Technical characteristics

Data referring to thermal module single models		50 kW	70 kW	90 kW	115 kW	160 kW
Rated thermal flow	kW	47.5	63.0	85.0	108.0	150
Rated thermal power (80/60°C)	kW	46.0	61.1	82.4	104.9	144.6
Rated thermal power (50/30°C)	kW	49.2	65.6	89.3	113.5	157.5
Maximum working pressure	Bar	3.0	3.0	4.5	4.5	4.5
Water content of individual thermal modules	l	3.5	4.0	9	11.5	14
Water content of the collector part for each thermal module	l	6	6	6	6	6
Electrical power absorbed	W	145	190	255	315	480
Maximum working temperature	°C	95	95	95	95	95
Maximum project temperature	°C	100	100	100	100	100
GAS connector diameter on thermal module	inch	1" M				
Connector diameter on cascade GAS collector	inch	1" Gas M				
Cascade GAS collector diameter	inch	1¼"				
System delivery/return connector diameter on thermal module	inch	1¼" M				
Diameter of connector on cascade system delivery/return collectors	inch	1¼" Gas M				
Cascade system delivery/return collector diameter	mm	65				

Data related to other modular generator components		< 280 kW tot.	> 280 kW tot.
Water content of the collector kit	l	6	
Water content of the balancer connection kit	l	7	9
Water content of the sludge remover/deaerator kit for cascade	l	16	35
Water content of the balancer kit	l	21	46

Expansion systems

Considering the possible dimension range of the system of the modular generator, the installation of the suitable expansion systems has to be carried out by the installer.

The collector kit has a specific connector for expansion tank (see "Collector kit" on page 12), which has to be used as follows:

- ► **in case of a system with hydraulic balancer** which does not perform a physical separation between the generator hydraulic circuit and the one of the rest of the system, the connector on the collector kit can be used for the connection of a single expansion system of the whole hydraulic system. The tank volume must be calculated according to the system water content, to which the modular generator total water content value must be added. The value of this last one must be calculated referring to the tables of the technical specifications listed above:
  - water content of individual thermal modules + water content of the collector part for each thermal module + water content of the collector kit + water content of the balancer connection kit + water content of the sludge remover/deaerator kit for cascade + water content of the balancer kit.
- ► **in case of a system with plate exchanger** or with separated circuits, two expansion systems **must be installed:**
  - **the first one, for the circuit mounted upstream of the exchanger** (modular generator) with **12 litres volume** and **to connect to the specific connector on the collector kit** of the modular generator itself;
  - **the second one, for the circuit mounted downstream of the exchanger**, the volume of which will have to be evaluated and dimensioned according to the system features and dimensions. This expansion system will have to be connected to the circuit downstream of the exchanger.