

Low-potential heat recovery system for high-capacity compressor units consists of two semi-cylindrical bases connected by flexible fasteners, with primary bismuth telluride Peltier elements mounted across the entire inner surface, and outer surface features additional cooling radiators and secondary parts of Peltier element made of silicon germanide, which are connected to primary parts by metal rods and switching devices for connection to power grid. Semi-cylindrical bases enclose cold part of working cylinder of Stirling engine connected to electric generator. Hot part of engine cylinder is located in inner cavity of receiver, into which compressed air is supplied for cooling.