

Abstract

The purpose of the present invention is to provide a temperature control device, an electrostatic rectifier and a cooling efficiency improvement method for the temperature control device that make it possible to solve the electrical problems of a medium and to achieve a greater cooling efficiency.

A temperature control device 1 comprises: a medium pipe 2 that is formed from a conductive material to house and circulate a medium; and a case 3 that houses the medium pipe 2. The temperature control device 1 also comprises an electrostatic rectifier 4 that is electrically connected to the medium pipe 2 and supplies a pulsed signal that is repeated at a frequency of 20-40 kHz thereto. Also, a cooling efficiency improvement method for the temperature control device 1 is a method that involves supplying a pulsed attenuated wave signal repeated at a frequency of 20-40 kHz to the medium pipe 2 by means of the electrostatic rectifier 4.

[FIG. 1]