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Experimental and Theoretical Investigation of Regenerative

Total Heat Exchanger with Periodic Flow for Air-Conditioning Systems

Running Title: **Regenerative Total Heat Exchanger with Periodic Flow for Air-Conditioning Systems**

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Highlights

- Performance of periodic total heat exchanger with energy-storage material.
- This study finds out the optimal operating period for heat effectiveness.
- Influence of different temperature and humidity for heat exchanger is investigated.

Abstract

This study experimentally investigates the theoretical performance of the periodic total heat exchanger. The total heat exchanger has a double flow-circuit heat exchange function for periodic positive- and reverse-directional pumping. The operating period parameters are 2 minutes, 3 minutes, 4 minutes, 6

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