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The Effect of the Number of Cooling Pads on the Output Air Condition and Effectiveness of Air Cooler

Wibowo Kusbandono

Abstract

To get comfortable air, it can be done by using an air conditioner or air cooler. The electrical power used for the air cooler is relatively lower. This research aims to see the effect of the number of cooling pads on the output air condition and on the effectiveness of the air cooler. The research was conducted experimentally. The research was conducted by varying the number of cooling pads used,

thick. The distance between the cooling pads is 1.5 cm. The air temperature inlet of the air cooler has a dry bulb air temperature of 30°C with an air humidity (RH) of 60%. The lowest dry bulb air temperature achieved was 24.04 °C when the number of cooling pads was 6 pieces. The highest air cooler effectiveness achieved was 0.99. Research has given satisfactory results. However, research can be developed by varying the cooling pad material or cooling pad pattern in order to obtain a small number of cooling pads

Keywords: Air cooler, Effectiveness, Cooling pad

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