

**Item no. 1950**

**Immersion heater** – for automatic and self-regulated preheating of the engine cooling water to a temperature of approx. 40°C. The temperature is set directly on the immersion heater.

The cooling water pump and the immersion heater are switched on or off independent from engine operation ("Operation - Heating - ON/OFF"). The cooling water is preheated to improve the starting quality of the engine and to reduce wear and tear during the starting process.

## 2.1.5 Technical data

Basic biogas characteristics, i.e. characteristics of the biogas delivered to the gas inlet of the plant implemented by **HAASE Energietechnik**.

Temperature:	20 to 30 °C
Pressure:	80 to 100 mbar
Moisture:	approx. 60 %
Density:	approx. 1.192 kg/m <sup>3</sup> (4*)
Minimum calorific value:	6.0 kWh/m <sup>3</sup> (4*)
Limit set point H <sub>2</sub> S:	<1500 ppm/m <sup>3</sup> CH <sub>4</sub> (4*)

**Gas engine for 65 Vol.-% CH<sub>4</sub>**

Engine output (2*):	1050 kW
Exhaust temperature:	approx. 530 °C
Exhaust gas / mass flow rate (wet):	approx. 5,385 kg/h
Combustion air / mass flow rate (2*):	4,677 kg/h
Ventilation / flux (3*):	approx. 28,000 m <sup>3</sup> /h
Power output (1*):	1021 kW
Fuel consumption:	approx. 2,625 kW
Electric efficiency:	38.8 %
NO <sub>x</sub> emissions (4*) O <sub>2</sub> -value 4%:	500 mg/m <sup>3</sup> n

**Generator**

Efficiency:	97.2 %
Frequency:	50 Hz
Voltage:	400 V

**Exhaust silencer**

Acoustic sound level at a distance of 10 m:	65 db(A)
---	----------