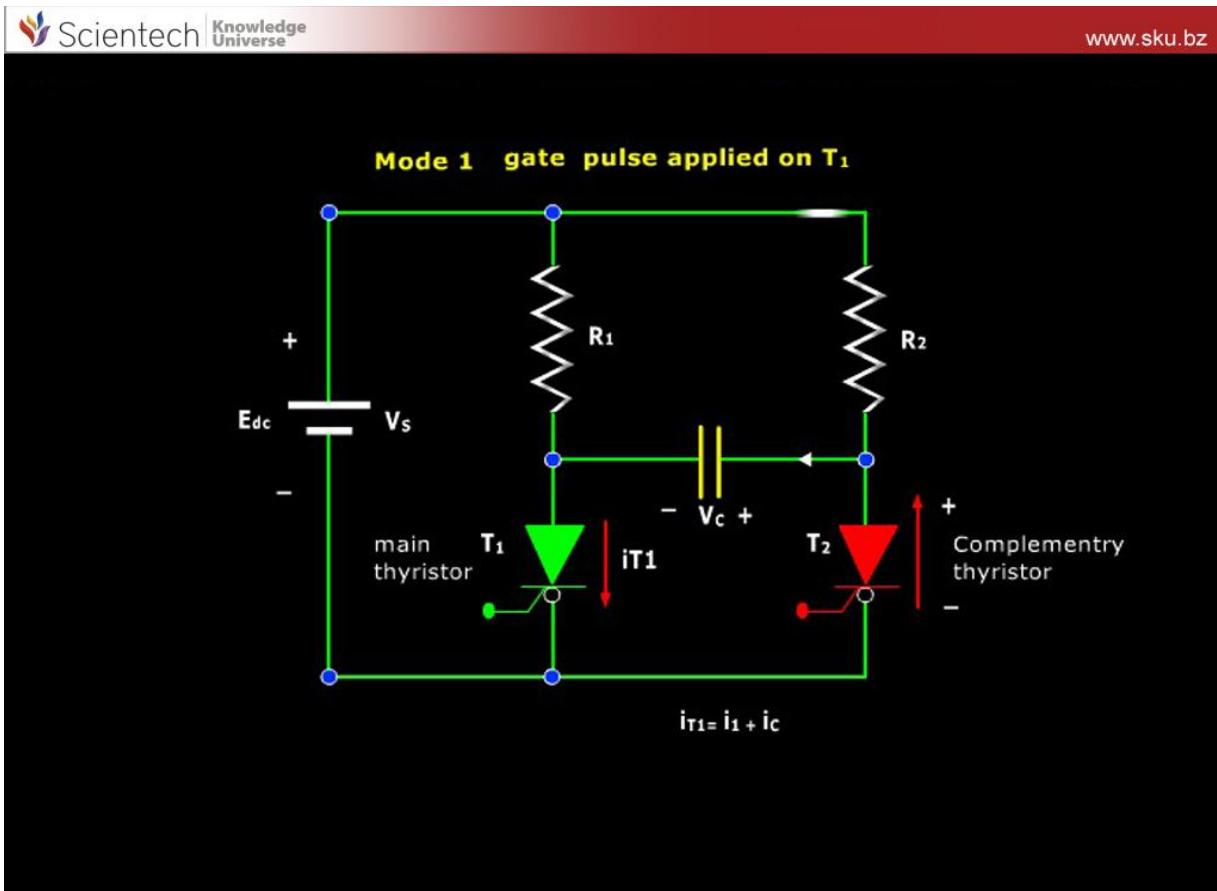


Topics Covered in SKU- Industrial Electronics:



Unit I - Power, Semiconductor Devices

Classification of Power semiconductor devices, characteristics, construction, application and theory of operation of power diode, power transistor, thyristors. Device specifications and ratings, working of Diac, Triac, IGBT, GTO and other power semiconductor devices. Turn-on/ Turn-off methods and their circuits.

Unit II – Rectifiers:

Review of uncontrolled rectification and its limitations, controlled rectifiers, half wave, Full wave configurations, multiphase rectification system, use of flywheel diode in controlled rectifier configurations.

Unit III - Inverters and Choppers

Classification of inverters, Transistor inverters, Thyristor inverters, Voltage and Current Commutated inverters, PWM inverters, Principle of Chopper, Chopper classification and types of regulators.

Unit IV - A. C. Voltage Controllers and Cyclo-converters

Classification and operation of a.c. voltage and cyclo-converters, their circuit analysis for different type of load.

Unit V - Industrial Applications

Solid-state switching circuits, Relays, Electronic Timer, battery charger, Sawtooth generator, applications in Industrial process control, Motor drive applications, Electronic regulators, etc., Induction heating, Dielectric Heating, Resistance welding and welding cycle.

Print Shots of SKU- Industrial Electronics:

