

The invention relates to air-conditioning systems for rooms. The system includes cooling module (2), this is connected to heating system (8), set of fan-convectors (F1,..., Fn), acting as heating and cooling terminals, single hydraulic circuit (5, 7), that supplies fluid to the set of fan-convectors (F1,..., Fn). Cooling module (2) has first inlet tube (B) and first outlet tube (A). Heating system (8) has second inlet tube (D) and second outlet tube (F). Hydraulic circuit (5, 7) has intake tube (5) and return pipe (7). The system has three-way switch valve (V1), central outlet of which is connected to the intake tube (5) of the single hydraulic circuit (5, 7). The inlets are connected to the second inlet tube (F) and first outlet tube (A) of the cooling module (2). Return tube (7) of hydraulic circuit (5, 7) is connected to the second inlet tube (D) and to the first inlet tube (B). Three-way switch valve (V1) connects the set of fan-convectors (F1,..., Fn) in the mode of cooling as well as in the mode of heating. The system promotes more effective air conditioning during the year.