

Abstract

Method for operating at least one fluorescent lamp with an electronic ballast, as well as ballast therefor

The invention relates to a method for operating at least one fluorescent lamp (FL) with the aid of an electronic ballast as well as to this ballast itself. There are provided a rectifier bridge (GL) which has AC mains voltage (L, N) across it, a connected step-up converter (L1, D1, V1), a half-bridge circuit (V2, V3) as well as a control loop (IC) for continuously monitoring the lamp current by means of a controlled drive circuit (CCO, SEL, HSD, LSD) of the power transistors (V2, V3), which drive circuit keeps the lamp current constant during normal operation. A timer (PST, IT, CT), which is started in a defined manner each time the lamp is started or a disturbance is detected, generates as superordinate control a time base for a monitoring circuit (MON), which evaluates the instantaneous lamp current using predetermined reference levels (Mp, Mi and Mo) which vary in individual time segments (Δp_t , Δi_t , Δs_t , Δo_t) and controls the lamp current as a function of time by means of the controlled drive circuit (CCO, IST, SEL, HSD, LSD) in the case of normal starting of the lamp or triggers automatic disconnection of the electronic ballast in the case of a fault.

Figure 1