



## Features:

Universal Inputs:  
0-5V/0-10V/4-20mA/5Kohm POT  
Picket Fence Firing Design  
Isolated Gates and Power Supply  
SCR Trigger with Phase Angle firing mode  
Linearised output response  
CE Approved (EMC + LVD)

FKPC SCR Trigger/Firing Module provides an updated and CE complaint replacement to older Trigger Modules. The controller includes a micro controller and incorporates a linearizing algorithm to give exceptional response and control for this price point. Regulation of the output voltage using a standard AC switch provides stepless regulation and can be used on the transformer primary. Used in welding machines, temperature control systems, dimmers, battery chargers, excitation, electroplating, electrolysis, water treatment

## INPUT

|                          |                             |
|--------------------------|-----------------------------|
| Control Voltage Range    | 0-5V/0-10V/4-20mA/5Kohm POT |
| Auxiliary Supply Voltage | 180-276VAC                  |
| Enable/Pulse Lock        | Voltage free contact        |

## OUTPUT

|                    |                                                   |
|--------------------|---------------------------------------------------|
| Load voltage range | 200-450VAC +10%                                   |
| Load Current Range | 300 Amp By external AC Switch (1 Amp SCR Trigger) |
| Linearity          | <5%                                               |

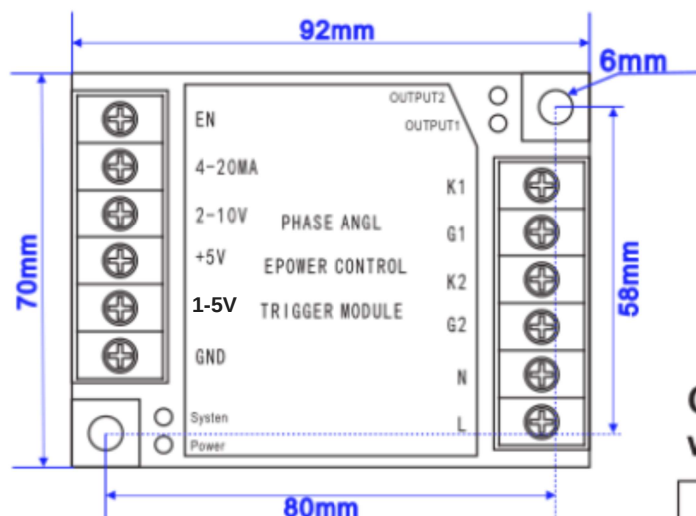
## GENERAL

|                                         |                                                                                                               |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Dimensions (mm)                         | 92L x 70W x 28H                                                                                               |
| Weight                                  | 300g +/-10%                                                                                                   |
| Response time                           | 0.5s                                                                                                          |
| Dielectric Strength (Input/Output/Base) | 2500V                                                                                                         |
| Operating Temperature                   | (-)20°C to 70°C                                                                                               |
| Tropicalised PCB                        | YES, Triple Coated                                                                                            |
| Phase Sequence Restriction              | No                                                                                                            |
| Certification                           | CE (EN 61000-6-3:2007+A1:2011;EN IEC 61000-3-2:2019+A1:2021;EN 61000-3-3:2013+A1:2019;;EN IEC 61000-6-1:2019) |

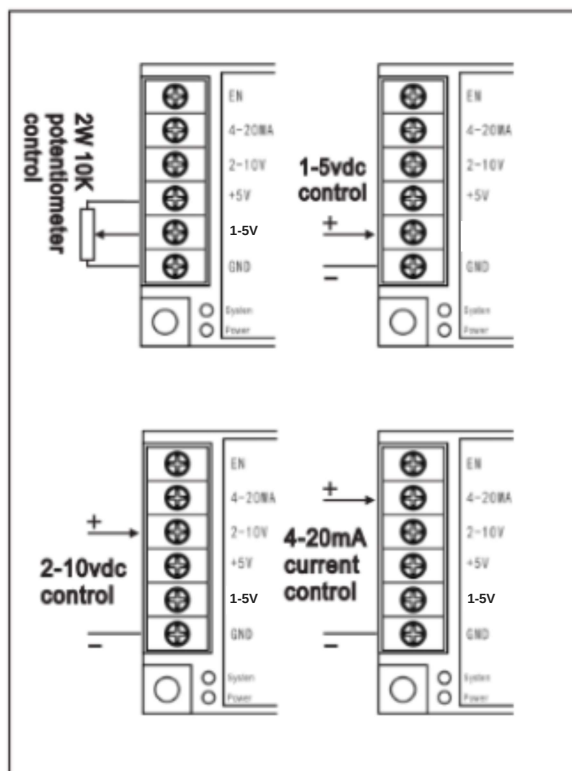
## Application Notes

1. Take Care not to connect L-L Voltages above 276VAC to L and N Terminals
2. External Suppression Required for inductive Loads
3. Short EN and GND Terminals to Lock Output in OFF state

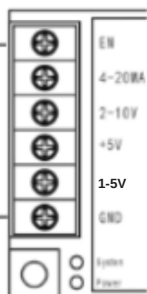
## Installation dimension (92\*70\*32)



## Control terminal wiring diagram



**EN  
enable  
pulse  
lockout**



### Description of blocking pulse

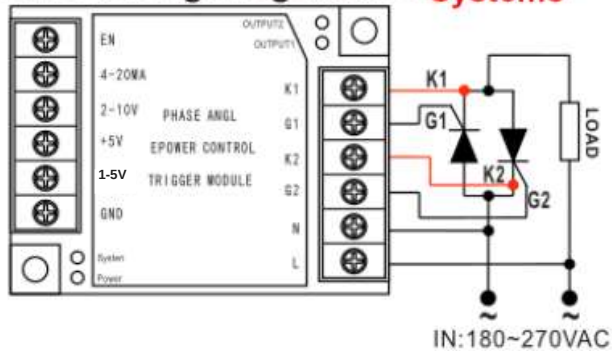
When en and GND terminals are connected, the pulse output is blocked and the main circuit is closed. When en and GND terminals are disconnected, the main circuit is opened. If this function is not used, the en terminal can be suspended. EN and GND terminals can be controlled manually by switch or automatically by relay normally open contact and control system.

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Please wire carefully as every connection is required in order to get the FKPC to output

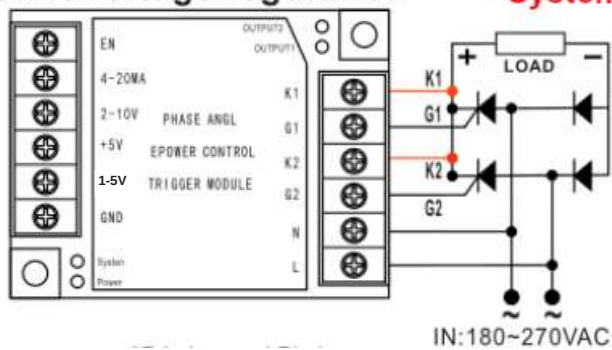
## A. Wiring of 230/240VAC Systems

### Single phase AC phase shift voltage regulation 240VAC Systems

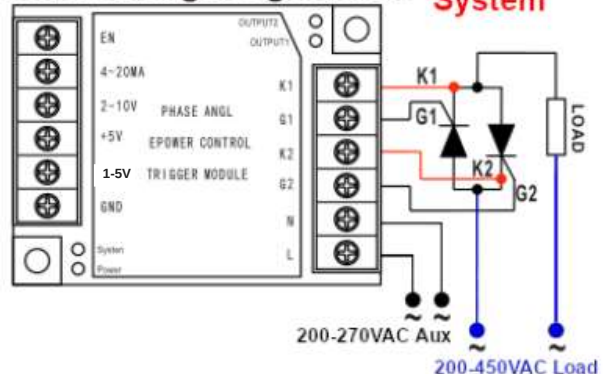


## B. Wiring of 380/450VAC Systems

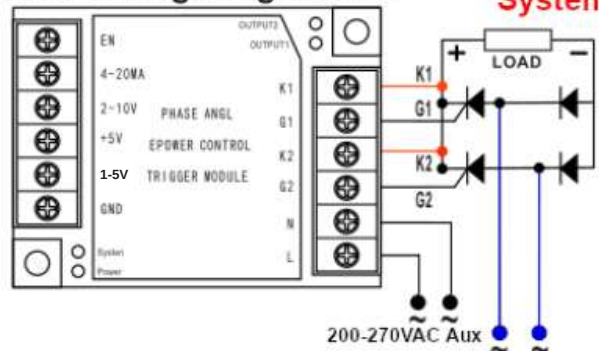
### Single phase rectifier phase shift voltage regulation 240VAC Systems



### Single phase AC phase shift voltage regulation 400VAC System



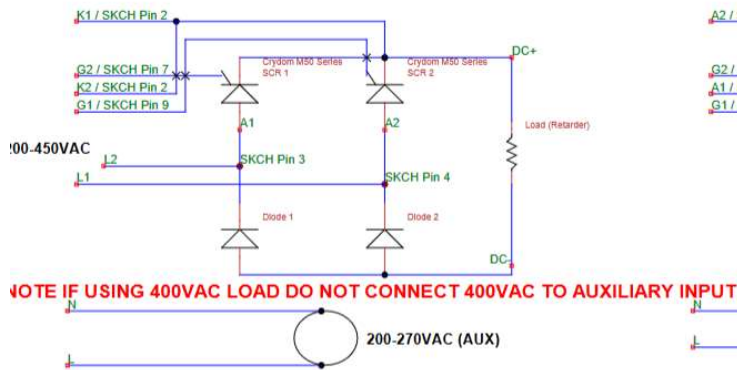
### Single phase rectifier phase shift voltage regulation 400VAC System



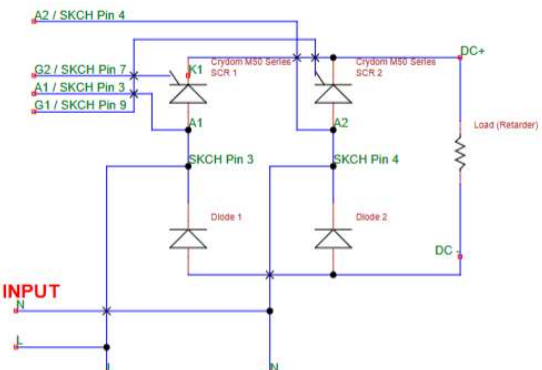
**Fastron**  
Electronics

# For 200-400VAC Input to SCR

Fastron FKPC200-400

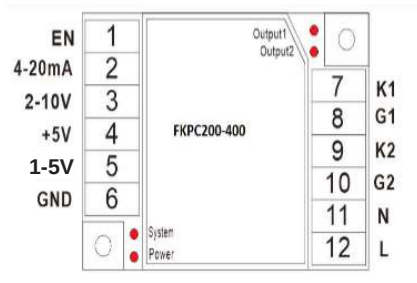


Semikron SKPC200-240

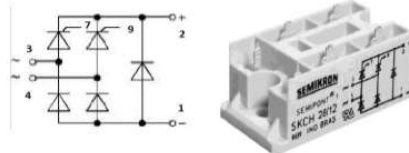


To Change from Semikron to Fastron Unit.

- 1) Remove A1, A2 Wiring from SKPC
- 2) Connect FKPC K1 Output to +DC Output on SKCH
- 3) Connect FKPC K2 Output to +DC Output on SKCH (or link K1/K2)

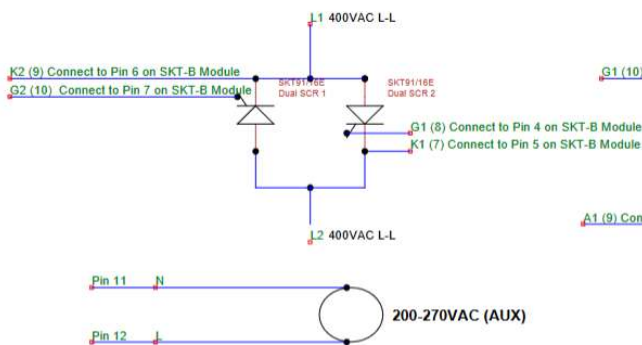


Semikron SKCH28/16 Series

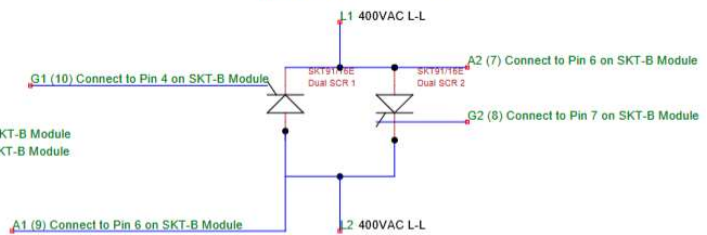


# For 200-400VAC Input to SCR

Fastron FKPC200-400



Semikron SKPC200-240



Note: L/N and K1,K2,G1,G2 must be 100% correct to have full Control



To Change from Semikron to Fastron Unit.

- 1) Remove wire from A1 and Connect to K2
- 2) Remove wire from A2 and Connect to K1
- 3) All other connections the same

