💖 Scientech

Micro Controller based firing Circuit for Controller Rectifier

Scientech 2716



Scientech 2716 is a learning platform which is very useful for Students to understand the concept of Microcontroller based thyristor firing method & working of single phase controlled rectifier on various load configurations. Scientech 2716 is provided with inbuilt AC/DC power supplies & exhaustive learning material.

Features

- Built in AC/DC Power Supply
- On board firing circuit using Microcontroller
- Gradual firing angle control upto 180 degree
- Test points to observe output of different blocks
- Sockets to make different connections
- On board AC sources of 0V-15V, 18V0-18V
- On board SCR assembly and load
- On board pulse transformer for isolation

Scope of Learning

To study the:

- Microcontroller based firing scheme
- Half wave controlled rectifier
- Full wave controlled mid point rectifier
- Fully controlled bridge rectifier
- Common anode configuration of controlled rectifier
- Common cathode configuration of controlled rectifier
- Asymmetrical configuration of controlled rectifier



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Technical Specifications

On board AC source	:	0V-15V, 18V-0V-18V.
On board firing circuits	:	Microcontroller based firing circuit
Interconnections	:	2mm sockets
SCR assembly	:	4 SCRs 2P4M, 400V/2A
Pulse transformer	:	PT4503 , 1:1:1
Mains Supply	:	220V/110V, 50 Hz / 60 Hz
Test points	:	8 nos
Load	:	270E,5W, L=120mH, DC motor 12V
Product Tutorial	:	Online on www.ScientechLearning.com
Dimensions (mm)	:	W 420 x D 255 x H 100
Weight	:	1 Kg. (approximately)
Operating Conditions	:	0-40°C, 85% RH
Included Accessories	:	
2mm Patch cord 16"	:	18 nos.
Mains cord	:	1 no.

Optional :

Simtel Power Electronics Simulation Software

