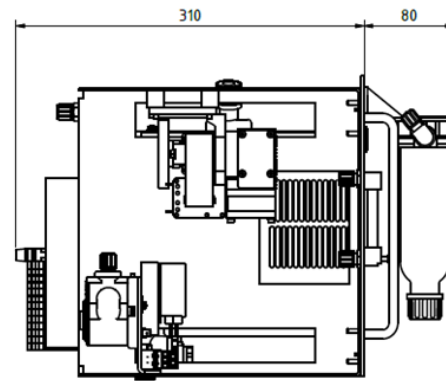
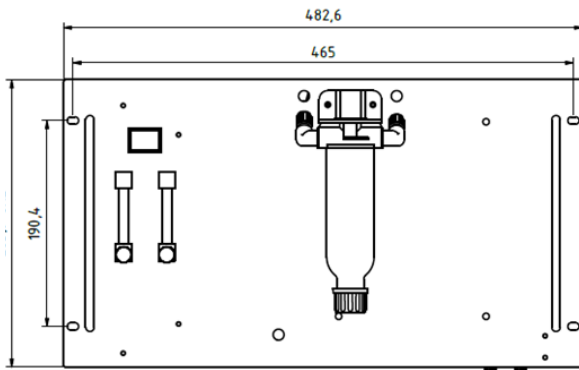
### SS5C and SS5C/3



### SS5C/2

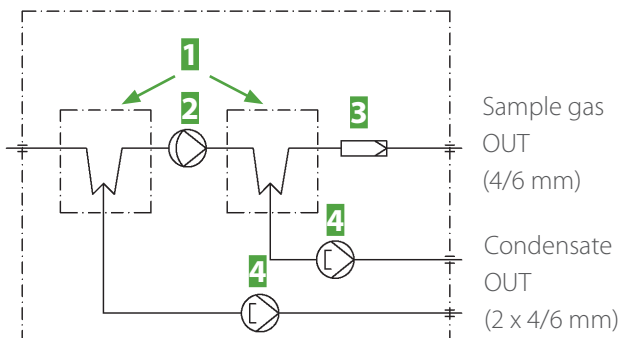
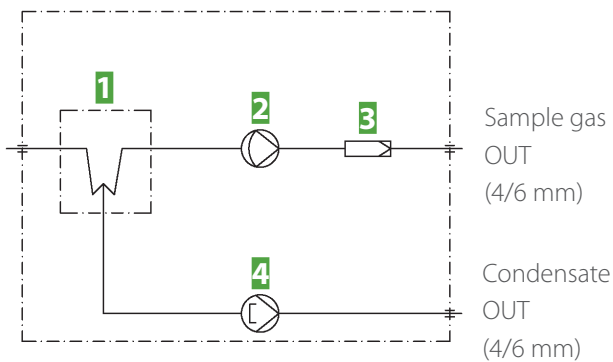


### SS5C-19", front and side view



Dimensions in mm

## Gas flow diagram



### SS5C-19", SS5C and SS5C/3

- 1 Gas cooler ECP1000C or ECP 3000C
- 2 Gas diaphragm pump N3KPE or N9KPE
- 3 Fine filter FP-2T, filter porosity 2  $\mu$ m
- 4 Peristaltic pump SR25.2-W

### SS5C/2

- 1 Gas cooler ECP 2000C with 2 x heat exchangers
- 2 Gas diaphragm pump N3KPE or N9KPE
- 3 Fine filter FP-2T, filter porosity 2  $\mu$ m
- 4 2 x Peristaltic pumps type SR25.2-W

Gas Conditioning Unit series PSS*	SS5C-19"	SS5C	SS5C/2	SS5C/3
Part No. for 230 V/50 Hz version	03G7010	03G7000	03G7050	03G7100
Part No. for 115 V/60 Hz version	03G7010a	03G7000a	03G7050a	03G7100a
Sample outlet dew point	Range of adjustment: +2 to 15 °C [35.6 to 59 °F], factory setting: +5 °C [41 °F]			
Dew point stability	At constant conditions < ±0.1 °C [±0.18 °F]			
Sample inlet temperature	*Max. +80 °C [176 °F] optional: *max. 180 °C [356 °F] with stainless steel bulkhead union			
Sample inlet water vapor saturation	*Max. +80 °C [176 °F]			
Gas flow rate heat exchanger	*Max. 150 NI/h	*Max. 150 NI/h	*Max. 150 NI/h per heat exchanger	*Max. 350 NI/h
Ambient temperature	*+5 to +40 °C [41 to 104 °F]			
Storage temperature	-25 to +65 °C [-13 to +149 °F]			
Pressure	0.7 bar to 1.4 bar abs.			
Total cooling capacity at 25 °C [77 °F] ambient	Max. 110 kJ/h	Max. 110 kJ/h	Max. 180 kJ/h	Max. 110 kJ/h
Number of gas inlets	1			
Number of gas outlets	1 optionally, up to max. 2 1 optionally, up to max. 4			
Medium connections	Tube connection 4/6 mm, material: PVDF			
Material of sample contacting parts	Stainless steel, glass, PVC, PVDF, PTFE, Novoprene			
Ready for operation	Approx. 3 min.			
Power supply	230 V AC ±10 %, 50/60 Hz oder 115 V AC ±10 %, 60 Hz			
Power consumption	Max. 240 VA	Max. 240 VA; for option temperature controller and heated sample line with 230 V: max. 1620 VA and with 115 V: max. 930 VA		
Fuse protection	4 A time-delayed, 5 x 20 mm	4 A time-delayed, 5 x 20 mm, for option with temperature controller: 10 A time-delayed, 5 x 20 mm		
Electrical connection	Terminals 4 mm <sup>2</sup>			
Case protection	IP20 EN 60529			
Electrical equipment standard	EN 61010			
Mounting	Front plate (height: 6 U)	Aluminium mounting plate for wall mounting		
Dimensions (W x H x D)	482 x 266 x 390 mm** [≈ 19" x 10.5" x 15.4"]	515 x 385 x 235 mm [≈ 20.3" x 15.2" x 9.3"]		
Weight	Approx. 14.5 kg [≈ 32.0 lbs]	Approx. 12.5 kg [≈ 27.6 lbs]	Approx. 14.8 kg [≈ 32.6 lbs]	Approx. 12.7 kg [≈ 28.0 lbs]

\*Maximum values in technical data must be rated in consideration of total cooling capacity at 25 °C [77 °F] ambient temperature and 5 °C [41 °F] outlet dew point.

\*\* Attention: keep 60 mm [≈ 2.4"] distance to the floor under the unit for dismantling the filter glass.

PTFE = Polytetrafluoroethylene (Teflon®), PVDF = Polyvinylidenfluoride

Other versions on request

## Options

	Description	Part number
mA output cooler	1 x mA output including plug and socket, mounting and calibration per channel included	01K9200
Liquid alarm sensor LA1S	Liquid alarm detection in the SS5C incl. switch-off function for the sample gas pump, liquid alarm sensor type LA1S with cable break detection, for conductive media, completely wired, evaluation via front display	03G7200
Temperature controller for a max. length of 12 m (230 V) or 6 m (115 V) heated sample line, 100 W/m for Pt100	Range of control: 0 to 200 °C [32 to 392 °F] Input : Pt100, power: 230 V 50/60 Hz (Part No. 01G9055) or 115 V 50/60 Hz (Part No. 01G9055a), contact capacity: 250 V AC max. 10 A, completely mounted incl. 7-pin plug 10 A	01G9055(a)
Flow meter FM40 (optionally), max. 4 pieces	FM40 7-70 NI/h air FM40 15-150 NI/h air FM40 25-250 NI/h air FM40 50-500 NI/h air	01G9070 01G9075 01G9080 01G9085
3-way ball valve*	3L/PV-1 for switching over from test gas to sample gas, in the inlet of the sample gas conditioning unit, mounted with mounting bracket, fittings in PVDF	01G9046
5-way ball valve*	5L/PV-1 for switching over from test gas to sample gas, in the inlet of the sample gas conditioning unit, mounted with mounting bracket, fittings in PVDF	01G9045
Needle valve	Needle valve in the bypass of the sample gas pump type N3/N5/N9 for pressureless control, with PVDF screw connections, mounting bracket and assembly	01G9050

\*For versions SS5C, SS5C/2 and SS-5C/3 only