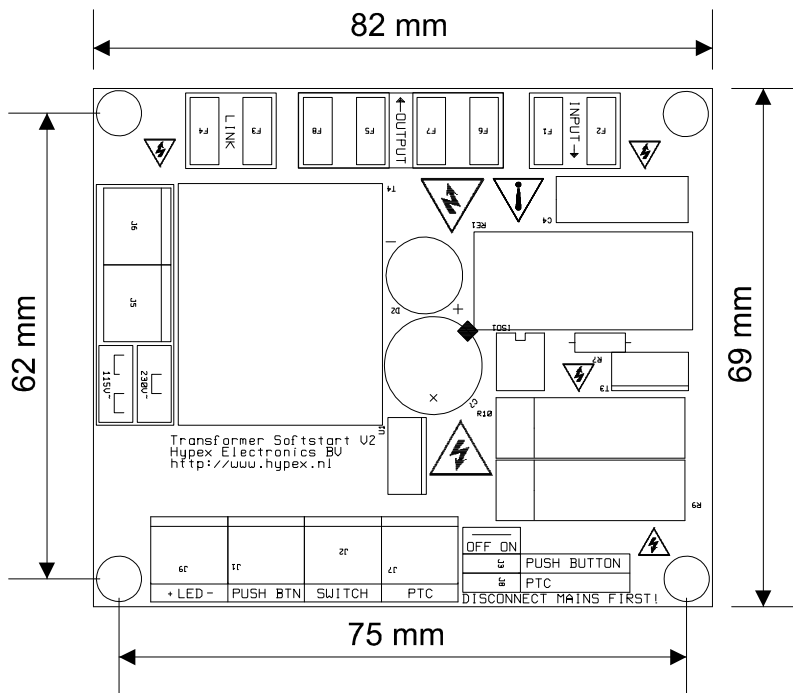


## Transformer softstart with extra features



### Features

- Transformer inrush current limiter
- Pushbutton control
- Low power switch control
- Temperature monitoring
- Single/dual LED indication
- 115V/230V operation

### Applications

- Mono/stereo amplifiers
- Weight: 175g
- Dimensions: 75mm x 68mm x 35mm



### SAFETY Guidelines (read this first)

Since the Softstart is connected directly to the AC mains, most parts like the faston terminals, the 5W-resistors and the 4-pins terminal block contains **hazardous** voltages, except for the 8-pins terminal block and the jumper block. Use an appropriate crimping tool or solder the wires directly into the provided **insulated** fastons. Use minimal 10mm spacers between the PCB and the mounting plate and keep a minimum distance of 10mm around the PCB.

Prevent accidental touching of the PCB (solder side). Make sure the mains is disconnected when working on the Softstart.

### Warning

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

### Description

Transformer inrush current is limited by means of a triac switching heavy-duty resistors in series with AC mains prior to relay switching. With an optional (bicolour) LED the status "On" or "Standby" can be indicated. In "Standby" the power-consumption will be less than 1.2W. The Softstart can operate with either a pushbutton or a switch (jumper selectable). If additional thermal protection is required a PTC-option is selectable. The Softstart can switch multiple transformers up to a total maximum of 1500VA. Maximum continuous current must not exceed 6A.

# Connections

## 115VAC mains operation

## 230VAC mains operation

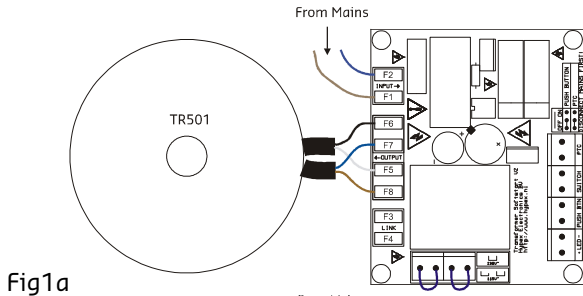


Fig1a

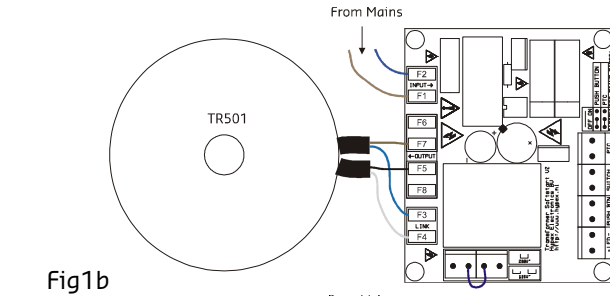


Fig1b

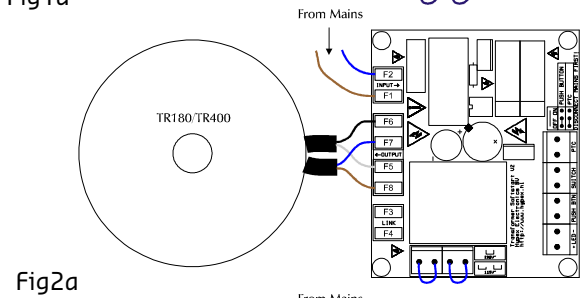


Fig2a

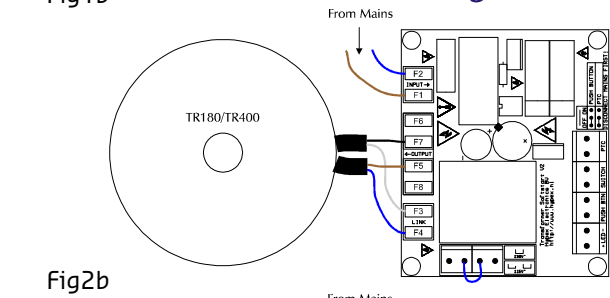


Fig2b

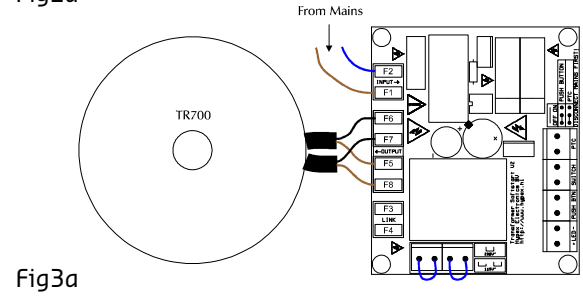


Fig3a

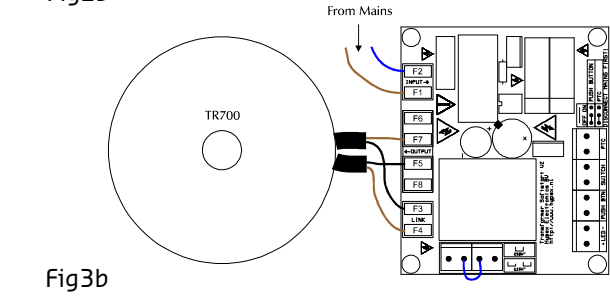


Fig3b

## Softstart connection configurations with Hypex transformers.

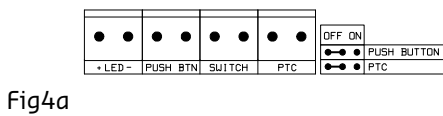


Fig4a

Default jumper settings. No extra's needed. Softstart module will switch on right after the mains power is applied. The Softstart will switch off after mains power is switched off.

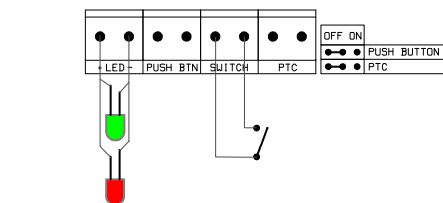


Fig4b

Two LED's (connected anti-parallel) indicate the state of the Sofstart depending on the position of the switch.

Switch closed: Softstart is in standby. LED1 is lit.  
Switch opened: Softstart is switched on. LED2 is lit.

This switch can be a low voltage, low current type.

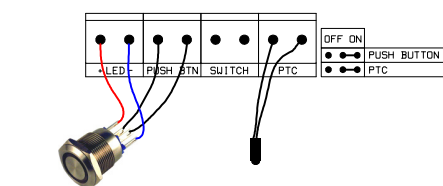


Fig4c

Jumper set to pushbutton/LED indication mode with PTC temperature monitoring. Depending on the type of PTC used the Softstart will switch off in case of an overtemperature.

Under normal conditions PTC monitoring is not necessary