

TEG 600W Thermoelectric Power Generator

Description

The 600 watts thermoelectric generator run with circulated heat transfer oil which distributes the heat to each thermoelectric module (TEM) to generate electricity. The cooling of the generator is by using water, which bring out the heat that pass through the modules effectively.

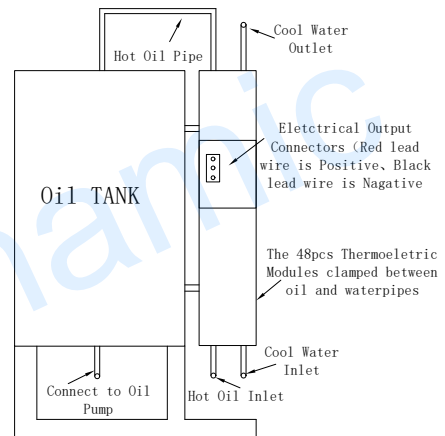
The thermoelectric power generator consists of thermoelectric modules, hot oil pipe for hot oil circulating to bring the heat to each module, oil tank for oil storage, water pipe for water circulating to bring out the heat. The hot oil flows from bottom of the generator to bring the heat to all the hot sides of the modules, and drops into an oil tank. Then oil is pumped out from the tank to be circulated through the heat sources to be heated up, and back to the generator to bring the heat continuously for the generator Please refer to the diagram and photo below.

The water flows from the inlet in the bottom, pass the modules cold side to bring out the heat that flows through the modules, and then out from the top outlet. Please drip the water when you do not use to keep dry.

The generator can provide 96V open circuit and 48V matched load output. It can generate over 600 watts if the heat source is over 300 °C. The positive and negative DC output is from the red and black color wire.



600W- 48VDC Output Thermoelectric Power Generator

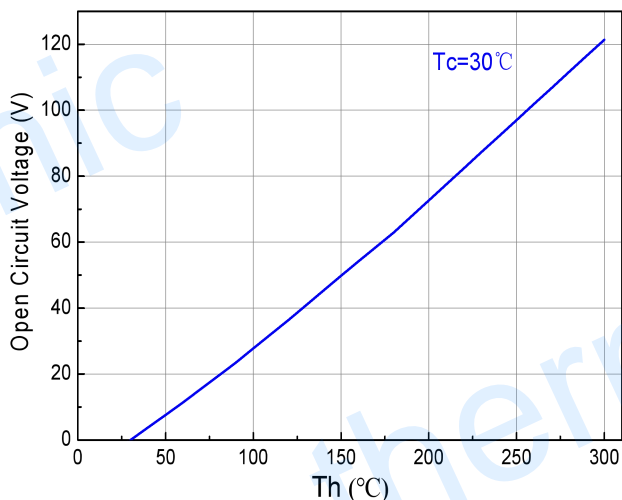


600W- 48VDC Output Thermoelectric Generator Diagram

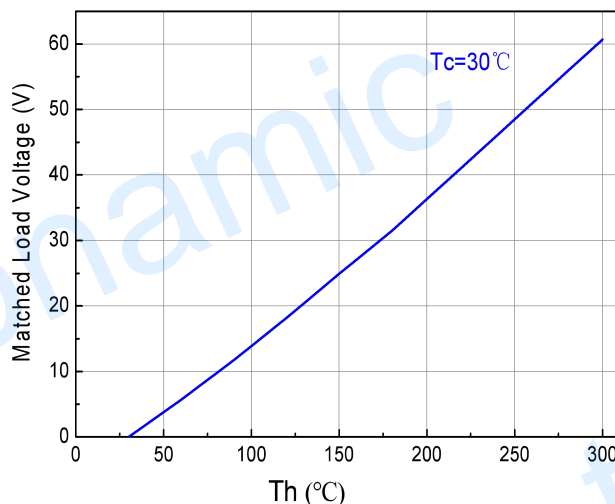
Specifications:

Part Number	TEG600-48V
Output Power /W	600
Open Circuit Voltage/VDC	96
Matched Load Output Voltage/VDC	48
Internal Resistance/ ohm	4.0
Matched Load Current/A	12
Hot Oil Input Temperature and Flow Rate/ liters/min	300° C / 48
Input Water Temperature and Input Rate/ liters/min	30 °C/ 18
Working pressure of oil tank / Mpa	0.25
Working pressure of water tank / Mpa	0.35
Oil and Water Inlet and Outlet Pipe Diameter	G1 (1 inch)
Dimension(Length × Height × width)/mm	460×400×965
Weight /Kg	75

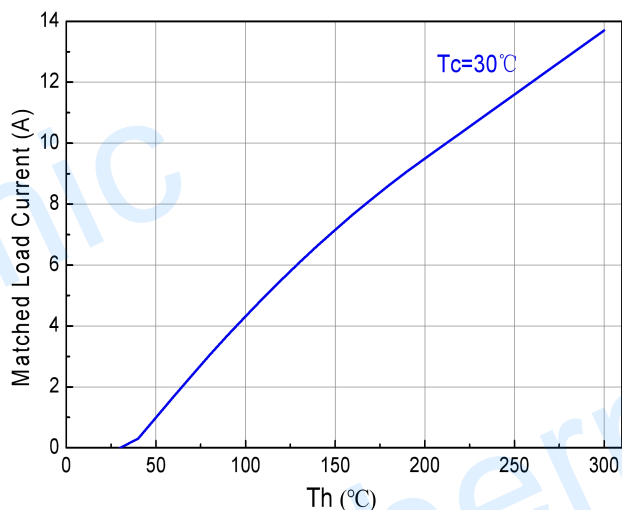
Performance Curves of the Generator



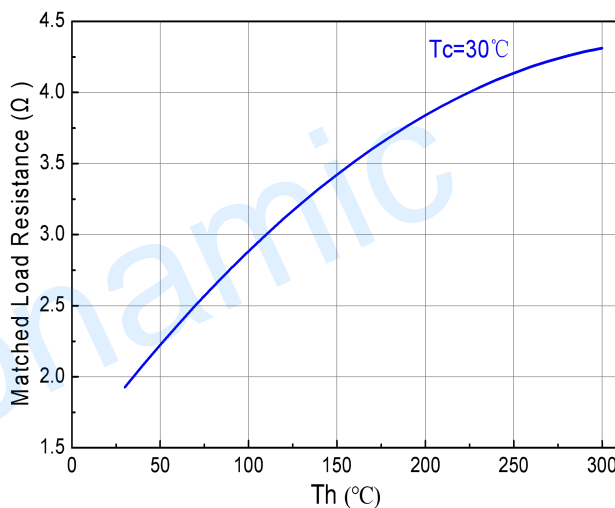
The chart for open circuit voltage Vs Th under Tc=30°C input water temperature



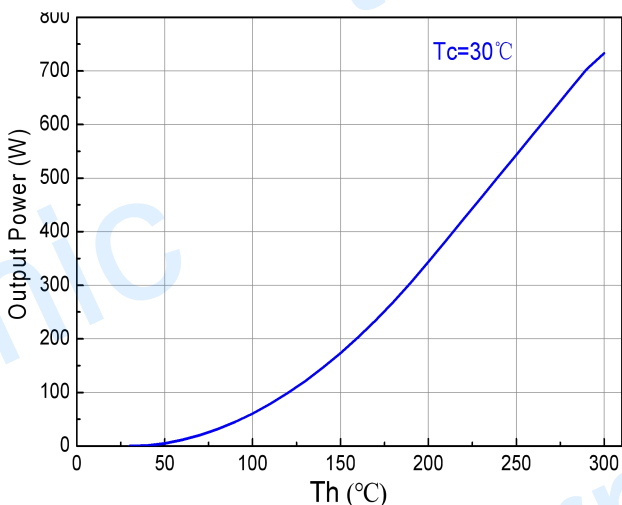
The chart for matched load voltage Vs Th under Tc=30°C input water temperature



The chart for matched load current Vs Th under Tc=30°C input water temperature



The chart for matched load resistance Vs Th under Tc=30°C input water temperature



The chart for matched load output power Vs Th under Tc=30°C input water temperature

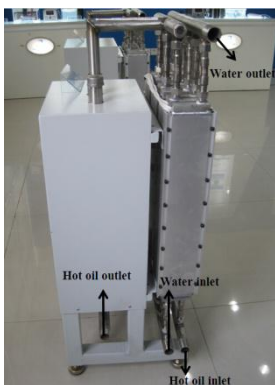
Instructions in use

1. There are four screw holes at the bottom of the generator, please screw the supporting legs into them and keep the generator in balance.



Supporting leg

2. Connect oil and water pipelines to the generator as the instructions on the body, and let water enter from the bottom and drain out from the top



3. The output DC voltage is high, please be careful and do not touch the output.

Notes

Please keep the flow of inlet and outlet same.

Packing List

- | | |
|------------------------|----------|
| 1. 600 Watts generator | one set |
| 2. Supporting leg | 4 pieces |

Serial Number

Date	
NO.	