



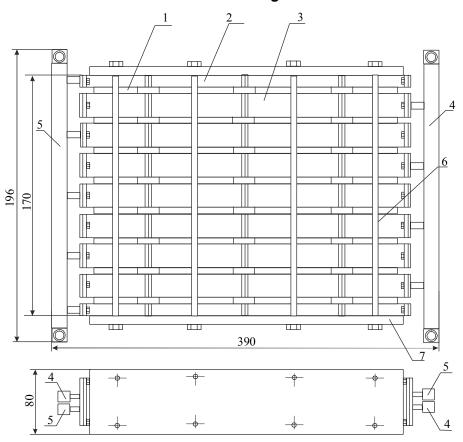
THERMOELECTRIC GENERATOR UNIT

ALTEC - 3004



- The unit is intended for conversion into electric power of industrial waste heat, the waste heat from heat engines (internal combustion engines, gas turbines, etc.), the heat from geothermal sources, sea and ocean water. It is used for power supply to amenity and living rooms, weather stations, light and acoustic beacons, signal buoys, various radioelectronic instruments and devices.
- The operating principle of the unit is direct conversion of thermal energy into electric power on the basis of thermoelectricity.

Scheme of thermoelectric generator unit



• The thermoelectric generator unit comprises: thermoelectric modules 1; heat exchangers 2 for heat transfer to thermoelectric modules with hot water; collectors 4; heat exchangers 3 for heat removal from thermoelectric modules with cold running water; collectors 5. Brace 6 and plate 7 provide the rigidity of construction and a good thermal contact between thermoelectric modules and heat exchangers.

Appearance of thermoelectric generator unit



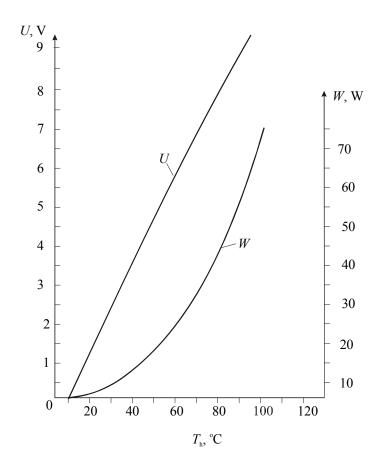
- Connection of a certain number of individual thermoelectric generator units provides the user with the necessary parameters of electric power and voltage.
 - The thermoelectric generator unit can work at circulating water pressure up to 5 atm.
- The thermoelectric generator unit is an ecologically clean device for electric power generation.

Parameters of thermoelectric generator unit for two temperature modes

№	Parameter name	Mode 1	Mode 2
1.	Cold water input temperature, °C	10	10
2.	Hot water input temperature, °C	95	35
3.	Cold water flow rate, ml/s	170	170
4.	Hot water flow rate, ml/s	170	170
5.	Electric voltage, V	9,4	3
6.	Electric power, W	63	6
7.	Cold liquid input pressure, atm	0,6	0,6
10.	Hot liquid input pressure, atm.	0,4	0,5
11.	Dimensions, mm	390x80x196	
12.	Weight, kg	5,9	

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Characteristics of thermoelectric generator unit



Temperature T_h = 10 ℃