



- Thermoelectric generator is intended for conversion of waste heat from industry and heat engines (internal combustion engines, gas turbines, etc.) into electric energy. It serves as a source of additional energy that can be used for internal needs and transferred into external electric circuit. The use of such generators provides saving of fuel resources by 5-7%.
- The operating principle of thermoelectric generator is based on direct thermal into electric energy conversion through the use of thermoelectricity.

#### Thermoelectric generator appearance



- Thermoelectric generator is comprised of thermoelectric modules and heat-exchangers of hot and cold loops. Hot loop heat-exchangers transfer heat to thermoelectric modules by high-temperature silicone liquid. Cold loop heat-exchangers remove heat from thermoelectric modules by running water. Input and output connections for cold running water and connections for heat transfer agent are provided in thermoelectric generator housing. External load is connected to terminals arranged on the front panel of thermoelectric generator.
- The generator can be used for creating high-power thermoelectric systems. Combining a certain number of individual thermoelectric generators provides the consumer with required electric power.
- Thermoelectric generator is ecologically pure electric energy source.

### Thermoelectric generator parameters

№	Name of parameter, measuring unit	Value
1.	Hot liquid input temperature, °C	250
2.	Hot liquid flow rate, ml/s	225
3.	Hot liquid input pressure, MPa	0.34
4.	Cold liquid input temperature, °C	50
5.	Cold liquid flow rate, ml/s	100
6.	Cold liquid input pressure, MPa	0.12
7.	Electric voltage, V	50
8.	Electric power, W	500
9.	Efficiency, %	3.7
10.	Weight, kg	14
11.	Dimensions	320×305×125

**Order and additional information:** General Post Office, Box 86, Chernivtsi, 58002, Ukraine, e-mail:ite@inst.cv.ua; fax: (380-3722)-41917; tel: (380-3722)-41917; <http://ite.cv.ukrtel.net>.