Accepted Manuscript

Development of a steady-state physical-based mathematical model for a direct expansion based enhanced dehumidification air conditioning system

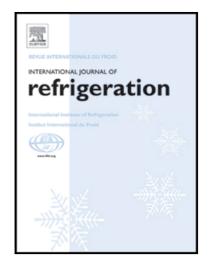
Wenjing Chen, Ming-yin Chan, Wenbing Weng, Huaxia Yan, Shiming Deng

PII: S0140-7007(18)30144-0 DOI: 10.1016/j.ijrefrig.2018.04.028

Reference: JIJR 3969

To appear in: International Journal of Refrigeration

Received date: 18 January 2018
Revised date: 21 April 2018
Accepted date: 30 April 2018



Please cite this article as: Wenjing Chen, Ming-yin Chan, Wenbing Weng, Huaxia Yan, Shiming Deng, Development of a steady-state physical-based mathematical model for a direct expansion based enhanced dehumidification air conditioning system, *International Journal of Refrigeration* (2018), doi: 10.1016/j.ijrefrig.2018.04.028

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Highlights

- A novel enhanced dehumidification air conditioning (EDAC) system was proposed.
- A steady-state physical-based mathematical model for EDAC system was developed
- The model was experimentally validated, with an adequate modeling accuracy.
- It was verified that the EDAC system can provide variable dehumidification ability.
- The model helps optimize the sizing of the two evaporators used in the EDAC system.

Download English Version:

https://daneshyari.com/en/article/7175226

Download Persian Version:

https://daneshyari.com/article/7175226

<u>Daneshyari.com</u>