

Universal Thyristor-Switch TSM-LC-I

Characteristics

- Single phase fast electronic switching device, self monitoring, designed for dynamic compensation systems
- For direct 2-phase switching of capacitive loads (L-N) or (L-L)
- For de-tuned and conventional applications
- For grid voltages from 110 to 525 V
- Switching of capacitors in 3-phase-network possible by cascading
- No neutral conductor required
- No system distortion caused by switching operations
- Monitoring of temperature, voltage and capacitor drop

Areas of applications

- Presses
- Welding machines
- Elevators
- Cranes
- Wind turbines etc.

Mounting and connection

Mechanical mounting directly on the mounting plate

Mounting position vertical; minimum distance 100 mm up and down

Connection of main current lines is done via plug connections (included in the delivery)

Auxiliary supply (24 V DC) necessary

Cascading of 3 switches for switching of capacitors in 3-phase-networks possible; mounting directly side-by-side (see connection example 2).



Thyristor-switch TSM-LC-I

Thyristor-modules

Technical Data

Dimensions	70 x 200 x 150 mm (W x H x D)
Weight	1,5 kg
Operating voltage	230 ... 525 VAC (110V upon request)
Max. step output possible at grid voltage	Single phase step size:
- 230V:	10 kvar
- 400V:	16 kvar
- 440V:	18 kvar
- 480V:	20 kvar
- 525V:	22 kvar
Frequency	50 / 60 Hz
Auxiliary supply	24 VDV
Triggering	10...24 V DC (ca. 20 mA) via connection clamp; galvanically internal coupling
Switching time	approx. 5 ms
Re-switching time	Depending of de-tuning factor and discharge resistor used
Display and monitoring	LED-display: operation/disturbance/triggering signal
Power circuit	Connection via plug connector from the front Conductor cross section max. 2x35 mm ²
Power loss	P_v (in W) = 1,0 x I (in A); At nominal power: appr. 45W thermal
Fuses	Electronic fuse „superfast“ NH00 AC690V 63A (e.g. SIBA Art.no. 20.477.20-63)
Ambient operating temperature at nominal load	-10 °C ... +55 °C

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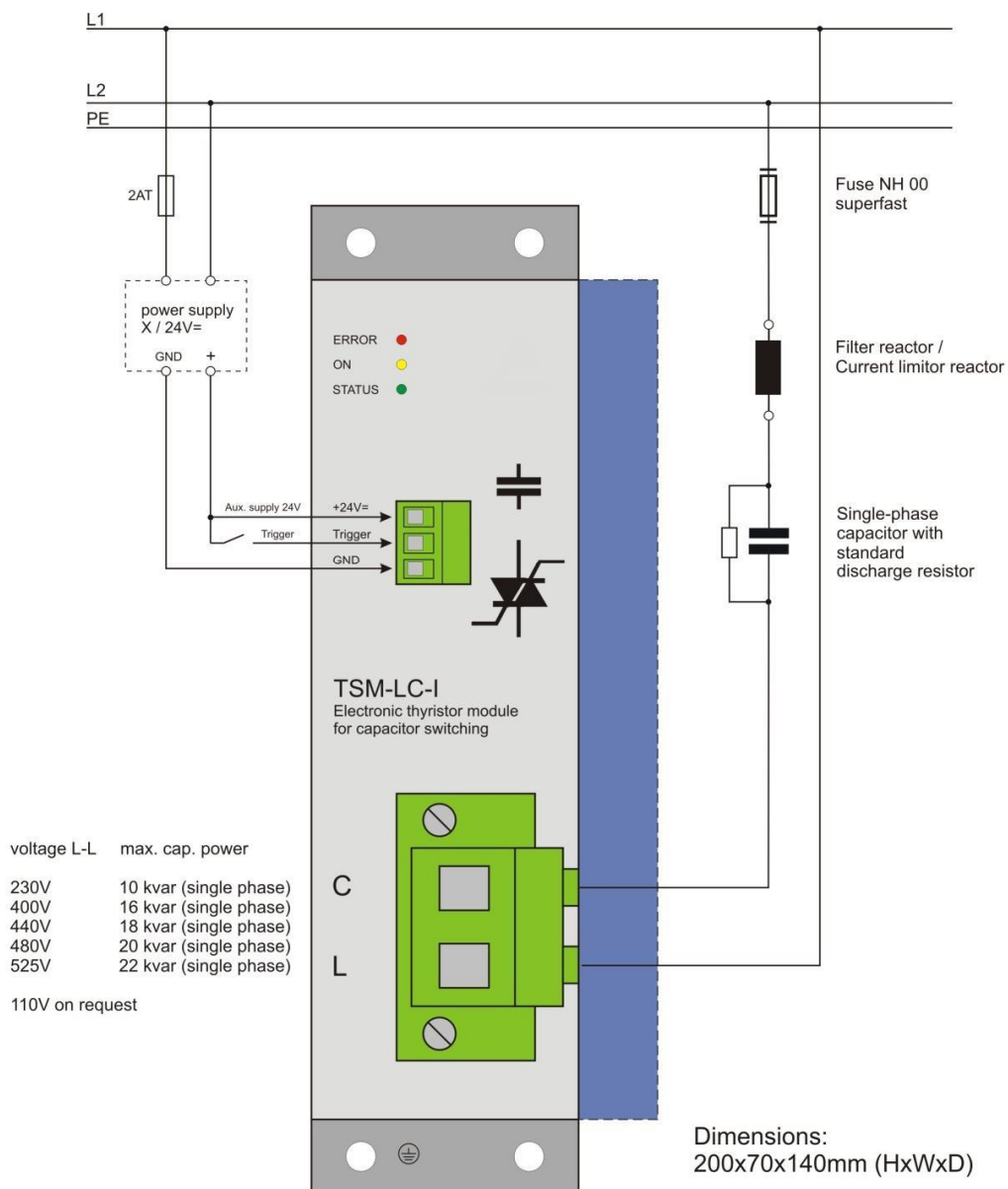
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Connection examples

1. Switching of single phase loads

Connection possible between L-N as well as between L-L

Application: single-phase switching with new TSM-LC-I (standard connection)
Load: Line to Line



Thyristor-switch TSM-LC-I

Thyristor-modules

2. Switching of capacitive loads in 3-phase grids

Capacitors can be switched in 3-phase in grids up to 525V by cascading.

preliminary data-sheet!

Application: three-phase switching with new TSM-LC-I (3 pcs. required)
Load: 3-phase without Neutral

