

Accepted Manuscript

The impact of ventilation parameters on thermal comfort and energy-efficient control of the ground-source heat pump system

Jian Fang , Yelin Deng , Zhuangbo Feng , Shijie Cao

PII: S0378-7788(18)31634-7
DOI: <https://doi.org/10.1016/j.enbuild.2018.09.024>
Reference: ENB 8810



To appear in: *Energy & Buildings*

Received date: 29 May 2018
Revised date: 20 August 2018
Accepted date: 16 September 2018

Please cite this article as: Jian Fang , Yelin Deng , Zhuangbo Feng , Shijie Cao , The impact of ventilation parameters on thermal comfort and energy-efficient control of the ground-source heat pump system, *Energy & Buildings* (2018), doi: <https://doi.org/10.1016/j.enbuild.2018.09.024>

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.

Highlights

- A full-scale GSHP experiments is conducted for two ventilation parameters.
- Gaussian process regression employed to deal with coupled effect of parameters over power change.
- The minimum power is derived along with corresponding setpoint when reaching best thermal performance.
- An efficient control is identified achieving 0.35kW(19.77%) energy saving with virtually no PMV deterioration.

Download English Version:

<https://daneshyari.com/en/article/11024227>

Download Persian Version:

<https://daneshyari.com/article/11024227>

[Daneshyari.com](https://daneshyari.com)