



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

- **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.

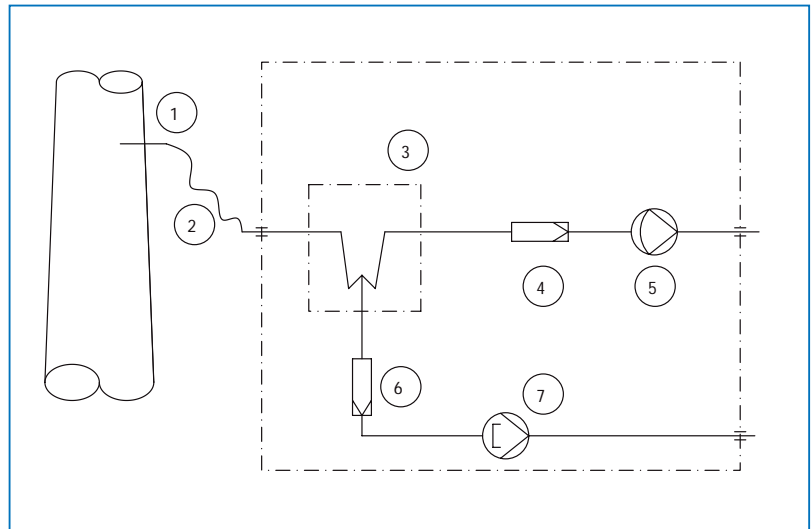
Description

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**.

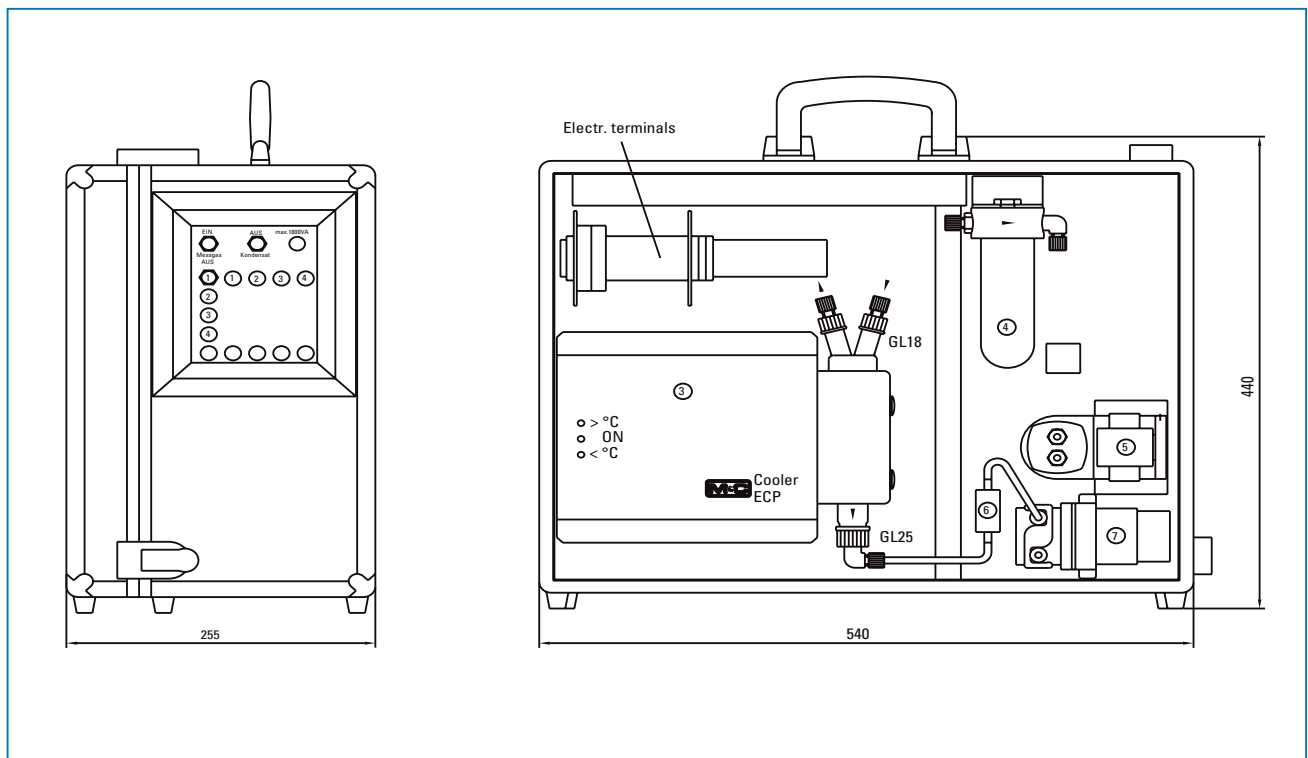
This makes the PSS5... unit a complete gas conditioning system suitable for most of the analysers.

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 6mm 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.