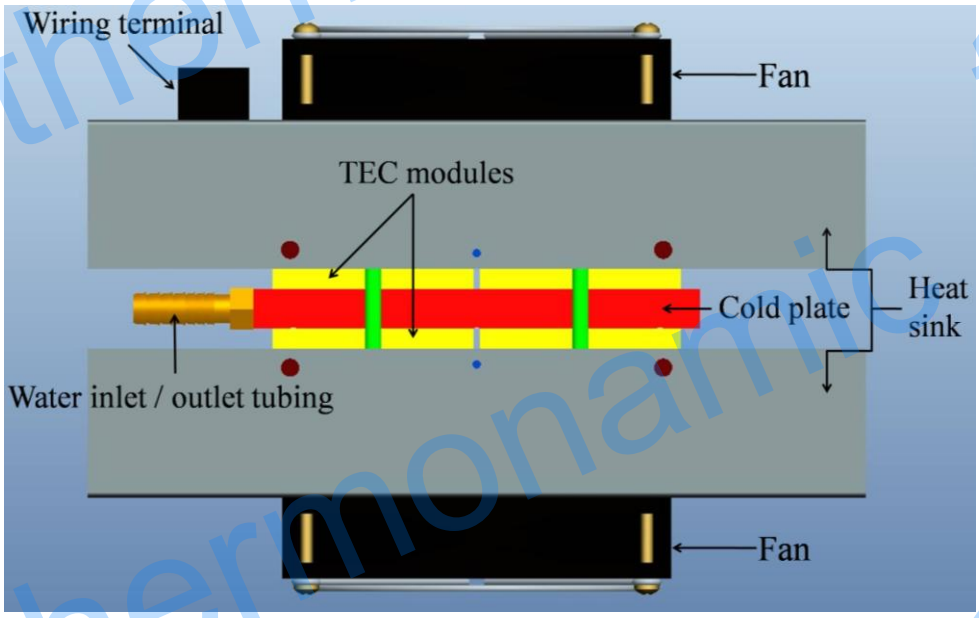
TECC-HL-170W-24V-1 Thermoelectric Cooling/Heating Units

Description

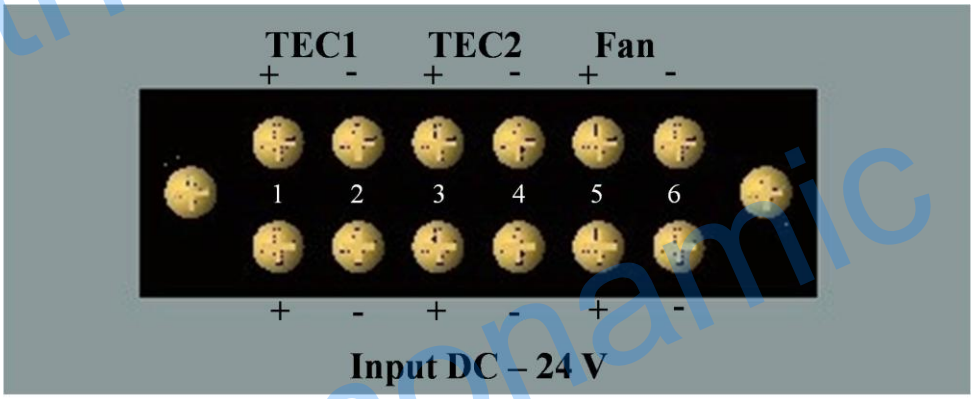
The system introduced here is Air to Liquid type thermoelectric cooling/heating unit with 170 watts cooling power where we use heat sink with fans for heat dissipating of thermoelectric modules to cool or heat up the circulated water or liquid. The unit is designed for cooling or heating circulated liquid purpose. It can cool 2 Liters of water from 25 ˚C down to 1 ˚C within one hour, and also can be used to heat up water up to 100 ˚C. Built up with our high performance TEHC series thermoelectric cooling modules, the unit demonstrates superior performance.

170 W thermoelectric cooling/heating consist of 4 pieces TEHC1-12707S-74 thermoelectric units, 2 in series and 2 series in parallel. It runs on 24 VDC with 11 A current drawn. When the red wire is connected to positive and black to negative it is in cooling mode, and if the polarity is reversed, then in heating mode.

Structure of the System



Over-all Structure of the Thermoelectric Cooling units



Electrical Connection Diagram

Peformance Specification Sheet

Part Number		TECC - HL - 170 W - 24 V - 1
Input Voltage / VDC		24
Input Current / A		≈ 11.2
Module part number		TEHC1-12707S-74
Maximum Cooling Power / watts		170
Heat Sink Spec / mm / Quantity		240 × 120 × 45 / 2pcs
Fan	Spec / mm / Quantity	120 × 120 × 25 / 2pcs
	Work Condition	24 VDC / 0.25 A, noise level less than 25 DB
Water in and out let Diameter / mm		6
Over all Dimension (Length × Width × Height) / mm		240 × 121 × 170
Weight / Kg		4.7