

Energy-efficient heat exchange module is a box-shaped structure and contains a vertical housing, the cavity of which is divided by a horizontal tube sheet, with thermosyphons fixed in it, into heating and cooling chambers, which are equipped with heat exchange medium supply and discharge pipes. Part of the thermosyphons located in the heating chamber has thermal ribs. The tube sheet, with vertically installed thermosyphons, is made separately from the upper box-shaped cover and the lower body part of the gas duct and is fixed between the flanges of the cover and the gas duct body. The evaporation part of the thermosyphons is located inside the gas duct body. The condensation parts of the thermosyphons are placed above the tube sheet inside the box-shaped cover, which is equipped with heat carrier medium supply and discharge pipes.