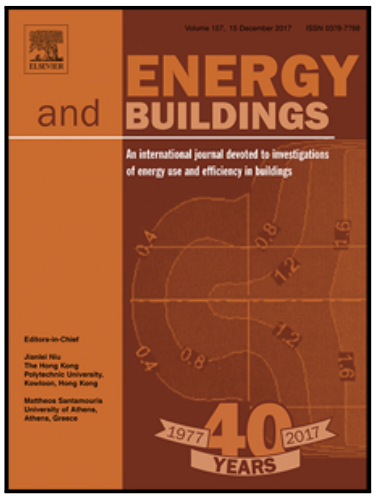

Simulations of the energy performance of variable refrigerant flow system in representative operation modes for residential buildings in the hot summer and cold winter region in China

Guohui Zhang , Xianting Li , Wenxing Shi , Baolong Wang , Ziai Li , Yang Cao

PII: S0378-7788(18)30604-2
DOI: 10.1016/j.enbuild.2018.06.064
Reference: ENB 8666

To appear in: *Energy & Buildings*

Received date: 22 February 2018
Revised date: 23 April 2018
Accepted date: 29 June 2018

Please cite this article as: Guohui Zhang , Xianting Li , Wenxing Shi , Baolong Wang , Ziai Li , Yang Cao , Simulations of the energy performance of variable refrigerant flow system in representative operation modes for residential buildings in the hot summer and cold winter region in China, *Energy & Buildings* (2018), doi: 10.1016/j.enbuild.2018.06.064

Highlights

- Energy model was developed for household VRF systems with defrost operations.
- Typical residential buildings in the HSCW region were simulated.
- Energy performance of household VRF systems was compared for four operation modes.
- Annual energy use for C4 mode is lower from 26.3% to 51.7% compared with C1 and C2 mode.