

**EXHAUST GAS HEAT RECOVERY IN A BIOGAS CHP UNIT**



REFERENCE PROJECT

**BIO-ENERGIE-KORTENBERKEN GMBH & CO. KG**

Boschstr. 7, 49835 Wietmarschen, Germany

At Kortenberken 8, the thermal energy contained in the exhaust gas is routed to the heating system via a BOMAT O7-VG-10240-8-9-6 high temperature exhaust gas heat exchanger. The heat exchanger consists of one high temperature module and 6 condensing modules. Cleaning nozzles are also available. The heat exchanger is installed in the bypass on the exhaust gas side.

<b>Heat source:</b>	AP CHP unit – MAN 400 kWel
<b>Fuel:</b>	<input type="radio"/> Fuel oil <input type="radio"/> Natural gas <input type="radio"/> Sewer gas <input checked="" type="radio"/> Biogas
<b>Exhaust gas heat exchanger:</b>	O7-VG-10240-8-9-6 (year of manufacture: 2016)
<b>Exhaust gas temperature:</b>	approx. 540 °C (upstream of HE) ➔ approx. 70 °C (downstream of HE)
<b>Coolant temperature (HT):</b>	approx. 78 °C (upstream of HE) ➔ approx. 85 °C (downstream of HE)
<b>Coolant temperature (LT):</b>	approx. 45 °C (upstream of HE) ➔ approx. 54 °C (downstream of HE)
<b>Heat recovery per year:</b>	approx. 1,300,000 kWh
<b>CO<sub>2</sub> reduction per year:</b>	approx. 260,000 kg
<b>Plant manufacturer:</b>	BioBG GmbH, Webers Flach 1, 26655 Westerstede, Germany



➔ Estimated payback period **less than 3 YEARS.**



**BOMAT Heiztechnik GmbH**

Zum Degenhardt 49  
88662 Überlingen

T +49(0)7551.80 99 70  
F +49(0)7551.80 99 71

info@bomat.de  
www.bomat.de

A member of the  
puren Group

