

The invention relates to electrical engineering. Induction rheostat with variable parameters includes ferromagnetic core with windings and three magnetically not connected windings and additional core made of several massif ferromagnetic elements. Each winding consists of several concentric windings between which ferromagnetic cores are placed. In the other variant rheostat has several flat windings placed in cylindrical massif ferromagnetic body closed at beneath and at above with massif ferromagnetic discs. Between the windings massif washers are placed, those are made of ferromagnetic material. The invention provides possibility of change of level of magnetization of cores, this changes value of losses for re-magnetization of those and leads to change of complex electric resistance.