



PSS-5/3

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

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**
- **Light weight**
- **Trolley system**
- **Optimum reliability**
- **Jet Stream heat exchangers in 3 standard materials**
- **Universal equipment possible**

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.

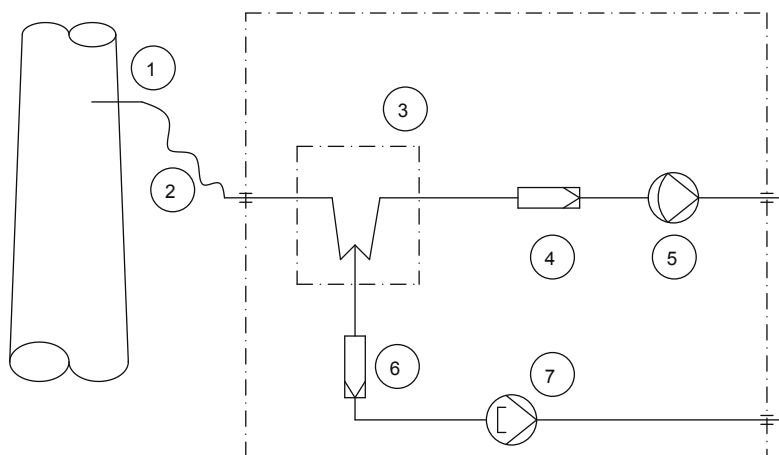
Description

The PSS-5... gas conditioning unit is equipped with an ECP... gas cooler with 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.

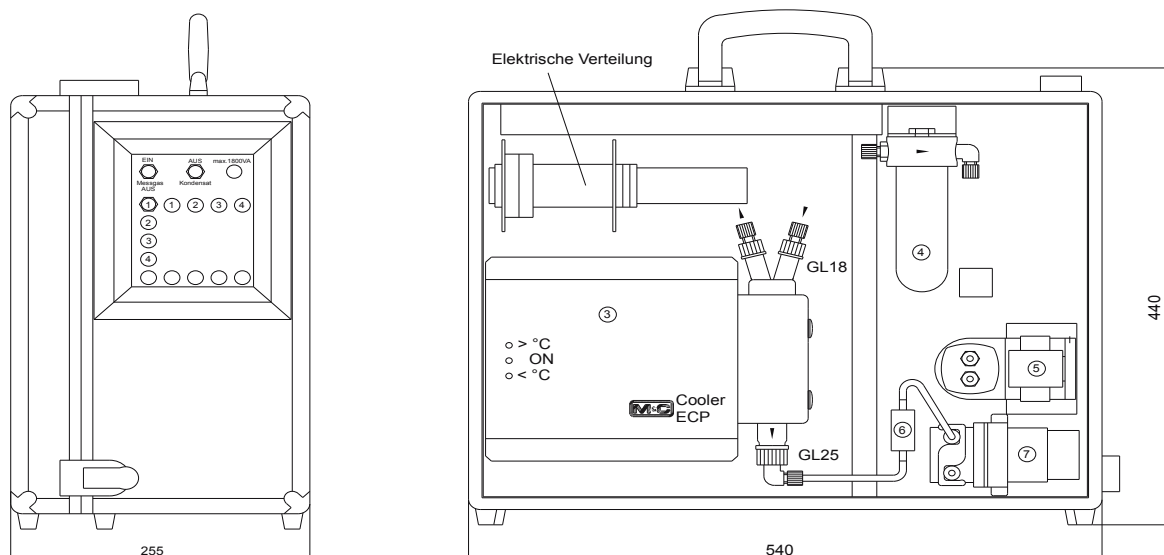
This makes the PSS5... unit a complete gas conditioning system suitable for most of the analysers.

Flow scheme PSS-5 und PSS-5/3

- 1 Gas sample probe
- 2 Sample 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

PSS5 with trolley system



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	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/h	**max. 350 NI/h
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. 18,5 kg	approx. 20,0 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 FM40 15-150 l/hr air, mounted in sample gas outlet FM40 25-250 l/hr air, mounted in sample gas outlet FM40 50-500 l/hr air, mounted in sample gas outlet	01G9070 01G9075 01G9080 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 1/1.4, consisting of: liquid alarm sensor LA1, controller LA1.4, filter glass F120G-D with GL connection incl. mountage/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	701 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. 6 m heated sample line 100W/m	701 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 mountage 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 mountage of heated sample line with interchangeable PTFE tube DN6/8, consisting of special Swagelok fitting with 6mm cartridge, material: SS316Ti.	01G9060
Trolley system		90G0160

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

** 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.
 Other versions on request.