

The analysis of correlation between the outdoor temperature and electric energy consumption of air-conditioning system based on moist air properties

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The monitoring indoor climate, outdoor temperature and electric energy consumption of an air-conditioning system was collected via the internet network and was analysed for the correlation between the outdoor temperature and electric consumption for energy management. Moist air properties were employed to setup the correlating equation that can be used to predict the energy consumption of the air-conditioning system. The simulated result compared with the real data is presented.

Keyword: outdoor temperature, enthalpy, moist air, energy consumption

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