Performance Comparison *Cooled Liquid* and *Cooling Fan* As Heat-Reducing Temperatures Thermoelektric Element

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The use of a vapor compression cooling machine is very common today, It can pollute the environment due to refrigerant that is not environmentally friendly. Than, the authors do research in the development of a type of cooling machine model by using thermoelectric elements as a cold source. In this case there is a variety of literature that says that the lower the temperature of the hot side of the element the lower the cold side, Thr of literature researchers compared the performance between liquid cooling and air conditioning as a cooling side device. Testing do it for 1 hour with time interval of data taking every 10 minutes and 3 times repetition. From the test results it is known that the hot side with liquid cooling has a temperature difference 30C cooler than the air conditioner and the difference of Coefficient of Performance (COP) of both cooling models is 0.060.

Keywords : *Thermoelektric Element, Cooled Liquid, Cooling Fan, Cooling Machine, Coefficient Of Performance.*