



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

- **Low maintenance and self-monitoring**
- **Dew point +5 °C ±0,1 °C**
- **Operational in 10 minutes**
- **Compact construction**
- **Optimum reliability**
- **Patented Jet-Stream heat exchanger**

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.

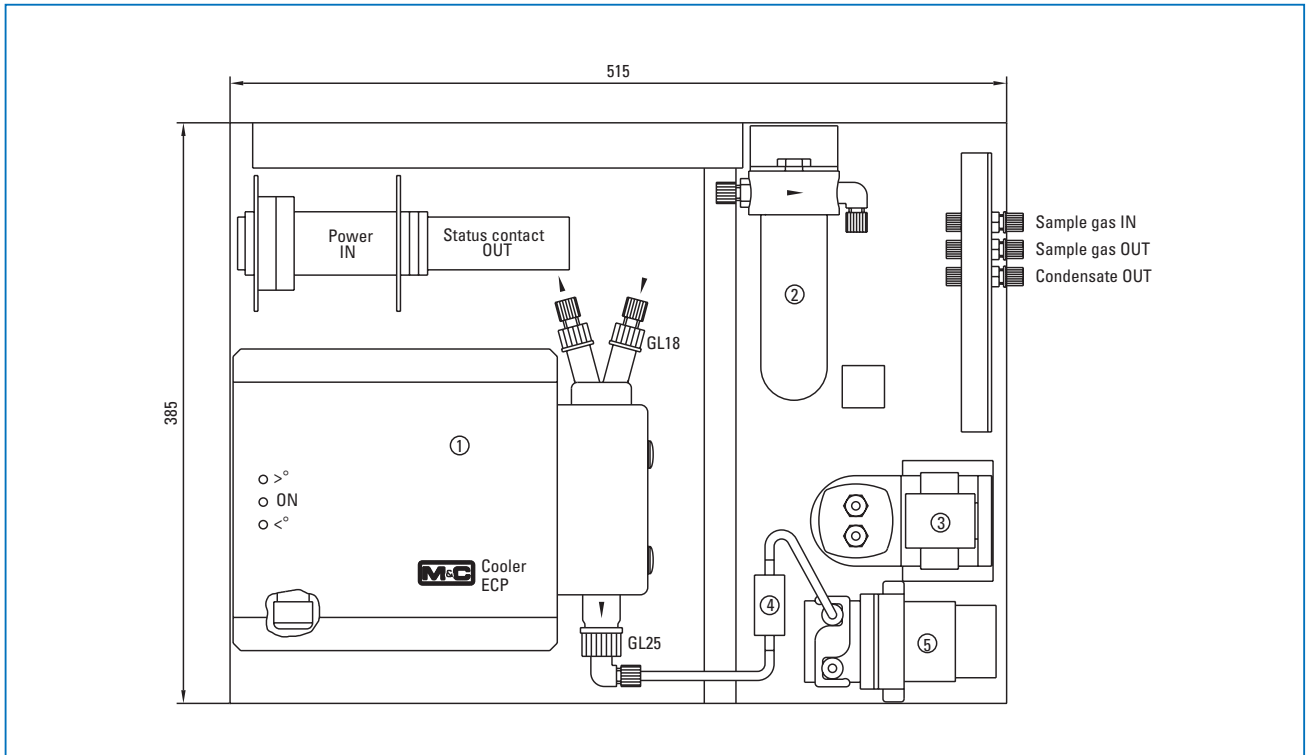
As soon as the operating temperature of < +8 °C is reached after start-up, the gas pump **N...KPE** is switched on automatically via the status contact of the gas cooler.

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

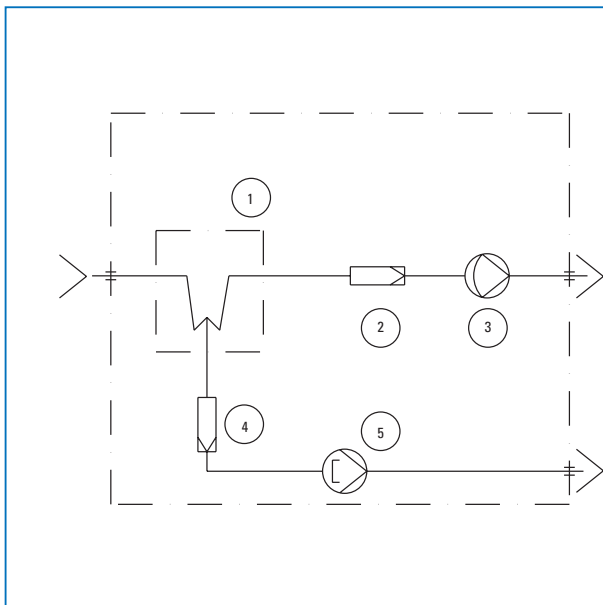
The corresponding particle filtration is carried out by a 2µm filter type **FP-2T**.

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 2µm
- 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 | +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 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 mm ² | |
| Case protection | IP20 (DIN 40050. IEC 529) | |
| Electrical equipment standard | EN 61010 | |
| Mounting version | aluminium mounting plate for wall mounting | |
| Dimensions (HxWxD) | 515 x 385 x 190 mm | |
| Weight | approx. 15,5 kg | approx. 17,0 kg |

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 | 01G9055 |
| Temperature controller for heated sample line 115V 60Hz: | range of control: 0 °C-200 °C, input PT100, 115V, max. 6A | 01G9055a |
| Liquid alarm type | LA 1/1.2 | 01G9035 |
| 5-way ball valve type | 5L/PV-1 | 01G9045 |

PPH = Polypropylene

PTFE = Polytetrafluoroethylene (Teflon®)

PVDF = Polyvinylidenfluoride

PVC = Polyvinylchloride

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