



SS-5

## Gas Conditioning Unit Series PSS®

Version SS-5, SS-5/3 plate-mounted unit,  
universally equipped for 150 or 350 NI/h gas flow rate

### Special Features

- **Minimum maintenance and self-monitoring**
- **Outlet dew point adjustable from +2 to 15 °C [35.6 to 59 °F]**
- **Dew point stability  $\pm 0.1$  °C [ $\pm 0.18$  °F]**
- **Ready for operation in 10 minutes**
- **Compact design**
- **Maximum reliability**
- **Jet-Stream heat exchangers available in various standard materials**
- **Universal equipment possible**

### Application

This unit mounted on an aluminium plate provides a completely pre-installed sample gas conditioning system for continuous use that can be excellently integrated within gas analysis systems.

Its compact design only takes up little space. The SS-5 units are ready for operation in a few minutes. This makes time-consuming procurement of individual components and small parts as well as their assembly superfluous. Typical application examples for the SS-5 or SS-5/3 units are flue gas and process gas conditioning.

For special problems, such as aerosols, various solvents, explosive gases or installation areas in Ex zones, additional or other components from our extensive product range can of course also be provided.

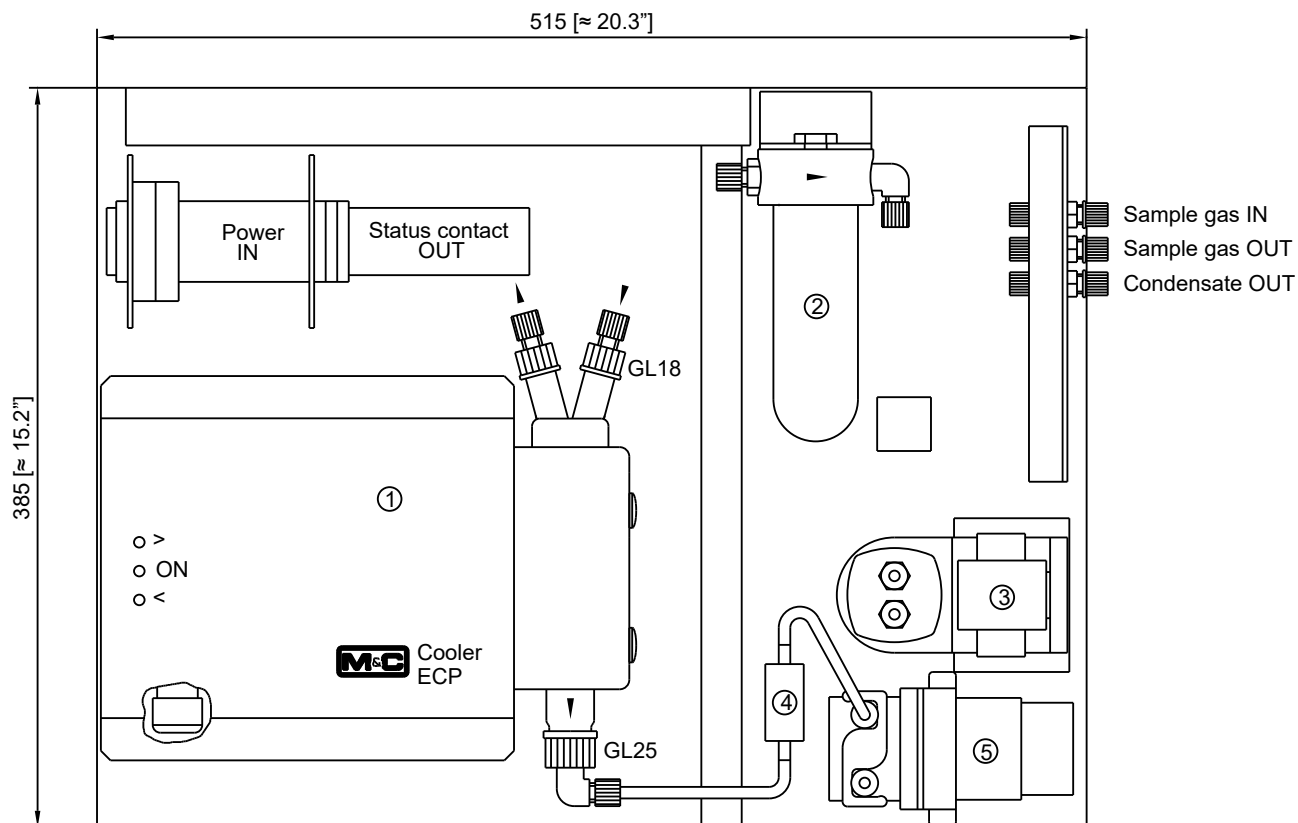
### Description

The M&C SS-5 gas conditioning unit is equipped with an ECP... gas cooler which cools the sample gas to constant +5 °C [41 °F] independent of the ambient temperature.

As soon as the operating temperature of < +8 °C [46 °F] is reached after the start-up, the gas pump N...KPE is automatically switched on via the status contact of the gas cooler.

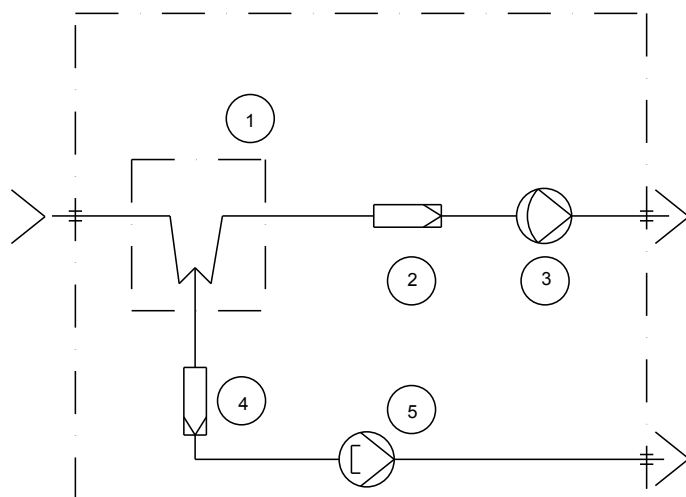
The SR 25.1 peristaltic pump ensures a constant condensate removal, which makes a long-term measurement possible without any problems.

The corresponding particle filtration is carried out by the ultra-fine filter type FP-2T. This makes the SS-5 unit a complete gas conditioning system suitable for most analyzers.



Dimensions in mm [Inches]

Flow scheme SS-5 and SS-5/3



- 1 Gas cooler ECP1000 or ECP 3000
- 2 Fine filter FP-2T, filter porosity 2 µm
- 3 Gas diaphragm pump N3KPE or N9KPE
- 4 Pre-filter PF2
- 5 Peristaltic pump SR25.1

Gas Conditioning Unit Series PSS®	Version SS-5	Version SS-5/3
Part No. for 230 V/50 Hz version	03G5000	03G5500
Part No. for 115 V/60 Hz version	03G5000a	03G5500a
Sample outlet dew point	Range of adjustment: +2 to +15 °C [34 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 dew point*	Max. +80 °C [176 °F]	
Gas flow rate*	Max. 150 NI/h	Max. 350 NI/h
Ambient temperature*	+5 up to +40 °C [41 up to 104 °F]	
Storage temperature	-25 up to +65 °C [-13 up to 149 °F]	
Pressure	0.7 bar up to 1.4 bar abs.	
Total cooling capacity at 25 °C [77 °F] ambient	Max. 50 kJ/h	Max. 90 kJ/h
Number of gas inlets	1	
Number of gas outlets	1 optional: max. 4	
Medium connections	Tube connection 4/6 mm	
Material of sample contacting parts	Stainless steel, glass, PPH, PVC, PVDF, PTFE, Novoprene	
Ready for operation	Approx. 10 min.	
Power supply	230 V/50 Hz or 115 V/60 Hz	
Power consumption	Max. 240 VA	
Fuse protection	4 A t, 5 x 20 mm, with option temperature controller: 10 A t	
Electrical connection	Terminals 4 mm <sup>2</sup>	
Case protection	IP20 (DIN 40050, IEC 529)	
Electrical equipment standard	EN 61010	
Mounting version	Aluminium mounting plate for wall-mounting	
Dimensions (W x H x D)	515 x 385 x 190 mm [≈ 20.3" x 15.2" x 7.5"]	
Weight	Approx. 15.5 kg [≈ 34.2 lbs]	Approx. 17.0 kg [≈ 37.5 lbs]

\* Maximum values in technical data must be rated in consideration of the total cooling capacity at 25 °C [77 °F] ambient temperature and 5 °C [41 °F] outlet dew point. Please note: NI/h and NI/min refer to the German standard DIN 1343 and are based on these standard conditions: 0 °C [32 °F], 1013 mbar.

PPH = Polypropylene, PTFE = Polytetrafluoroethylene (= Teflon®), PVDF = Polyvinylidenfluoride, PVC = Polyvinylchloride  
Teflon® a registered trademark of DuPont Performance Elastomers, USA.

## Options

	Alternatively	Part number
Flow meter FM40 mounted in sample gas outlet: max. 4 pcs.	7-70 NI/h air 15-150 NI/h air 25-250 NI/h air 50-500 NI/h air max. 4 pcs.	01G9070 01G9075 01G9080 01G9085
Temperature controller for heated sample line 230 V/50 Hz:	Range of control: 0 to 200 °C [32 to 392 °F], input PT100, 230 V, max. 6 A, max. length of the sample line: 20 m	01G9055
Temperature controller for heated sample line 115 V/60 Hz:	Range of control: 0 to 200 °C [32 to 392 °F], input PT100, 115 V, max. 6 A, max. length of the sample line: 10 m	01G9055a
Liquid alarm type	LA 1/1.4	01G9035
5-way ball valve type	5L/PV-1	01G9045