



TST01 8A ÷ 25A/230VAC

Thyristorstack for resistive and inductive loads with phase angle controlled firing

- (Single phase) fully controlled firing for heating and drive applications
- Slim build size 45mm
- Internal auxiliary supply
- Isolated 0..10V control input
- Digital input: start / enable
- Output relay: temperature alarm
- Low power dissipation 0,9W / A load current
- -25°C...+50°C operating temperature range
- Controlled fan for long lifetime
- Solid aluminum case
- DIN-rail mounting

Features:

The TST01 is a very compact thyristorstack with PA-firing in a rugged aluminum case for easy handling and mounting. The auxiliary supply is generated internally from the mains supply, which saves external wiring and costs.

This fully controlled thyristor stack is ideally used to control inductive and resistive loads.

The extremely low power generation dissipation of 0.9W / A load current in continuous mode and a standby power consumption of 0,2W offers you a highly efficient instrument and reduces the cooling power for your cabinets.

Versatile application range:

- Continuous control of industrial heaters
- Control for short wave infrared lamps
- Ballast-/ load-control for Solar-, wind- and hydraulic power plants
- Packaging machines, vacuum forming machines, blow forming machines
- Drying plants and gluing machines
- Dental furnaces, ceramic furnaces
- Power control for fans and small pumps
- Laboratory and education application

Type and ordering code

Type	TELE Art.no.	P Heater [kW]	I _{max.} 100% duty cycle[A]	I _{max.} 10 ms [A]	Weight [kg]	Dimension WxHxD[mm]
TST01-08/230	499015	1,8	8	200	0,40	45 x 97 x 126
TST01-12/230	499016	2,7	12	200	0,40	45 x 97 x 126
TST01-16/230	499017	3,6	16	300	0,50	45 x 97 x 126
TST01-20/230	499018	4,6	20	400	0,50	45 x 97 x 126
TST01-25/230	499019	5,75	25	400	0,70	45 x 97 x 126

Technical data

	08A	12A	16A	20A	25A
Power loss: Watt / Ampere	0,9W / A				
Load type	resistive & inductive				
Thyristor I^2t (for selecting the right semiconductor fuse)	0,8	0,8	1,5	2,59	2,59
0...10V control input	phase angel control				
Storage temperature	-55°C to +80°C				
Operating temperature	-25°C to + 50°C				
Current derating above	50°C: 1A / °C				
Max. torque - terminals	Control terminals: 0,5 Nm Power terminals: 0,6 Nm				
Wire size control terminals	max. 1,5mm²				
Wire size power terminals	max. 2,5mm²				
Isolation voltage 50 / 60Hz	4kV RMS (Power/control electronics)				
Max. Voltage semiconductor	1600V _{peak}				
Max. current for 10ms power circuit	200A	200A	300A	400A	400A
International Standards	emission IEC 60947-4-3 class A immunity: electrostatic discharge IEC 61000-4-2, Burst, Surge IEC 61000-4-4 & 5				
Stand by consumption	0,2W				
Mechanical shock IEC 60068-2-27	15g / 11ms				
Operating above sea level	0...1200m above sea level, derating above 1200m = 1A / 100m				
Contact capability alarm relay	3A / 250V AC, 3A / 30V DC				
Protection	IP20 according EN 60529				
Mains voltage	230V AC ±20%				
Load type	AC51				
Voltage category	III				
Pollution degree	2				
CE-conformity	EN 60947-4-3, EN 950				
ROHS	yes				

Dimension:

