

- ▶ Industrial design
- ▶ Compact construction
- ▶ 1-phase connection
- ▶ Phase-angle or multi-cycle control (depends on selected unit)



Technical data

1. Device type

The TST can be ordered with two types of power control
 TST Phase-angle control remote controlable
 TST-SP Multi-cycle control remote controlable

2. Indicators

Green LED RUN: indication of operation
 Yellow LED Start: indication of activation
 Yellow LED 100%U_{load}: indication of max. output voltage
 Red LED Fault: indication of fault resp. indication of overtemperature

3. Mechanical design

Aluminium housing, IP rating IP20
 Mounted on DIN-Rail TS 35 according to EN 50022
 Mounting position: any

Master control unit:
 Terminals: PCB terminals 2.5mm²
 Initial torque: max. 0.5Nm

Power section:
 Shockproof terminal connection according to VBG 4, IP rating IP 20
 Terminal capacity: 1 x 16mm² with/without multicore cable end

4. Input circuit

Supply voltage: 230V AC
 (other voltages on request, e.g. 110V, 400V, 500V AC or internally generated)
 Toleranzce ±15%
 Rated frequency: 45 to 65Hz (automatically synchronised)
 Duration of operation: 100%

5. Control contact 1-2

Function: activation
 Connections: potential free, terminals 1-2
 Loadable: No
 Line length: max. 10m, twisted pair

6. Control contact 3-4-5

Function: setting of firing angle
 Input impedance: 500Ω/50kΩ (switchable)
 Activation: Potentiometer 2.5 to 47kΩ or control signal 0 to 10V resp. 0 to 20mA (switchable)
 Line length: max. 10m, twisted pair

7. Signaling contact 6-7

1 potential free normally open contact
 Function: indication of fault
 Switching capacity: 2A / 230V AC1

8. Power circuit

Load voltage: 1~ 110V to 500V AC terminals L1-L2, T1-T2
 Tolerance: ±15%

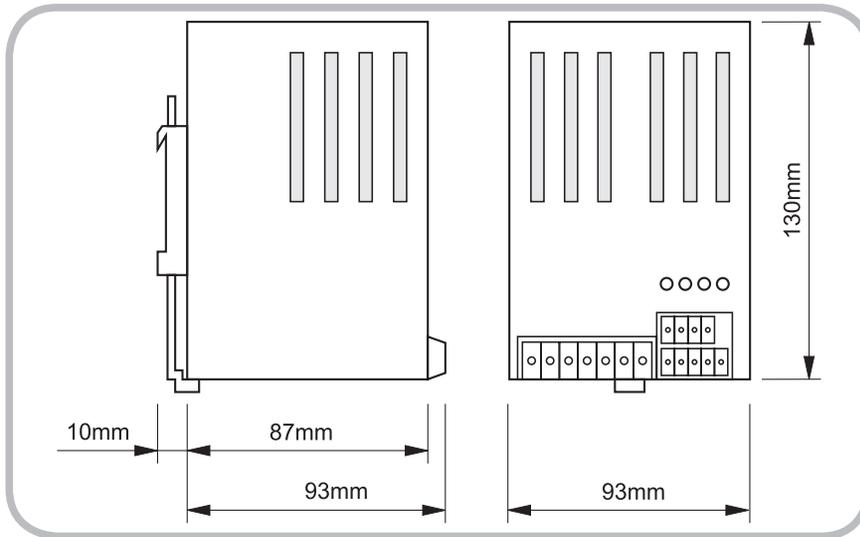
9. Power classes

Type	max. load current
TST 15	15A
TST 25	25A
TST 35	35A
TST 50	50A

10. Ambient conditions

Ambient temperature: 0 to +45°C (according to IEC 68-1)
 Storage temperature: -10 to +70°C
 Transport temperature: -10 to +70°C
 Relative humidity: 5% to 95% not condensing (according to IEC 721-3-3 class 3K3)
 Pollution degree: 2 (according to IEC 664-1)

Dimensions



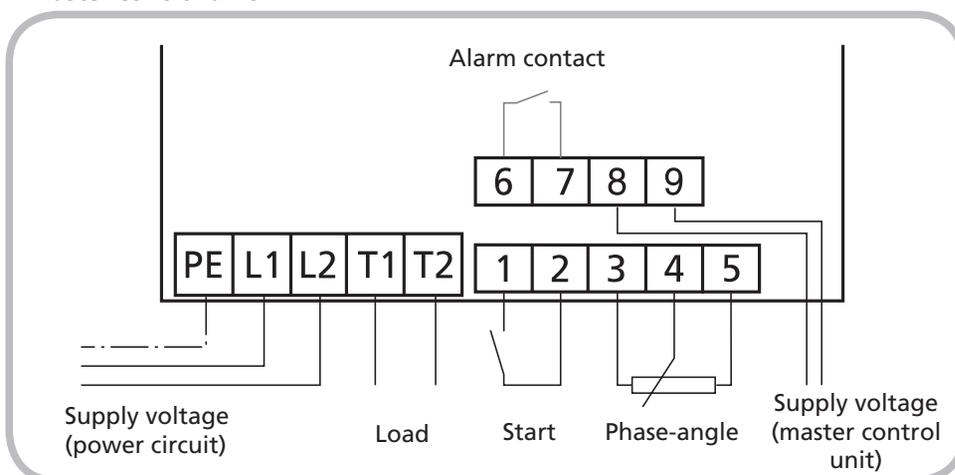
Functions

Phase control

The TST is a power controller that is based on the principle of phase control. A thyristor bridge is set by the remote control potentiometer (or the control signal) so that the thyristor switches the connected loads to the supply system in every sinusoidal half-wave only when the selected voltage level is reached. This produces a reduced rms voltage and therefore a smaller power draw by the load. This type of power control is suitable for all types of resistive and inductive loads. Thanks to the high blocking voltage of the thyristor, the device can be operated both between phase and PEN conductor and between two phases.

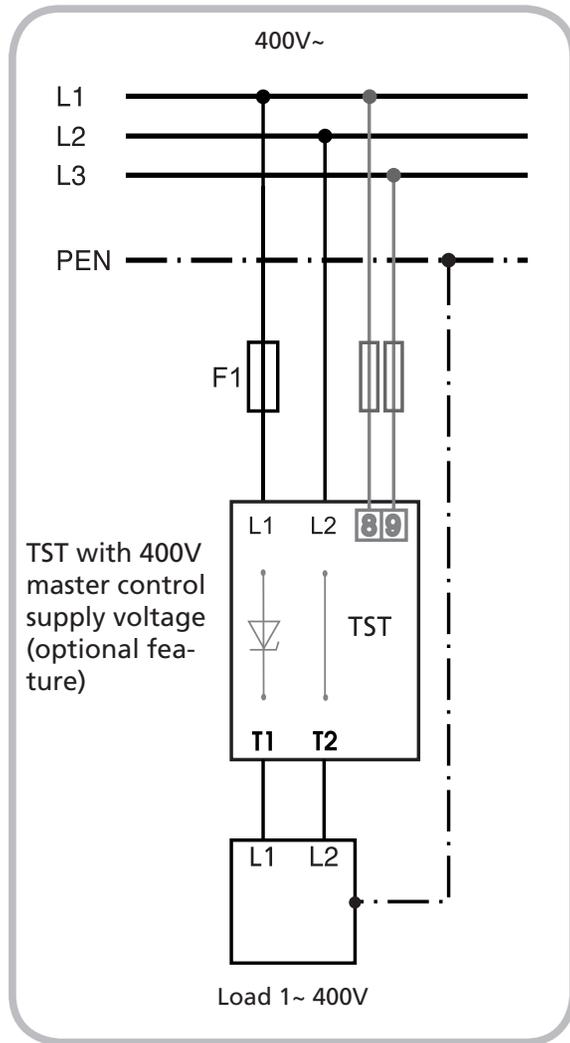
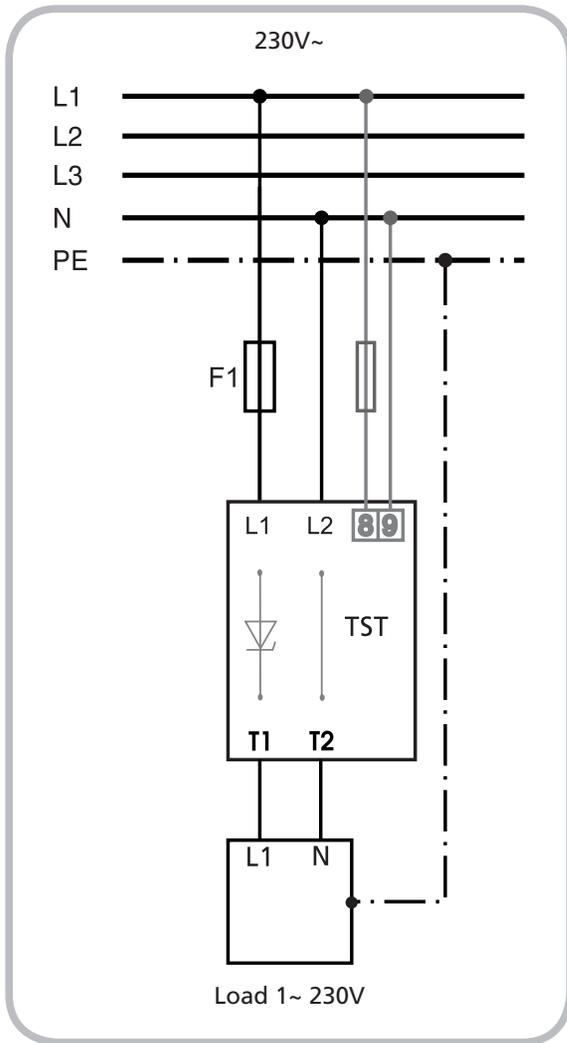
Connections

Master control unit



Connections

Power circuit



TST

 **Comments**