

The invention relates to the field of heat and power engineering, in particular to devices for the conversion of natural energy: solar radiation into heat energy, atmosphere and space energy into cold, and can be used in the natural heat and cold supply systems.

The collector-accumulator contains a thermally insulated chamber (1) in the form of a parallelepiped or a truncated pyramid with a transparent coating (2) for the electromagnetic radiation. Inside, the chamber (1) is divided by partitions into sectors and by a crossover (3) into a ceiling compartment (4). Each sector is divided by shelves (13) into tiers, on which are installed accumulating elements (14). In the ceiling compartment (4) is installed an absorber/radiator, for example, in the form of rows of blackened grids (5), under which is installed a flow heat exchanger (6). The sectors and the ceiling compartment (4) are equipped with lids (16) with reflectors and channels for the gaseous coolant. The collector-accumulator contains a box (7), divided into gas ducts, communicating with the sectors and the ceiling compartment (4), and a coolant circulation system with shut-off-and-regulating elements (27).

The result of the invention consists in the multitude of variants of the modes of operation of the collector-accumulator, the work on liquid and gaseous coolants, and the design simplicity.

Claims: 5

Fig.: 7

