

Title (en)

Instant start solid state ballast for fluoresent and gas-dis charge lamps.

Title (de)

Sofortstart-Festkörperballast für Gasentladungslampen und für Fluoreszenzlampen.

Title (fr)

Ballast à l'état solide pour démarrage instantané de lampes à décharge dans le gaz et pour lampes fluorescentes.

Publication

EP 0096105 A2 19831221 (EN)

Application

EP 82108774 A 19820918

Priority

TR 8977981 A 19811001

Abstract (en)

The standart Ballasts and starters used for the fluoresent lamps are based on the voltage kicks of a dying magnetic field in iron core. This is a somewhat artificial way of obtaining the voltage gradient necessary to establish an arc in the long vacuum tube. To facilitate this arc a cathode heating has been added for electron emission and arc starting. In the new design: 1- Instead of a weak voltage increase a dependable high voltage level is created by the sound autotransformer principle. 2- Instead of having the fully rated voltage primary coil, a much shorter one is subjected to the rated voltage for a few seconds and also protected from damage by a carefully chosen PTC (Positif Temperature Coefficient Thermistor) to separate the primary from the rated voltage circuit. 3- Therefore, with the aid of the PTC, from a 1 : 2 ratio autotransforme a voltage of 3 x V (rated) is obtained instantly. 4- This very short durated voltage is enough to strike an arc even for a very low (140 V) network and light a lamp without a starter. 5- This high voltage is harmless since it has the secondary coil in series as a ballast in the lamp circuit.

IPC 1-7

H05B 41/04

IPC 8 full level

H05B 41/04 (2006.01)

CPC (source: EP)

H05B 41/04 (2013.01)

Cited by

WO8801467A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0096105 A2 19831221; EP 0096105 A3 19840718

DOCDB simple family (application)

EP 82108774 A 19820918