RT380T 230/400 PCB RoHS

Analog three-phase thyristor trigger module

- Two supply voltages: 230 Vac or 400Vac
- Supply with external trafo up to 690 Vac
- Screwless terminal blocks
- Control voltage selectable 0-5/0-10V
- External inhibit input
- 4.000 V galvanic insulation
- Triggers the whole range SEMIKRON
- · No external components needed

TECHNICAL SPECIFICATIONS

Supply voltage 230/400 V_{AC} +10% / -15%

Power drain 8 VA max. Input voltages INHIBIT-IN 7-16 Vcc

0-5 V IN 0 - 5 Vcc (15 Vcc max.)
0-10 V IN 0 - 10 Vcc (15 Vcc max.)
+5V OUT 5 Vcc 100 mA max.

Output signals +5V OUT 5 Vcc 100 mA max. Trigger current 600 mA @ $V_{\rm GT}$ = 5V Isolation 4000Vca inlet/outlet

Working frequency 45-65Hz (automatic adaptation)

Working temperature 5 - 50°C

Humidity 10 - 95% without condensation

Power-on 1 second Weight 525 g

This module has been designed for triggering 6 thyristors with phase regulation in order to control the power on the load. It is recommended the use of external RC-snubbers to protect the thyristors and to facilitate its triggering.

The load may be supplied with a variable alternating voltage if the 6 thyristors are connected in antiparallel W3C, or with a variable direct voltage if they are connected in B6C, B6HK or B6HKF.

The external thermal trip has to be normally close. If it opens, the module stops, the green LED stops lighting and the red LED lights.

The module has an automatic Power-on delay of approx. 1 second. That means that during the first second the output is inhibited (no pulse output).

It is important to connect the three phases and the outputs of gates and cathodes exactly as shown in the label. Done this, the input phases **of the whole equipment** (module + power) can be connected in the sequence you want.

To select the thyristors connection W3C, the three minidips have to be in W3C position. For a B6C connection, they have to be in B6C position.

An input of $\pm 12V$ (7 to $\pm 16V$) in the input INHIBIT stops the output of gate pulses and red LED starts lighting. This $\pm 12V$ can be external or using the internal auxiliary $\pm 12V$ present at the thermal trip jumper (see drawing).

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