

ELECTRICAL CIRCUIT DIAGRAM

The diagram illustrates an electronic ballast circuit for a 20W compact fluorescent lamp (CFL). The circuit is powered by an AC input (AC 250V 3A) through a fuse F1. The input is connected to a network of capacitors (C1, C2, C3, C4, C5, C6, C7, C8) and inductors (LF1, T1). The core of the circuit consists of two MOSFETs, Q1 and Q2 (1P7F30), which are driven by a push-pull oscillator circuit. This oscillator is composed of resistors R2, R3, R4, R1 and capacitors C2, C3, C4, C5, C6, C7, C8. The output of the MOSFETs is connected to a transformer T1 (1.7mH) and a lamp. The circuit also includes several diodes (D1, D2, D3, D4, D5, D6, D7) and capacitors (C9, C10) for protection and filtering. The overall design is a compact and efficient electronic ballast for a 20W CFL.