

TEDOM



Hydrogen
H₂
READY

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 NO _x /CO (mg/Nm ³)
			standard	increased ¹		standard	increased ¹	standard	increased ¹	
MICRO	Micro 30	20	43.3	48.8	30.0	64.9	73.2	94.9	103.2	95 / 250
	Micro 30	30	58.1	65.4	32.4	62.8	70.7	95.2	103.1	95 / 250
	Micro 50	50	88.5	101.6	34.2	60.6	69.5	94.8	103.7	95 / 250
CENTO	Cento 80	81	119	128	35.2	51.7	55.7	86.9	90.9	500 / 650
	Cento 100	104	141	155	37.1	50.4	55.4	87.5	92.5	500 / 650
	Cento 120	125	177	194	36.3	51.5	56.4	87.8	92.7	500 / 650
	Cento 160	164	220	241	37.8	50.7	55.5	88.5	93.3	500 / 650
	Cento 180	184	231	255	39.2	49.3	54.4	88.5	93.6	500 / 650
	Cento 200	200	252	277	39.2	49.4	54.3	88.6	93.5	500 / 650
FLEXI	Flexi 260	260	370	392	38.0	54.0	57.2	92.0	95.2	95 / 250
	Flexi 350	354	439	482	40.2	49.8	54.7	90.0	94.9	500 / 650
	Flexi 430	430	610	668	37.0	52.5	57.4	89.5	94.4	250 / 650
	Flexi 530	528	671	738	39.3	50.0	55.0	89.3	94.3	250 / 650
QUANTO	Quanto 600	600	690	802	42.0	48.4	56.2	90.4	98.2	250 / 650
	Quanto 800	800	911	1 059	42.3	48.2	56.1	90.5	98.4	250 / 650
	Quanto 1000	999	1 155	1 359	42.0	48.5	57.1	90.5	99.1	250 / 650
	Quanto 1200	1 200	1 354	1 576	42.6	48.0	55.9	90.6	98.5	250 / 650
	Quanto 1600	1 560	1 788	2 080	42.2	48.4	56.3	90.6	98.5	250 / 650
	Quanto 1800	1 840	1 996	2 105	43.6	47.3	49.9	90.9	93.5	250 / 650
	Quanto 2300	2 300	2 451	2 863	44.0	46.9	54.7	90.9	98.7	250 / 650
	Quanto 3000	3 203	3 666	3 856	42.1	48.2	50.7	90.3	92.8	250 / 650
	Quanto 4000	4 500	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 NO _x /CO (mg/Nm ³)
			standard / increased ¹			standard / increased ¹		standard / increased ¹		
MICRO	Micro 30	20	43.3	48.8	30.0	64.9	73.2	94.9	103.2	50 / 150 ²
	Micro 30	30	58.1	65.4	32.4	62.8	70.7	95.2	103.1	50 / 150 ²
	Micro 50	50	88.5	101.6	34.2	60.6	69.5	94.8	103.7	50 / 150 ²
CENTO	Cento 80	85	141	149	33.7	56.0	59.1	89.7	92.8	50 / 250 ²
	Cento 100	104	164	174	34.8	54.8	58.2	89.6	93.0	50 / 250 ²
	Cento 120	124	181	193	36.6	53.4	56.9	90.0	93.5	50 / 250 ²
	Cento 200	200	252	277	39.2	49.4	54.3	88.6	93.5	50 / 250 ²
FLEXI	Flexi 260	260	370	392	38.0	54.0	57.2	92.0	95.2	50 / 250 ²
	Flexi 350	354	439	482	40.2	49.8	55.3	90.0	94.9	95 / 250 ²
	Flexi 430	430	545	600	39.6	50.2	55.3	89.8	94.9	95 / 250 ²
	Flexi 530	528	641	705	40.5	49.2	54.1	89.7	94.6	95 / 250 ²
QUANTO	Quanto 600	600	662	771	43.0	47.5	55.3	90.5	98.3	95 / 250 ²
	Quanto 800	800	873	1 017	43.1	47.3	55.1	90.4	98.2	95 / 250 ²
	Quanto 1000	999	1 106	1 304	43.0	47.6	56.1	90.6	99.1	95 / 250 ²
	Quanto 1200	1 200	1 297	1 513	43.6	47.2	55.0	90.8	98.6	95 / 250 ²
	Quanto 1600	1 560	1 713	1 996	43.2	47.5	55.3	90.7	98.5	95 / 250 ²
	Quanto 1800	1 840	1 910	2 014	44.7	46.3	48.9	91.0	93.6	95 / 250 ²
	Quanto 2300	2 300	2 354	2 754	45.0	46.0	53.8	91.0	98.8	95 / 250 ²
	Quanto 3000	3 203	3 666	3 856	42.1	48.2	50.7	90.3	92.8	95 / 250 ²
	Quanto 4000	4 500	4 799	5 066	43.7	46.6	49.2	90.3	92.9	95 / 250 ²

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)
			standard	increased ¹		standard	increased ¹	standard	increased ¹	
MICRO	Micro 30	30	58.8	66.4	31.5	61.8	69.7	93.3	101.2	92.5
	Micro 50	48	77.3	90.0	34.8	56.1	65.3	90.9	100.1	137.8
CENTO	Cento 80	84	152	164	31.5	56.9	61.4	88.4	92.9	267
	Cento 120	114	194	208	32.9	55.9	59.9	88.8	92.8	347
	Cento 200	150	231	250	35.2	54.2	58.7	89.4	93.9	426
FLEXI	Flexi 530	238	365	395	35.7	54.7	59.2	90.4	94.9	667
QUANTO	Quanto 600	352	435	481	40.2	49.7	54.9	89.9	95.1	876
	Quanto 800	470	575	636	40.5	49.5	54.8	90.0	95.3	1161
	Quanto 1000	857	1022	1134	41.2	49.2	54.5	90.4	95.7	2017
	Quanto 1600	1071	1304	1445	40.7	49.6	54.9	90.3	95.6	2630

1. When using an additional exhaust heat exchanger.

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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	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	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	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	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 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_x/Nm³ for CHP units above 1 MW in the fuel input. The stated NO_x a CO emission limits apply at a concentration of 5% O₂ 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.