

## Advantages of TEDOM generator sets:

- Long term proven high-quality engines designed for continuous duty
- Long service intervals and easy maintenance
- Economic operation due to high efficiency and fair spare parts pricing
- High quality generators
- Capability to utilize various fuels - natural gas, biogas, LPG, mine gases, wellhead gas, syngas and pyrolysis gases

## Standard scope of supply:

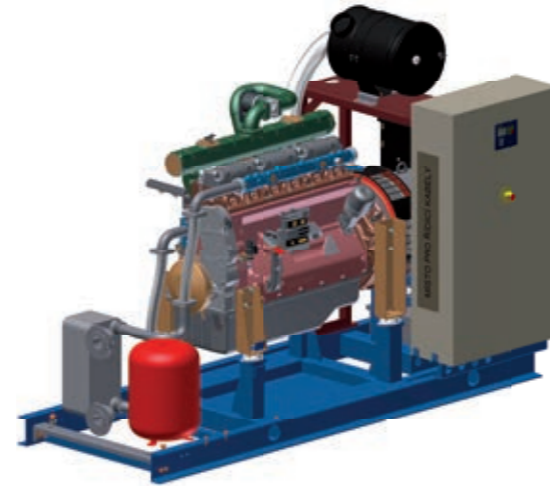
- Combustion engine TEDOM
- Generator
- Frame
- Cooling radiator or Plate heat exchanger
- Switchboard with control system
- For 'island' operation only

## Options:

- Automatic oil level control
- Engine pre-heating
- Dry cooler
- Basic or stainless steel exhaust system
- Sound enclosure
- Container
- ATS panel
- Primary regulator of gas pressure
- Remote control
- Multiple unit synchronization



Generator set with cooling radiator



Generator set with plate heat exchanger

**TEDOM**

technology  
... in harmony  
with nature

# GAS GENERATOR SETS

For Continuous Power Supply



TEDOM a.s., Výčapy 195, 674 01 Třebíč, CZECH REPUBLIC

NATURAL GAS – BIOGAS – LPG – MINE GAS

## 50 Hz

### Natural Gas

Type <sup>1</sup>	Maximum electrical output <sup>2</sup>		Efficient power output <sup>3</sup>		Gas consumption <sup>4</sup>	Heat output <sup>5</sup>
			Heat exchanger	Cooling radiator		
	kW	kVA	kVA	kVA	m <sup>3</sup> /h	kW
TNGG 80	81	101	97	94	24.4	55
TNGG 100	104	130	124	122	29.7	67
TNGG 120	125	156	150	147	36.3	79
TNGG 160	164	205	197	194	45.9	85
TNGG 180	184	230	222	220	49.7	95
TNGG 200	200	250	242	240	54.0	97
TNGG 230	235	294	286	–	60.0	89
TNGG 330	331	414	402	–	83.5	124
TNGG 410	410	512	499	–	106.0	164
TNGG 450	455	569	554	–	116.0	175
TNGG 500	500	625	611	–	126.0	186

### Biogas

Type <sup>1</sup>	Maximum electrical output <sup>2</sup>		Efficient power output <sup>3</sup>		Gas consumption <sup>4</sup>	Heat output <sup>5</sup>
			Heat exchanger	Cooling radiator		
	kW	kVA	kVA	kVA	Nm <sup>3</sup> /h	kW
TBGG 80	83	107	99	96	36.5	63
TBGG 100	106	132	127	124	44.6	76
TBGG 120	124	155	149	147	51.7	85
TBGG 160	166	207	199	197	67.5	100
TBGG 180	182	227	220	218	71.5	108
TBGG 200	200	250	242	240	78.4	115
TBGG 230	235	293	286	–	89.2	88
TBGG 330	331	413	402	–	125.0	124
TBGG 410	410	512	499	–	155.0	164
TBGG 450	455	568	554	–	169.0	175
TBGG 500	500	625	611	–	184.0	186

### LPG

Type <sup>1</sup>	Maximum electrical output <sup>2</sup>		Efficient power output <sup>3</sup>		Gas consumption <sup>4</sup>	Heat output <sup>5</sup>
			Heat exchanger	Cooling radiator		
	kW	kVA	kVA	kVA	kg/h	kW
TPGG 80	80	100	95	93	21.7	85
TPGG 90	92	115	110	107	23.4	80
TPGG 115	115	144	137	135	28.3	87

## 60 Hz

### Natural Gas

Type <sup>1</sup>	Maximum electrical output <sup>2</sup>		Efficient power output <sup>3</sup>		Gas consumption <sup>4</sup>	Heat output <sup>5</sup>
			Heat exchanger	Cooling radiator		
	kW	kVA	kVA	kVA	m <sup>3</sup> /h	kW
TNGG 90	93	116	111	109	29.1	67
TNGG 140	144	180	174	172	42.7	97
TNGG 190	192	240	233	231	53.7	109
TNGG 240	240	300	293	–	61.2	90
TNGG 270	274	342	335	–	70.2	103
TNGG 380	382	477	467	–	97.6	143
TNGG 470	470	587	573	–	123.0	185
TNGG 520	520	650	636	–	134.0	200
TNGG 575	575	719	706	–	147.0	217

### Biogas

Type <sup>1</sup>	Maximum electrical output <sup>2</sup>		Efficient power output <sup>3</sup>		Gas consumption <sup>4</sup>	Heat output <sup>5</sup>
			Heat exchanger	Cooling radiator		
	kW	kVA	kVA	kVA	Nm <sup>3</sup> /h	kW
TBGG 90	94	117	112	110	43.1	76
TBGG 140	140	175	169	167	63.0	114
TBGG 190	191	239	232	229	79.7	118
TBGG 240	240	300	293	–	91.8	90
TBGG 270	274	342	335	–	104.0	103
TBGG 380	382	477	467	–	146.0	143
TBGG 470	470	587	575	–	178.0	185
TBGG 520	520	650	636	–	194.0	200
TBGG 575	576	719	706	–	213.0	217

### LPG

Type <sup>1</sup>	Maximum electrical output <sup>2</sup>		Efficient power output <sup>3</sup>		Gas consumption <sup>4</sup>	Heat output <sup>5</sup>
			Heat exchanger	Cooling radiator		
	kW	kVA	kVA	kVA	kg/h	kW
TPGG 90	93	116	111	108	25.5	102
TPGG 110	113	141	135	133	29.9	122
TPGG 130	132	165	158	156	33.7	115

1) Generator sets above 200 kW<sub>el</sub> are available only in design with plate heat exchanger.

2) **Maximum electrical output [kW]** means the power limit, that doesn't take into account the input of other auxiliary equipment (pumps, fans etc.). Apparent power [kVA] means maximum power output when  $\cos \varphi = 0.8$ . The decrease of generator power output for  $\cos \varphi = 0.8$  is not taken into account.

3) **Efficient power output [kVA]** means maximum usable genset power output when the 'power factor'  $\cos \varphi = 0.8$ .

4) Natural **gas consumption** is rated under invoicing conditions (15 °C, 101.325 kPa); biogas consumption deals with methane content 65% at normal conditions (0 °C, 101.325 kPa).

5) **Heat output [kW]** means the heat output of the engine jacket water (relevant only for the design with plate heat exchanger).