

# PC530 dc Thyristor trigger module

## Features

- dc firing, >600mA to a 10 ohms load
- high isolation, 5000Vrms, input to output
- proven to trigger high current & voltage thyristors
- logic signal input with high impedance
- high noise immunity
- encapsulated for highest reliability

PC530 dc gate current thyristor trigger unit



PC530 thyristor trigger module is designed for firing high power thyristors requiring high isolation between input signal and output supply.

Once the input signal is applied there is a typical delay time of 20 micro-sec, after which the output will switch on with a rise time of less than 7 micro-seconds.

With a dc trigger current the PC530 ensures that no matter what happens to the thyristor supply voltage or current, the thyristor remains switched on. This technique ensures the thyristor remains on under difficult load conditions, such as highly inductive or highly capacitive loads.

Compared with the pulse train triggering technique, dc firing only requires an initial high peak current profile. Up to double the normal gate current ensures the thyristor turns on rapidly. The dc current level chosen of 600mA is to ensure the gate dissipation is reasonable for thyristors having Irms ratings of 1000A to 5000A.

## Specification

Supply voltage	24Vac, +/-5%.
Supply current	1.5A max. for continuous output current.
VA rating for the supply transformer	50VA max.
Logic input signal	less than 3V, output switched off.. higher than 9V, output switched on.
Max. input signal	30Vdc.
Input impedance	higher than 47 kilo-ohms.
Input to output delay	typical 20 micro-sec., 30 micro-sec. max.
Output rise time	typical 5 micro-sec., 7 micro-sec. max.
Isolation between input & output	5000Vrms..
Dimensions	width: 140mm; depth: 100mm; height: 60mm.
Mounting pitch	130mm, with two off 5.5mm holes.

## Notes.

\* This product is offered for use to professional installers and the product is to be installed by suitably qualified personnel in accordance with current industrial electrical/mechanical safety and EMC standards. Installation to be in accordance with the current edition of IEE wiring regulations BS7671: 2001: 16<sup>th</sup> edition.

\* This product is deemed a component only for professional assemblers for incorporation in to apparatus and systems or installations for which its own EMC and safety standards will apply and for which Powerlink is not responsible.

\* For further information see the Product Manual.

Data Sheet 011109-002.  
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