

# TEDOM



## CHP UNITS

Overview of manufactured types

# NATURAL GAS

## Basic Technical Data



CHP Unit type	Electrical Output (kW)	Heat Output (kW)		Electrical Efficiency (%)	Heat Efficiency (%)		Total Efficiency (%)		Emission NOx/CO (mg/Nm <sup>3</sup> )
		standard / increased <sup>1</sup>			standard / increased <sup>1</sup>		standard / increased <sup>1</sup>		
Micro 30	<b>20</b>	43.3	48.8	30.0	64.9	73.2	94.9	103.2	95 / 250
Micro 30	<b>30</b>	58.1	65.4	32.4	62.8	70.7	95.2	103.1	95 / 250
Micro 50	<b>50</b>	88.5	101.6	34.2	60.6	69.5	94.8	103.7	95 / 250
Cento 80	<b>81</b>	119	128	35.2	51.7	55.7	86.9	90.9	500 / 650
Cento 100	<b>104</b>	141	155	37.1	50.4	55.4	87.5	92.5	500 / 650
Cento 120	<b>125</b>	177	194	36.3	51.5	56.4	87.8	92.7	500 / 650
Cento 160	<b>164</b>	220	241	37.8	50.7	55.5	88.5	93.3	500 / 650
Cento 180	<b>184</b>	231	255	39.2	49.3	54.4	88.5	93.6	500 / 650
Cento 200	<b>200</b>	252	277	39.2	49.4	54.3	88.6	93.5	500 / 650
Flexi 260	<b>260</b>	370	392	38.0	54.0	57.2	92.0	95.2	95 / 250
Flexi 350	<b>354</b>	439	482	40.2	49.8	54.7	90.0	94.9	500 / 650
Flexi 430	<b>430</b>	610	668	37.0	52.5	57.4	89.5	94.4	250 / 650
Flexi 530	<b>528</b>	671	738	39.3	50.0	55.0	89.3	94.3	250 / 650
Quanto 600	<b>600</b>	690	802	42.0	48.4	56.2	90.4	98.2	250 / 650
Quanto 800	<b>800</b>	911	1 059	42.3	48.2	56.1	90.5	98.4	250 / 650
Quanto 1000	<b>999</b>	1 155	1 359	42.0	48.5	57.1	90.5	99.1	250 / 650
Quanto 1200	<b>1 200</b>	1 354	1 576	42.6	48.0	55.9	90.6	98.5	250 / 650
Quanto 1600	<b>1 560</b>	1 788	2 080	42.2	48.4	56.3	90.6	98.5	250 / 650
Quanto 1800	<b>1 840</b>	1 996	2 105	43.6	47.3	49.9	90.9	93.5	250 / 650
Quanto 2000	<b>2 000</b>	2 251	2 621	42.6	48.0	55.9	90.6	98.5	250 / 650
Quanto 2300	<b>2 300</b>	2 451	2 863	44.0	46.9	54.7	90.9	98.7	250 / 650
Quanto 3000	<b>3 203</b>	3 666	3 856	42.1	48.2	50.7	90.3	92.8	250 / 650
Quanto 4000	<b>4 500</b>	4 799	5 066	43.7	46.6	49.2	90.3	92.9	250 / 650

# NATURAL GAS

## Basic Technical Data for Low-Emission Version



CHP Unit type	Electrical Output (kW)	Heat Output (kW)		Electrical Efficiency (%)	Heat Efficiency (%)		Total Efficiency (%)		Emission NOx/CO (mg/Nm <sup>3</sup> )
		standard / increased <sup>1</sup>			standard / increased <sup>1</sup>		standard / increased <sup>1</sup>		
Micro 30	<b>20</b>	43.3	48.8	30.0	64.9	73.2	94.9	103.2	50 / 150 <sup>2</sup>
Micro 30	<b>30</b>	58.1	65.4	32.4	62.8	70.7	95.2	103.1	50 / 150 <sup>2</sup>
Micro 50	<b>50</b>	88.5	101.6	34.2	60.6	69.5	94.8	103.7	50 / 150 <sup>2</sup>
Cento 80	<b>85</b>	141	149	33.7	56.0	59.1	89.7	92.8	50 / 250 <sup>2</sup>
Cento 100	<b>104</b>	164	174	34.8	54.8	58.2	89.6	93.0	50 / 250 <sup>2</sup>
Cento 120	<b>124</b>	181	193	36.6	53.4	56.9	90.0	93.5	50 / 250 <sup>2</sup>
Cento 200	<b>200</b>	252	277	39.2	49.4	54.3	88.6	93.5	50 / 250 <sup>2</sup>
Flexi 260	<b>260</b>	370	392	38.0	54.0	57.2	92.0	95.2	50 / 250 <sup>2</sup>
Flexi 350	<b>354</b>	439	482	40.2	49.8	55.3	90.0	94.9	95 / 250 <sup>2</sup>
Flexi 430	<b>430</b>	545	600	39.6	50.2	55.3	89.8	94.9	95 / 250 <sup>2</sup>
Flexi 530	<b>528</b>	641	705	40.5	49.2	54.1	89.7	94.6	95 / 250 <sup>2</sup>
Quanto 600	<b>600</b>	662	771	43.0	47.5	55.3	90.5	98.3	95 / 250 <sup>2</sup>
Quanto 800	<b>800</b>	873	1 017	43.1	47.3	55.1	90.4	98.2	95 / 250 <sup>2</sup>
Quanto 1000	<b>999</b>	1 106	1 304	43.0	47.6	56.1	90.6	99.1	95 / 250 <sup>2</sup>
Quanto 1200	<b>1 200</b>	1 297	1 513	43.6	47.2	55.0	90.8	98.6	95 / 250 <sup>2</sup>
Quanto 1600	<b>1 560</b>	1 713	1 996	43.2	47.5	55.3	90.7	98.5	95 / 250 <sup>2</sup>
Quanto 1800	<b>1 840</b>	1 910	2 014	44.7	46.3	48.9	91.0	93.6	95 / 250 <sup>2</sup>
Quanto 2000	<b>2 000</b>	2 154	2 514	43.7	47.1	54.9	90.8	98.6	95 / 250 <sup>2</sup>
Quanto 2300	<b>2 300</b>	2 354	2 754	45.0	46.0	53.8	91.0	98.8	95 / 250 <sup>2</sup>
Quanto 3000	<b>3 203</b>	3 666	3 856	42.1	48.2	50.7	90.3	92.8	95 / 250 <sup>2</sup>
Quanto 4000	<b>4 500</b>	4 799	5 066	43.7	46.6	49.2	90.3	92.9	95 / 250 <sup>2</sup>

We also offer CHP units with different emission levels. Technical parameters of these units are available on request. Most TEDOM CHP units are ready to co-fire a mixture of hydrogen and natural gas up to a hydrogen concentration of 20%.

1. When using an additional exhaust heat exchanger.
2. When using SCR technology.

# PROPANE

## Basic Technical Data

CHP Unit type	Electrical Output (kW)	Heat Output (kW)	Electrical Efficiency (%)	Heat Efficiency (%)	Total Efficiency (%)	Power input in fuel (kW)
Micro 30	30	58.0	31.5	60.9	92.4	95
Micro 50	48	77.0	35.2	56.4	91.5	137
Cento 80	84	151	31.5	56.6	88.0	267
Cento 200	150	232	35.0	54.2	89.3	428
Flexi 530	238	364	35.7	54.7	90.4	666
Quanto 600	352	435	40.2	49.7	89.8	876
Quanto 800	470	575	40.5	49.5	90.0	1 161
Quanto 999	857	1 022	41.2	49.2	90.4	2 079
Quanto 1600	1 071	1 304	40.7	49.6	90.3	2 630
Quanto 1800	1 003	1 262	40.0	50.4	90.4	2 505
Quanto 2000	1 340	1 625	40.8	49.4	90.2	3 287

Propane is an economical alternative for cogeneration during times of natural gas price hikes.

Propane CHP units are also suitable for locations without natural gas supply pipelines.

In order to operate a propane-based CHP unit, a storage tank for liquid propane must be available together with tankers to refill the propane.

All the offered CHP units can also be retro-fitted to burn natural gas.

The Micro 30 and Cento 200 CHP units can also be operated on a blend of propane and butane (LPG). Technical parameters available on request.

# BIOGAS

## Basic Technical Data

CHP Unit type	Electrical Output (kW)	Heat Output (kW)	Electrical Efficiency (%)	Heat Efficiency (%)	Total Efficiency (%)	Power input in fuel (kW)
Micro 30	20	41.3	29.7	61.4	91.1	67.3
Micro 30	30	59.0	30.9	60.8	91.7	97.1
Micro 50	44	78.7	32.6	58.3	90.9	135
Cento 80	83	120	35.0	50.6	85.6	237
Cento 100	106	142	36.6	49.0	85.6	290
Cento 120	124	165	36.9	49.1	86.0	336
Cento 160	166	217	37.7	49.3	87.0	440
Cento 180	182	223	39.1	48.0	87.1	465
Cento 200	200	245	39.1	47.9	87.0	511
Flexi 250	250	235	42.5	40.0	82.5	588
Flexi 265	265	249	43.0	40.0	83.0	624
Flexi 350	354	397	40.2	45.1	85.3	880
Flexi 430	430	506	39.4	46.4	85.8	1 090
Flexi 530	528	584	40.2	44.5	84.7	1 313
Quanto 600	600	613	42.7	43.6	86.3	1 405
Quanto 800	800	803	43.1	43.3	86.4	1 856
Quanto 1000	999	1 089	42.6	46.4	89.0	2 345
Quanto 1200	1 200	1 285	43.0	46.0	89.0	2 793
Quanto 1600	1 560	1 699	42.6	46.4	89.0	3 663
Quanto 1800	1 840	1 840	43.6	43.6	87.2	4 223
Quanto 2000	2 000	2 137	43.0	46.0	89.0	4 650
Quanto 2300	2 300	2 289	43.4	43.4	86.8	5 271

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### Notes on data in all tables

The data presented in the document are for information only.

Technical parameters are valid for emission limits according to the European legislation, which stipulates max. 250 mg NO<sub>x</sub>/Nm<sup>3</sup> for CHP units above 1 MW in the fuel input. The stated NO<sub>x</sub> and CO emission limits apply at a concentration of 5% O<sub>2</sub> in exhaust gases.

The gas consumption with a tolerance according to ISO 3046-1.

The term biogas also includes other fuels resulting from biological decomposition, e.g. the sewage or landfill gas. The stated parameters may vary with regard to technical and design development or innovations. The manufacturer reserves the right to changes.