

General Information for Installation and Operation

Input

Starting Behaviour

When the unit is connected to the input power, the primary capacitors will be charged by a high current pulse. The magnitude of this pulse mainly depends on the supply system. Certain circuits are available for an electrical limiting of this pulse (Option H, HE). The build-up of the output voltage is electronically delayed by a soft-start circuit on the control board and does hardly contribute to the current surge at the input during turn-on. The output voltage reaches the final value app. 1-2 sec. after the application of input power.

Indication of Operation

The operation of the unit is indicated by a green LED at the front connected in parallel to the output. A red LED indicates a malfunction, e.g. over voltage at the output.

Low/High Input Voltage Operation

A correct operation according to the specifications is only possible within the given input voltage range. When the designated threshold level is reached (standard 95% of the lowest or 105% of the highest allowed input voltage), the unit is switched off. It automatically returns into operation when the input voltage is back in tolerance.

Efficiency, Increased Temperature

Power dissipation and an increase in temperature are caused by the voltage drop in the primary and secondary circuitries as well as through switching losses in the transistors. These power losses are higher in the units with lower input and output voltage ranges due to the higher current. Some of the possible options, such as decoupling diodes or polarity protection diodes can also increase the power losses and reduce the efficiency.

High Temperature Shutdown

If the internal temperature reaches a critical value, the unit switches off. It returns to normal operation automatically after cooling down.