



SS-5

Gas Conditioning Unit series PSS®

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

Special Features

- **Low maintenance and self-monitoring**
- **Outlet dew point adjustable from +2 °C to +15 °C**
- **Dew point stability $\pm 0,1$ °C**
- **Operational in 10 minutes**
- **Compact construction**
- **Optimum reliability**
- **Jet Stream heat exchangers in 3 standard materials**
- **Universal equipment possible**

Application

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

Its compact construction only takes up little space. The SS-5.. units are ready for use in a few minutes. This makes time-consuming procurement of individual components and assembly superfluous.

Typical application examples for the SS-5.. 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.

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 independent of the ambient temperature.

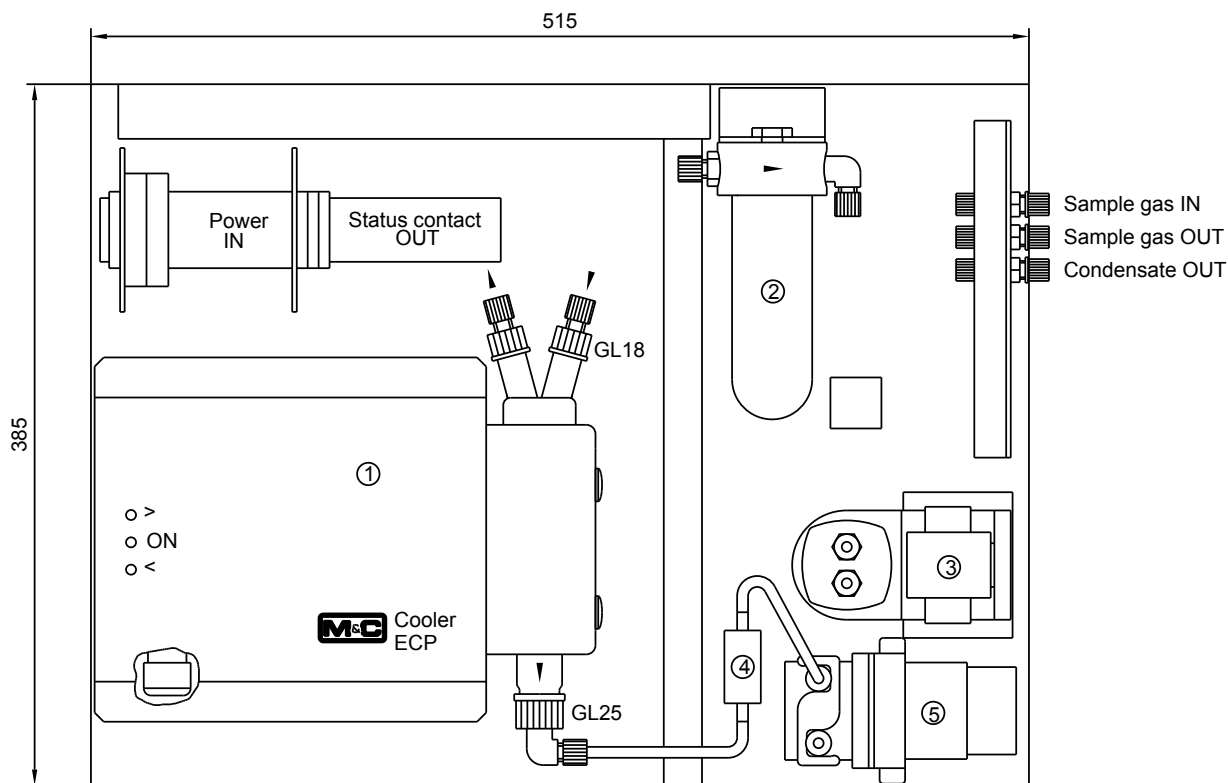
As soon as the operating temperature of < +8 °C is reached after start-up, the gas pump N...KPE is switched on automatically via the status contact of the gas cooler.

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

The corresponding particle filtration is carried out by a 2µm filter type FP-2T.

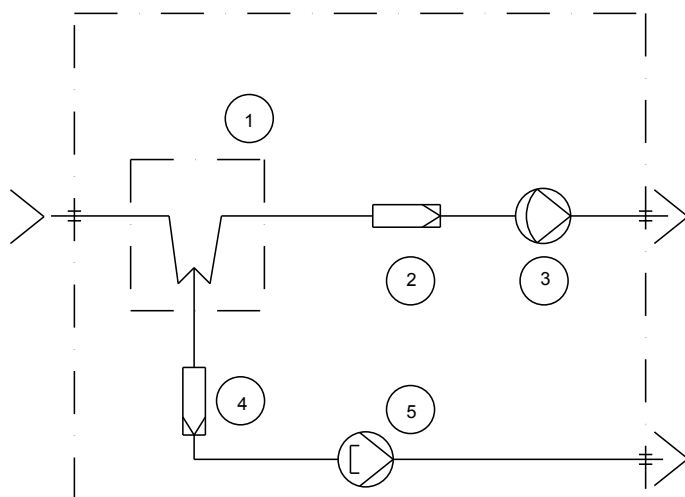
This makes the SS-5... unit a complete gas conditioning system suitable for most of the analysers.

Dimensions



Dimensions in mm

Flow scheme SS-5 and SS-5/3



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

Technical Data

Gas Conditioning Unit series PSS*	version SS-5	version SS-5/3
Part No. for 230V 50Hz version	03G5000	03G5500
Part No. for 115V 60Hz version	03G5000a	03G5500a
Sample outlet dew point	range of adjustment: +2 °C +15 °C, factory setting: +5 °C	
Dew point stability	at constant conditions < ±0,1 °C	
Sample inlet temperature**	max. +80 °C optional: max. 180 °C with stainless steel bulkhead union	
Sample inlet dew point**	max. +80 °C	
Gas flow rate**	max. 150 NI/hr	max. 350 NI/hr
Ambient temperature**	+5 °C up to +40 °C	
Storage temperature	-25 °C up to +65 °C	
Pressure	0,7 bar up to 1,4 bar abs.	
Total cooling capacity at 25 °C ambient	max. 50 kJ/hr	max. 90 kJ/hr
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	230V 50Hz or 115V 60Hz	
Power consumption	max. 240VA	
Fuse protection	4A t, 5x 20 mm, with option temperature controller: 10A t	
Electrical connection	terminals 4 mm²	
Case protection	IP20 (DIN 40050. IEC 529)	
Electrical equipment standard	EN 61010	
Mounting version	aluminium mounting plate for wall mounting	
Dimensions (WxHxD)	515 x 385 x 190 mm	
Weight	approx. 15,5 kg	approx. 17,0 kg

** Maximum values in technical data's must be rated in consideration of total cooling capacity at 25 °C ambient temperature and 5 °C outlet dew point.

PPH = Polypropylene
 PTFE = Polytetrafluoroethylene (Teflon®)
 PVDF = Polyvinylidenfluoride
 PVC = Polyvinylchloride
 Novoprene®

Options

	Alternatively	Part number
Flow meter FM40 mounted in sample gas outlet: max. 4 pc.	7-70 l/hr air 15-150 l/hr air 25-250 l/hr air 50-500 l/hr air max. 4 pcs.	01G9070 01G9075 01G9080 01G9085
Temperature controller for heated sample line 230V 50Hz:	range of control: 0 °C-200 °C, input PT100, 230V, max. 6A max. length of the sample line 20 m	01G9055
Temperature controller for heated sample line 115V 60Hz:	range of control: 0 °C-200 °C, input PT100, 115V, max. 6A 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