

Title (en)  
CIRCUIT FOR REDUCING SWITCHING LOSSES IN ELECTRONIC VALVES

Title (de)  
SCHALTUNG ZUR REDUKTION DER SCHALTVERLUSTE ELEKTRONISCHER VENTILE

Title (fr)  
CIRCUIT POUR REDUIRE LES PERTES DE COMMUTATION DE SOUPAPES ELECTRONIQUES

Publication  
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Application  
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Abstract (en)  
[origin: WO0180425A1] The invention relates to a circuit for reducing switching losses in electronic valves, wherein a saturation coil (2) for reducing switching losses is mounted in series relative to the electronic valve (1). In order to reduce losses as effectively as possible both during connection and disconnection, an electronic auxiliary valve (3) is connected in parallel to the electronic valve (1) by means of a capacitor (4) and a serial circuit consisting of at least one inductive resistor (6) and a diode (7) is mounted in parallel to the electronic auxiliary valve (3) valve for discharging the capacitor (4), wherein the electronic auxiliary valve (3) is triggered before the electronic valve (1) is disconnected so that the auxiliary valve (3) absorbs the current flowing through the electronic valve (1), thereby minimizing power loss of the electronic valve (1) during disconnection. A saturation coil (5) for reducing the connection losses of the auxiliary valve is also advantageously mounted in series relative to said auxiliary valve (3).

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