

IEA-EBC Annex 87 Energy and Indoor Environmental Quality Performance of Personalised Environmental Control Systems (PECS)

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ABSTRACT

The new annex 87 is dealing with Personal Environmental Control System (PECS) with the functions of heating, cooling, ventilation, lighting and acoustic and controlling the localized environment at occupant's workstation by their preference instead of conditioning an entire room. This improves personal comfort, health, and energy efficiency of the entire heating, ventilation, and air-conditioning (HVAC) system substantially. Personalized ventilation will also protect against cross contaminations, which are critical in open plan offices and workplaces with close distance. There will in the future be an increasing interest and marked for PECS. The application is for workplaces with mainly sedentary activity like offices (open plan, banks, control centres, etc.). Due to the pandemic, where many people worked at home, there will be an increase in home working places where PECS may be a solution.

This talk aims to present the new IEA-EBC Annex 87 on Personalized Environmental Control Systems

KEYWORDS

Personal systems; heating; cooling; ventilation, lighting; energy, personal control;