



Portable Gas Conditioning Unit series PSS®

**Version
PSS-5 for 150 NI/h gas flow rate**

**Version
PSS-5/3 für 350 NI/h gas flow rate**

- **Low maintenance and self-monitoring**
- **Dew point +5 °C ± 0,1 °C**
- **Operational in 10 minutes**
- **Compact construction**
- **Light weight**
- **Optimum reliability**
- **Universally equipped**

Application

The **M&C** portable gas conditioning unit **PSS-5...** is designed to carry out precise gas analyses at different locations. The entire gas conditioning unit is housed in a robust aluminium-frame case to enable the user to carry out a rapid gas analysis, which is safe with little maintenance work.

The **PSS-5...** gas conditioning unit is suitable for variable, discontinuous use as well as for continuous operation. The components built into the **PSS-5...** gas conditioning unit can be used for standard applications. If you have special problems please ask us for other solutions.

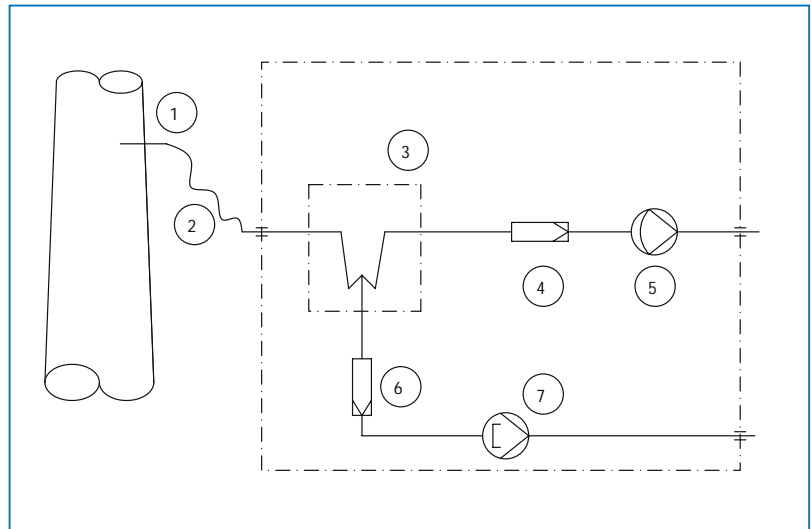
Description

The **PSS-5...** gas conditioning unit is equipped with an **ECP...** gas cooler with patented Jet-Stream heat exchanger 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**.

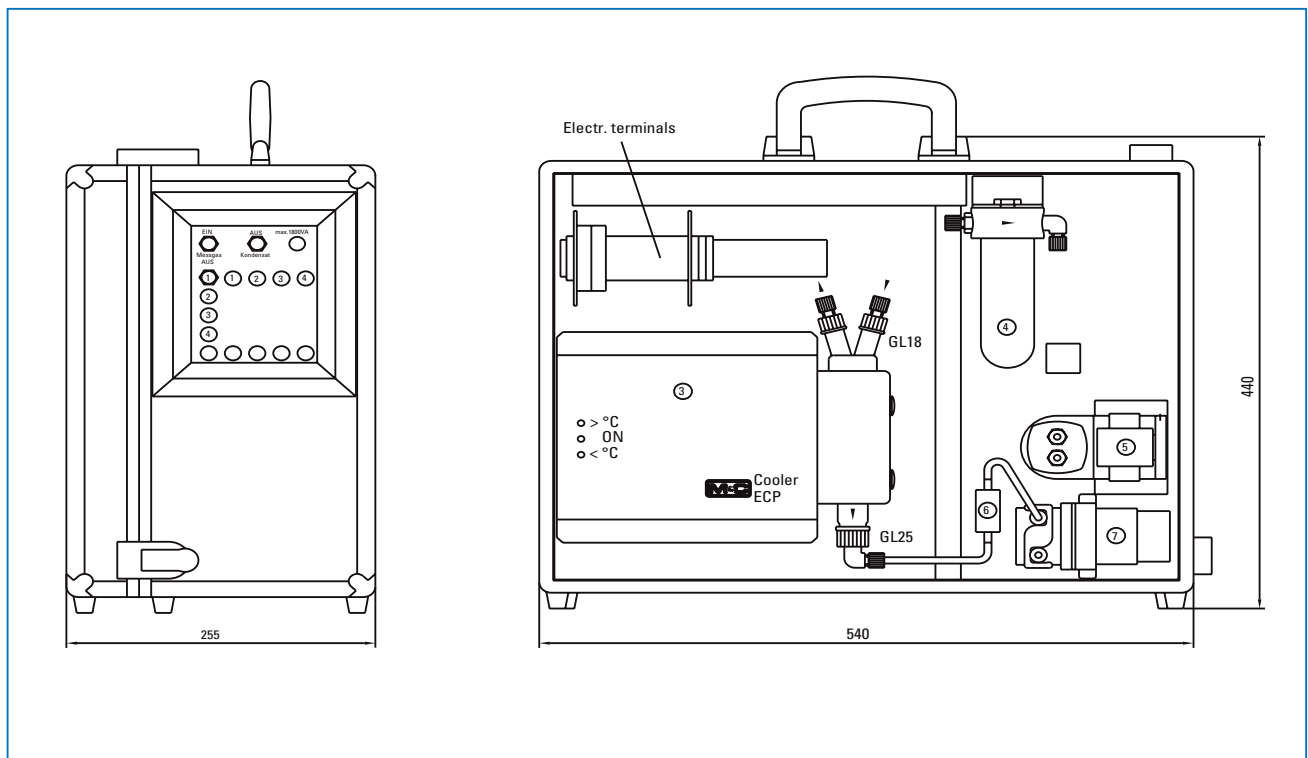
This makes the PSS5... unit a complete gas conditioning system suitable for most of the analysers.

Flow scheme PSS-5 und PSS-5/3

- 1 Gas sample probe
- 2 ESample line, 3 m PVC hose
- 3 Gas cooler **ECP 1000** or **ECP 3000**
- 4 Fine filter **FP-2T**, filter porosity 2 µm
- 5 GAs diaphragm pump **N3KPE** or **N9KPE**
- 6 Pre-filter **PF2**
- 7 Peristaltic pump **SR25.1**



Dimensions



Dimensions in mm

Technical Data

Gas Conditioning Unit series PSS®	version PSS-5	version PSS-5/3
Part No. for 230V 50Hz version	01G1100	01G1500
Part No. for 115V 60Hz version	01G1100a	01G1500a
Sample outlet dew point	+5 °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 **	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® optional: FDM for gas sample line, part no.: 01G9025	
Ready for operation	approx. 10 min.	
Power supply	230V 50Hz or 115V 60Hz	
Power consumption	max. 240VA; with option temperature controller and heated sample line 230V: max. 1620VA 115V: max. 920VA	
Fuse protection	4A t, 5x 20 mm, with option temperature controller: 10A t	
Electrical connection	Cold appliance plug with 2 m of cable	
Case protection	IP20 (DIN 40050. IEC 529)	
Housing	portable aluminium-frame case	
Housing dimensions	440 mm x 540 mm x 255 mm (H x W x D)	
Electrical equipment standard	EN61010	
Weight	approx. 15,5 kg	approx. 17,0 kg
Options	Type	Part No.
Further sample gas outlet	Parallel sample gas outlet, tubing via T-piece on lateral PVDF bulkhead fitting, DN4/6, max. 4 pieces	01G9065
Flowmeter, max. 4 pieces	FM40 7-70 l/hr air, mounted in sample gas outlet	01G9070
	FM40 15-150 l/hr air, mounted in sample gas outlet	01G9075
	FM40 25-250 l/hr air, mounted in sample gas outlet	01G9080
	FM40 50-500 l/hr air, mounted in sample gas outlet	01G9085
Fittings out of PVDF	Fittings out of PVDF instead of PP and 3m FPM sample tube DN4/6	01G9025
Sample tube	Sample tube out of Kanthal® ø 6 mm, length 1 m, sampling temperature max. 1300 °C	01G9030
Liquid alarm	Liquid alarm LA 1/1,2 , consisting of: liquid alarm sensor LA1 , controller LA1,2 , filter glass F120G-D with GL connection incl. moutange/wiring. In case of condensate inrush, the sample gas pump is automatically switched of.	01G9035
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 brackets, fitting 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 brackets, fitting PVDF	01G9045
Electronic temperature controller for max. 12 m heated sample line 100W/m	TRM 1.2 control range 0-200 °C, inlet PT100, power 230V 50Hz , Contact capacity 250V AC max. 10A, completely mounted incl. 7-pin plug 10A	01G9055
Electronic temperature controller for max. 12 m heated sample line 100W/m	TRM 1.2 control range 0-200 °C, inlet PT100, power 115V 60Hz , Contact capacity 250V AC max. 10A, completely mounted incl. 7-pin plug 10A	01G9055a
Connecting adapter DN4/6 for heated sample line	PSS-5 connecting adapter with bending protection for rigid moutange of heated sample line with interchangeable PTFE tube DN4/6 , consisting of special Swagelok fitting with 4mm cartridge, material: SS316Ti.	01G9060
Connecting adapter DN6/8 for heated sample line	PSS-5 connecting adapter with bending protection for rigid moutange of heated sample line with interchangeable PTFE tube DN6/8 , consisting of special Swagelok fitting with 4mm cartridge, material: SS316Ti.	01G9060

PPH = Polypropylene

PTFE = Polytetrafluoroethylene (Teflon®)

PVC = Polyvinylchloride

PVDF = Polyvinylidenfluoride

** Maximum values in technical data must be rated in consideration of total cooling power at 25 °C.

Other versions on request.