

EPCOS Product Brief 2018

Power Quality Solutions

Thyristor Module TSM-LC-I for dynamic PFC

The thyristor TSM-LC-I module is a fast electronically controlled switch for single-phase dynamic PFC-systems. Depending on the voltage, it offers outputs of 10 (230 V) to 22 kvar (525 V) for the single steps. The device offers all features of the well-proven TSM-LC-series.

Features

- Ultra fast switching times of only 5 ms
- Switching without delay
- No system perturbations by switching operations
- Monitoring of temperature, voltage and capacitor drop
- Maintenance free, long service life
- No switching noise
- Compact design, ready for use

In addition, the TSM-LC-I offers the following characteristics:

- For direct 2-phase switching of capacitive loads (L-N) or (L-L)
- For detuned and conventional applications (without reactors)
- Real current monitoring
- For grid voltages from 230 ... 525 V (110 V on request)
- Cascading for switching of capacitors in 3-phase grids possible
- No neutral conductor necessary

PQS

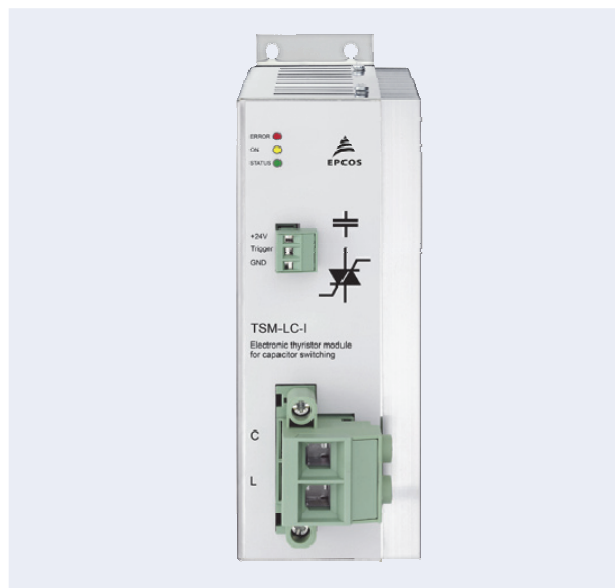


Power Quality Solutions

Thyristor Module TSM-LC-I



The TSM-LC-I is very well suited for panel mounting where space is crucial. The compact dimensions are 70 x 200 x 150 mm (B x W x D) and the weight is 1.5 kg. It is compatible with BR6000-T, BR7000-I-T and BR7000-T and a broad variety of other key components for dynamic compensation.



Technical data	
Operating voltage	230 ... 525 V (110 V upon request)
Maximum step output possible at grid voltage	
- 230 V	10 kvar
- 400 V	16 kvar
- 440 V	18 kvar
- 480 V	20 kvar
- 525 V	22 kvar
Frequency	50/60 Hz
Auxiliary supply	24 V DC
Triggering	10 ... 24 V DC (ca. 20 mA) via connection clamp; galvanically internal coupling
Switching time	ca. 5 ms
Re-switching time	Depending on de-tuning factor and discharge resistor used
Display and monitoring	LED-display: operation/disturbance/triggering signal Permanent monitoring of grid voltage, capacitor current, operating status and temperature
Ambient operating temperature at nominal load	- 10 ... + 55 °C
Ordering code	B44066T1022E520

Display of ordering codes for EPCOS products

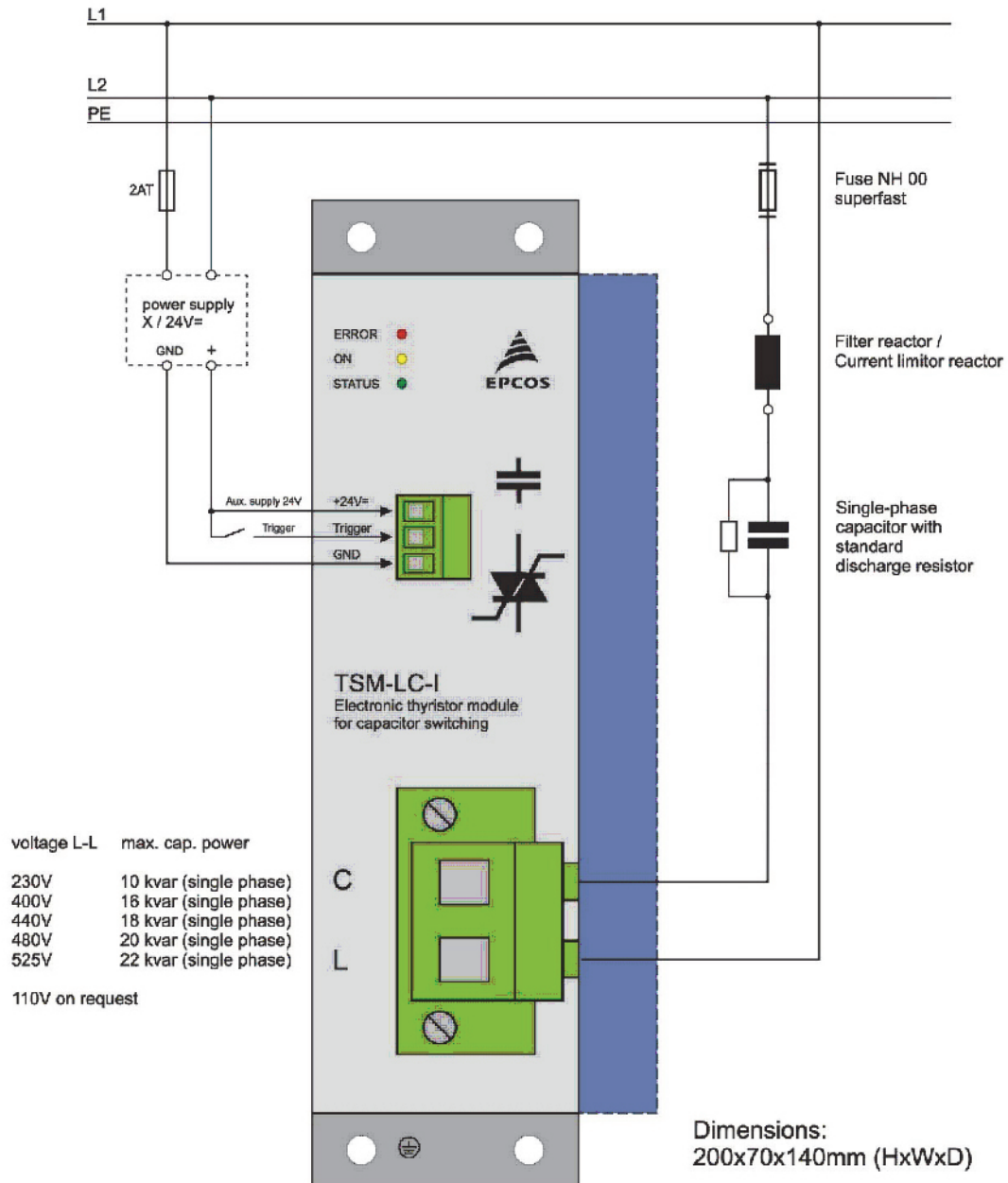
The ordering code for one and the same EPCOS product can be represented differently in data sheets, data books, other publications, on the EPCOS website, or in order-related documents such as shipping notes, order confirmations and product labels. **The varying representations of the ordering codes are due to different processes employed and do not affect the specifications of the respective products.** Detailed information can be found on the Internet under www.epcos.com/orderingcodes

Power Quality Solutions

Thyristor Module TSM-LC-I

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

Load: Line to Line

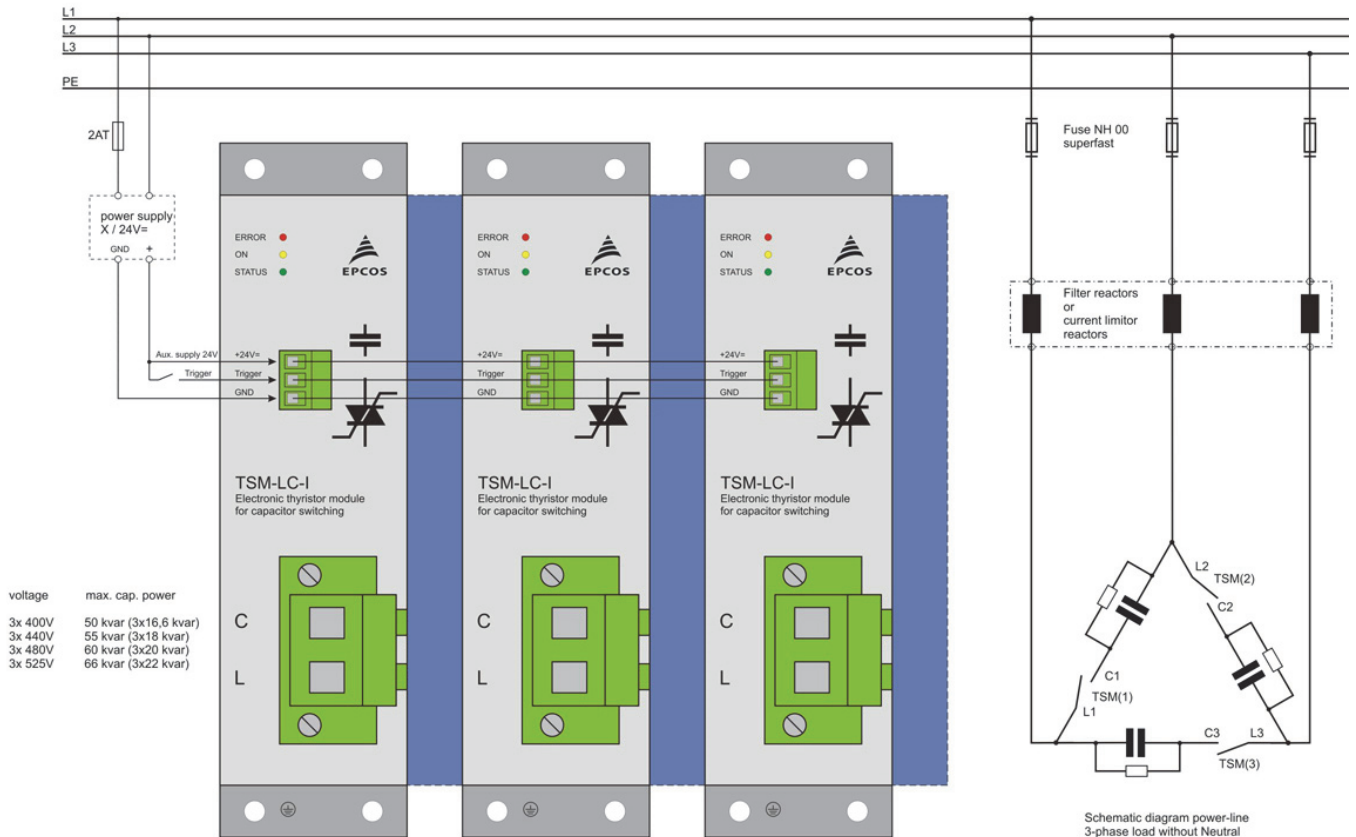


Power Quality Solutions

Thyristor Module TSM-LC-I

Application: three-phase switching with new TSM-LC-I (3 pcs. required)

Load: three-phase without neutral



Important information: Some parts of this publication contain statements about the suitability of our products for certain areas of application. These statements are based on our knowledge of typical requirements that are often placed on our products. We expressly point out that these statements cannot be regarded as binding statements about the suitability of our products for a particular customer application. It is incumbent on the customer to check and decide whether a product is suitable for use in a particular application. This publication is only a brief product survey which may be changed from time to time. Our products are described in detail in our data sheets. The Important notes (www.epcos.com/ImportantNotes) and the product-specific Cautions and warnings must be observed. All relevant information is available through our sales offices.