

Development, Implementation and Performance of a Model Predictive Controller for Packaged Air Conditioners in Small and Medium-sized Commercial Building Applications
Development, implementation and performance of a model predictive controller for packaged air conditioners in small and medium-sized commercial building applications

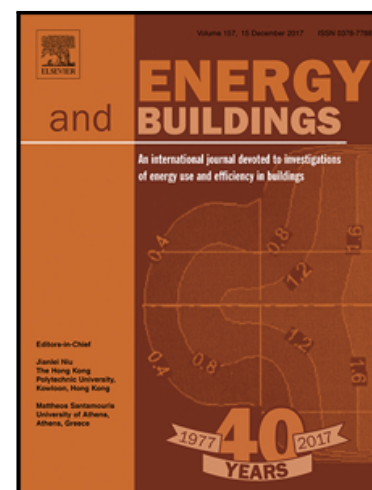
Donghun Kim, James E. Braun

PII: S0378-7788(18)30880-6
DOI: <https://doi.org/10.1016/j.enbuild.2018.08.019>
Reference: ENB 8755

To appear in: *Energy & Buildings*

Received date: 18 March 2018
Revised date: 5 July 2018
Accepted date: 12 August 2018

Please cite this article as: Donghun Kim, James E. Braun, Development, Implementation and Performance of a Model Predictive Controller for Packaged Air Conditioners in Small and Medium-sized Commercial Building Applications, *Energy & Buildings* (2018), doi: <https://doi.org/10.1016/j.enbuild.2018.08.019>



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 complete and low cost MPC solution for small/medium sized commercial buildings was developed.
- Handling unmeasured building disturbances for modeling and control phases was focused.
- Performance was evaluated using both laboratory and field experiments.
- A long-term performance evaluation of the MPC at a field site was performed.
- Over 10% energy savings and 18

Download English Version:

<https://daneshyari.com/en/article/10145819>

Download Persian Version:

<https://daneshyari.com/article/10145819>

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