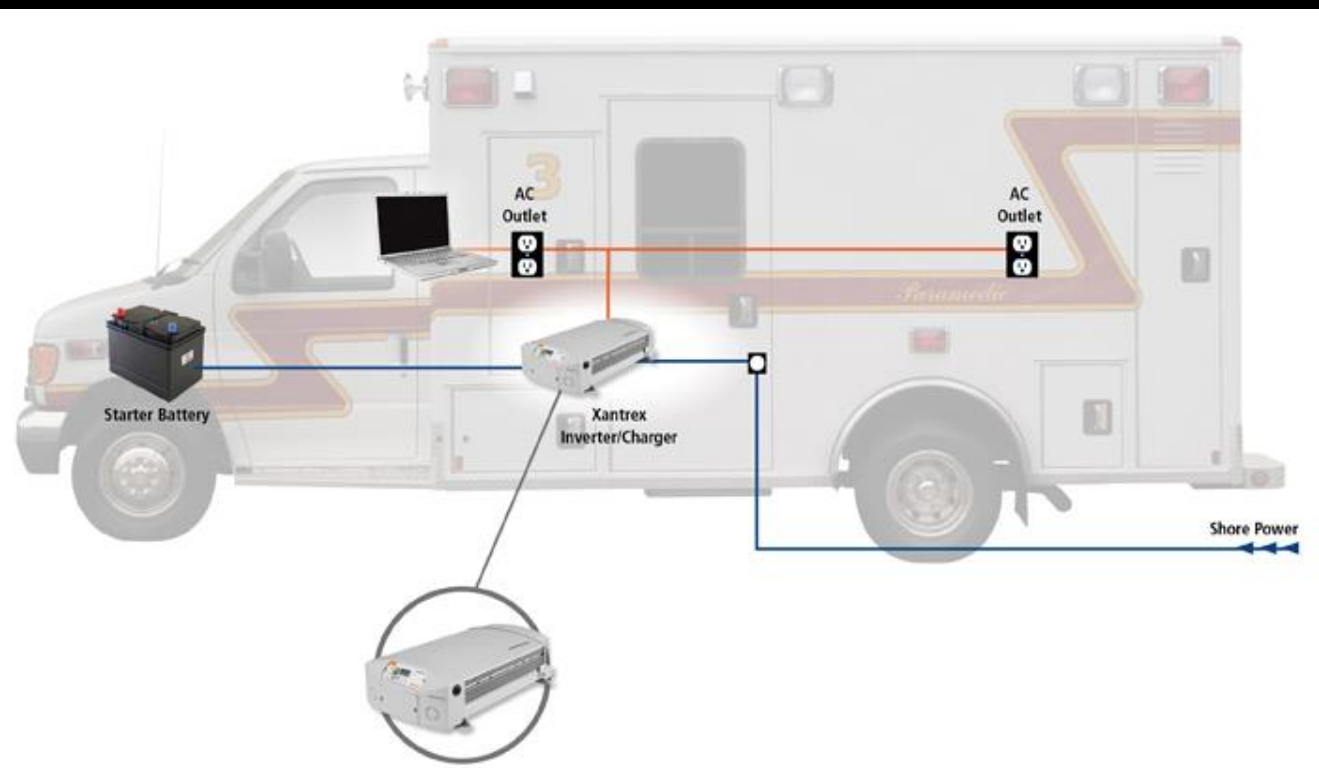

POWER ELECTRONIC

8

2022, Istanbul

DC-AC Converters

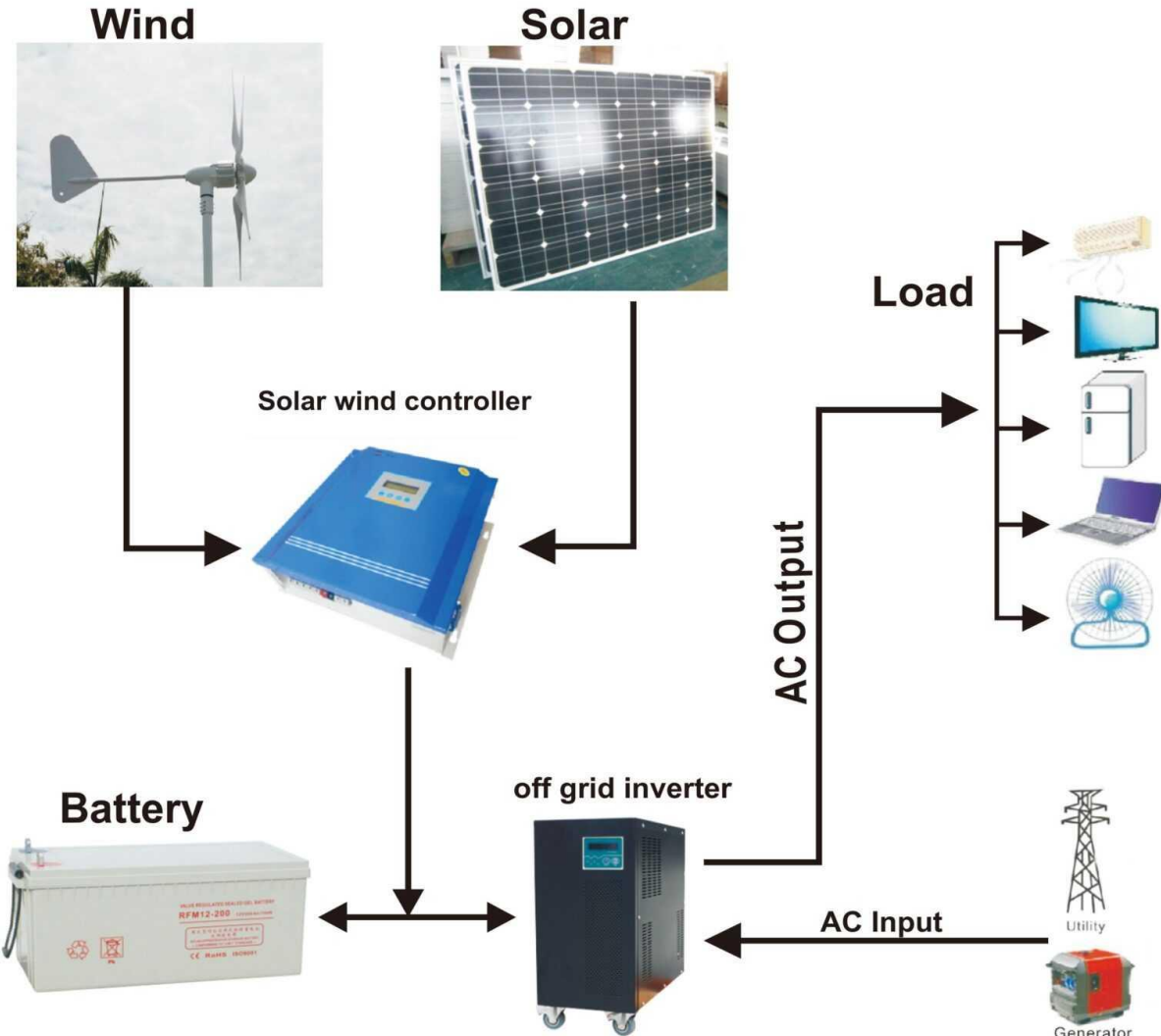


Model	STP400
Output waveform	Pure Sine Wave
Rated power	400W
Surge power	800W
Output voltage	110V/230V(alternative)
Output frequency	50/60Hz±3(alternative)
Input voltage	12V/24V(alternative)
Certification	CE-EMC/LVD, RoHS
Warranty	24 months
Dimension	22.2*16.75*9cm
N.W/unit	8600g
Packing	Gift box; 8pcs/17.6Kgs/CTN; 57.5*32*38.5cm
Packing list	1 * 400W Power Inverter; 1 * User Manual; Spare fuse; DC connect cable*2 sets



DC-AC Converters

off grid solar wind hybrid power system diagram



DC-AC Converters

Switch-Mode DC-AC Inverter

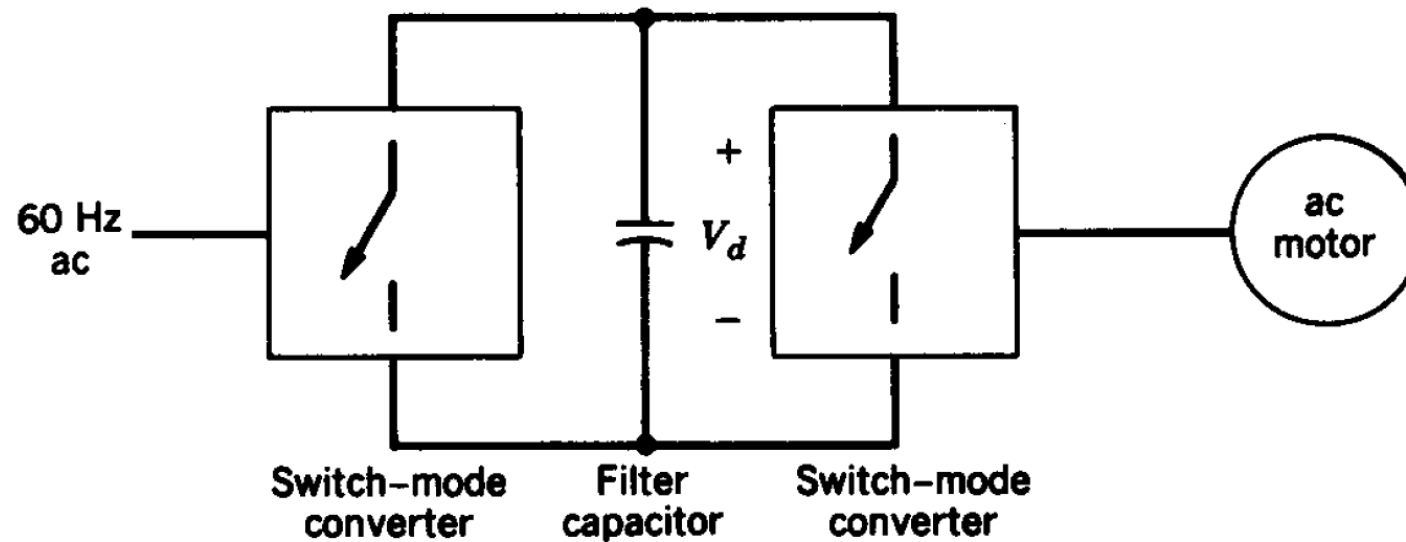
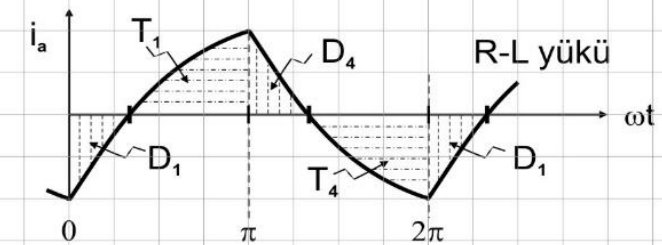
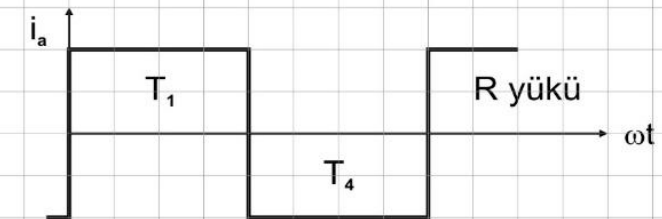
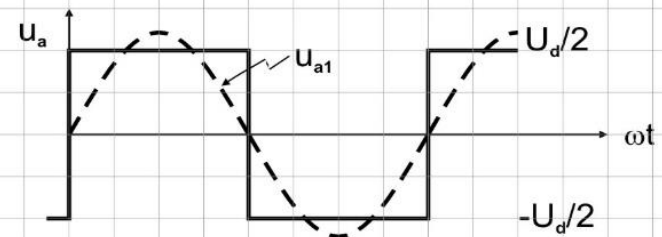
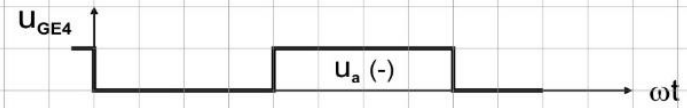
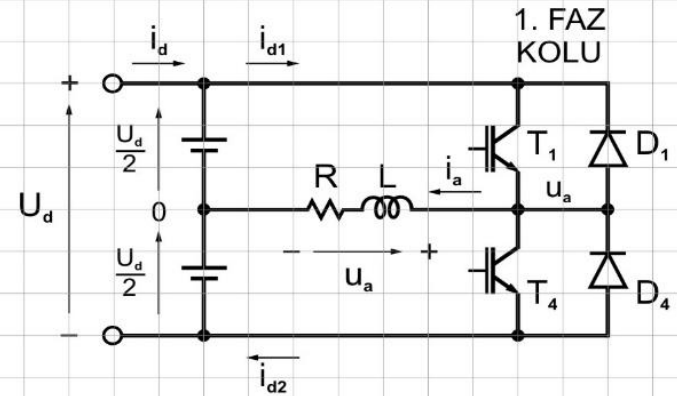
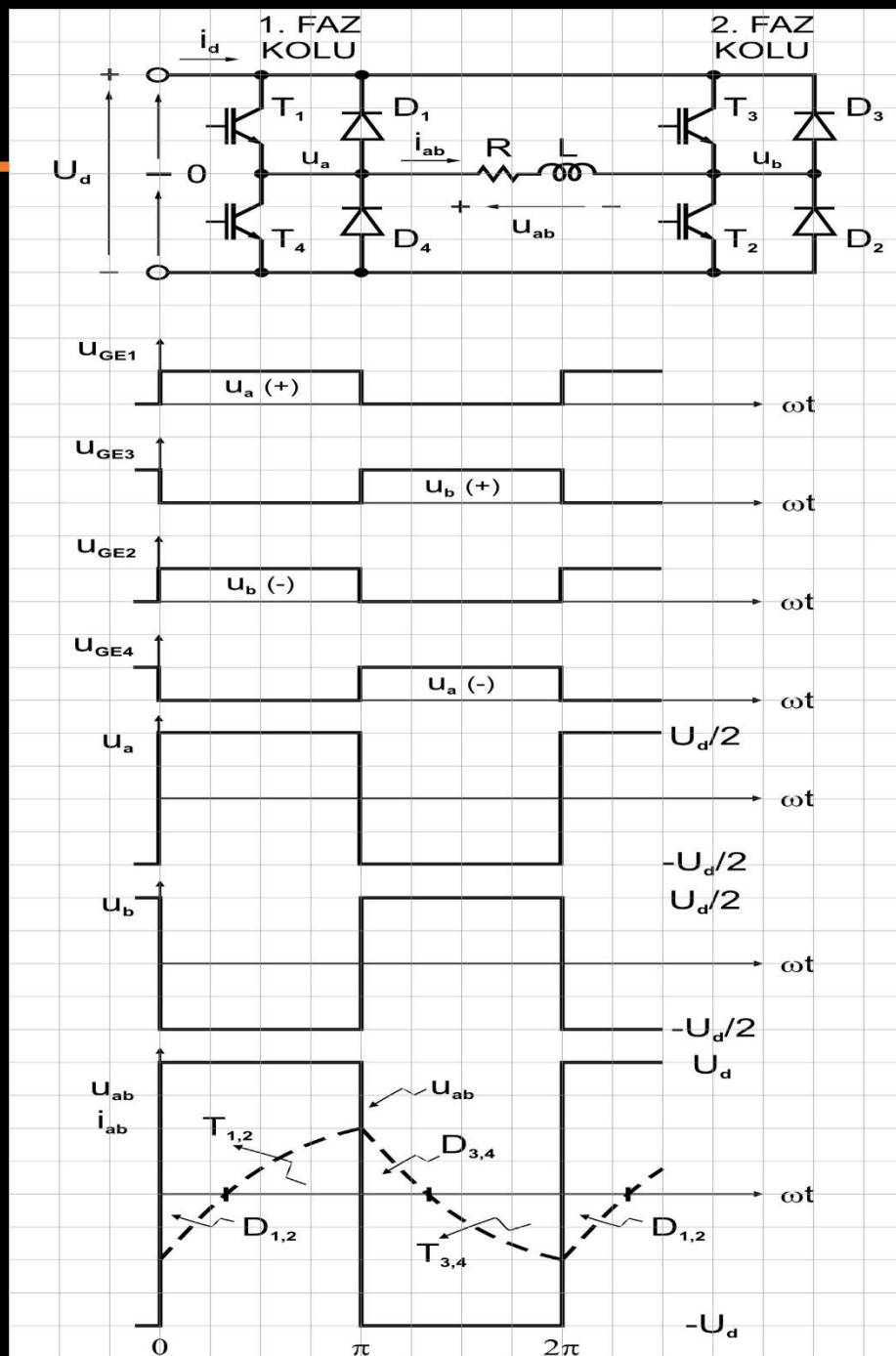


Figure 8-2 Switch-mode converters for motoring and regenerative braking in ac motor drive.

- Block diagram of a motor drive where the power flow can be bi-directional





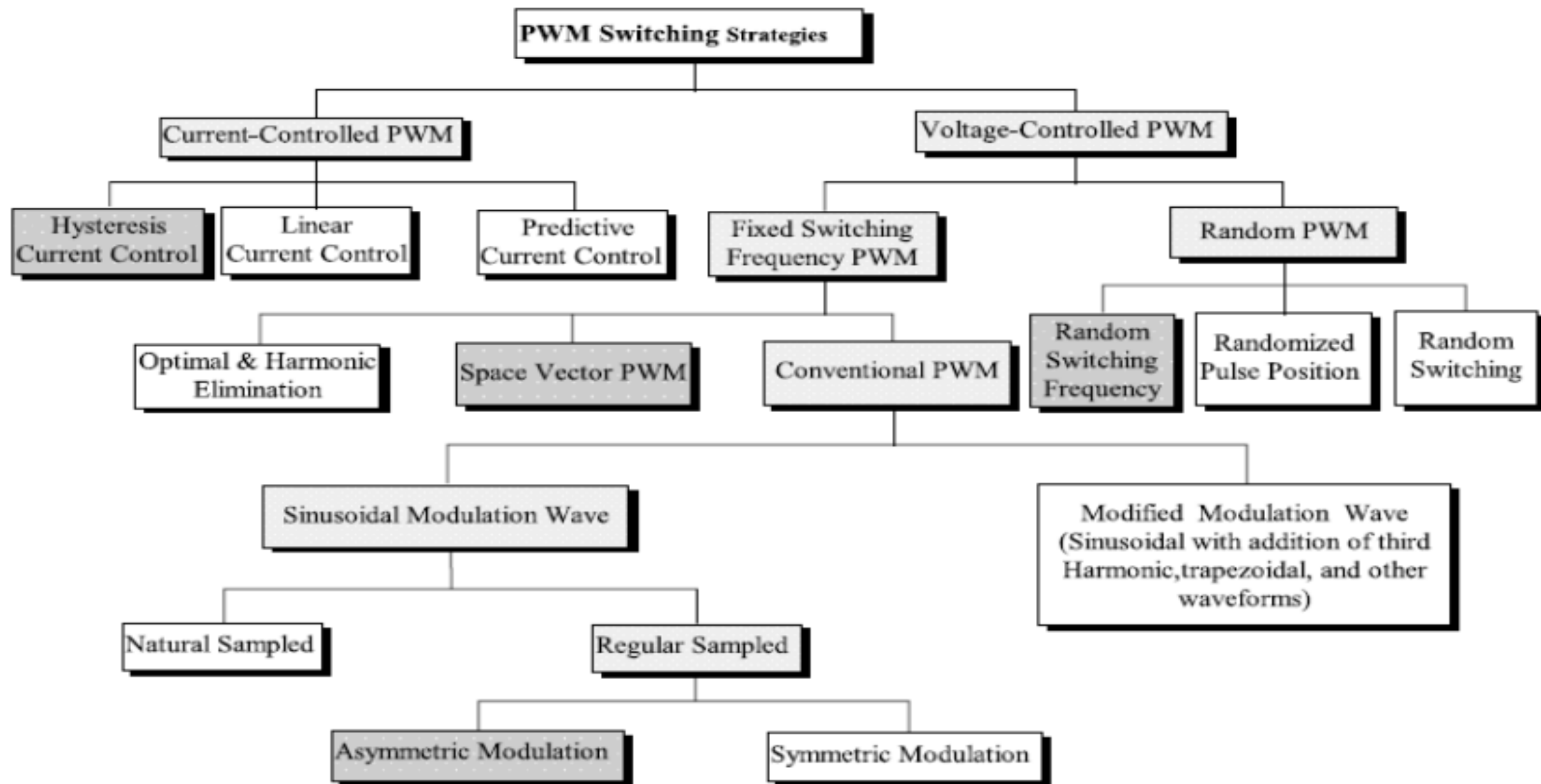
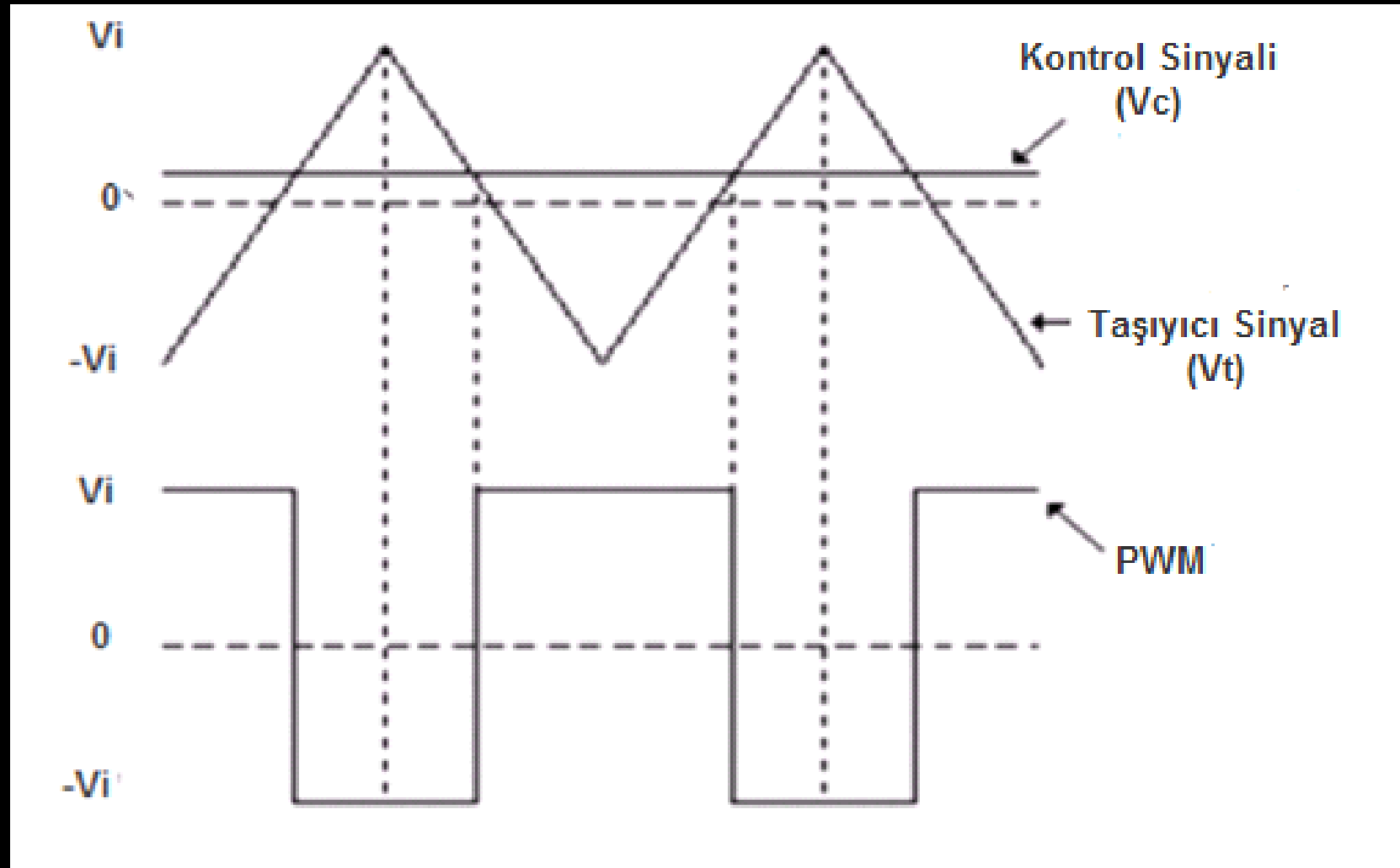
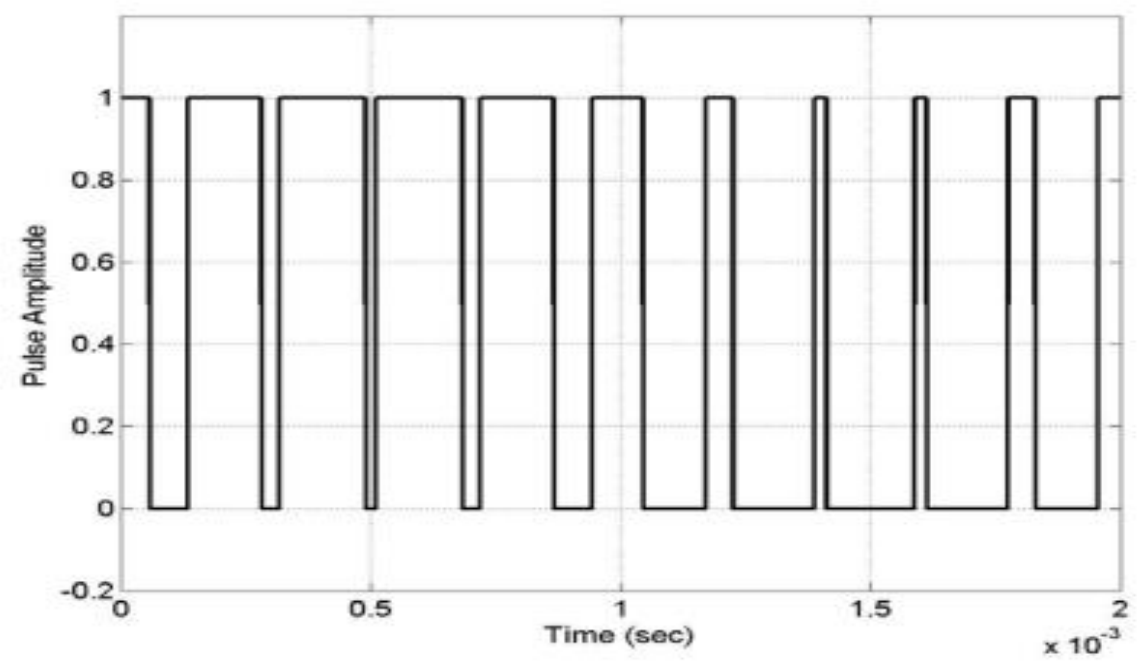
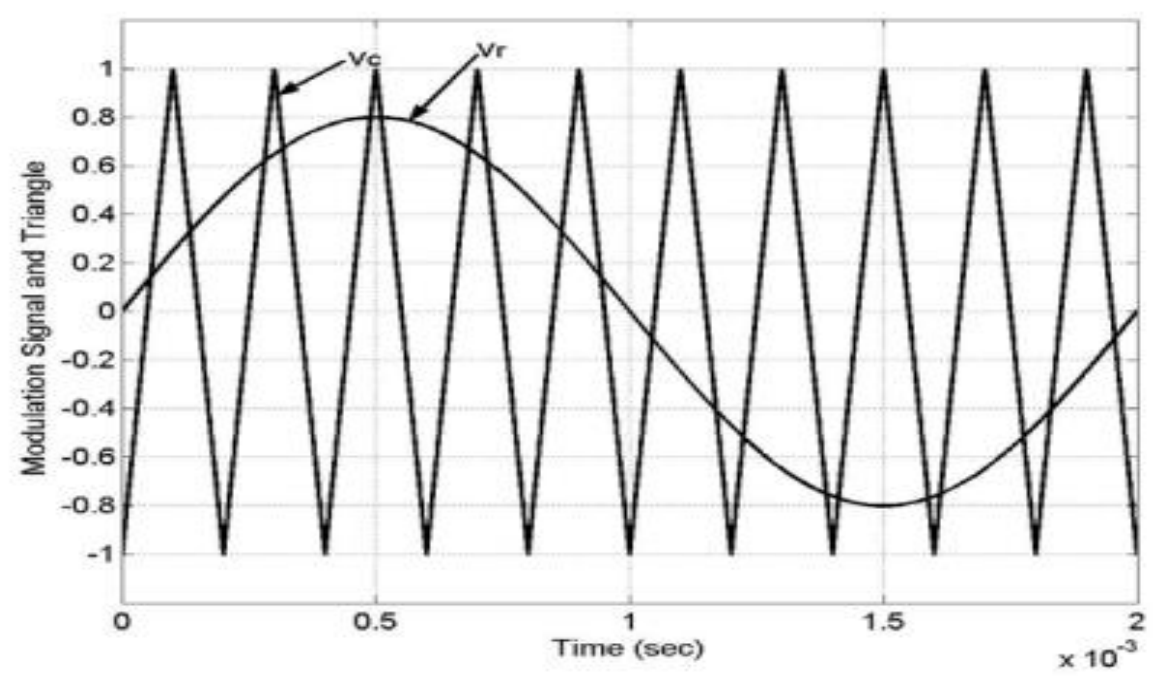


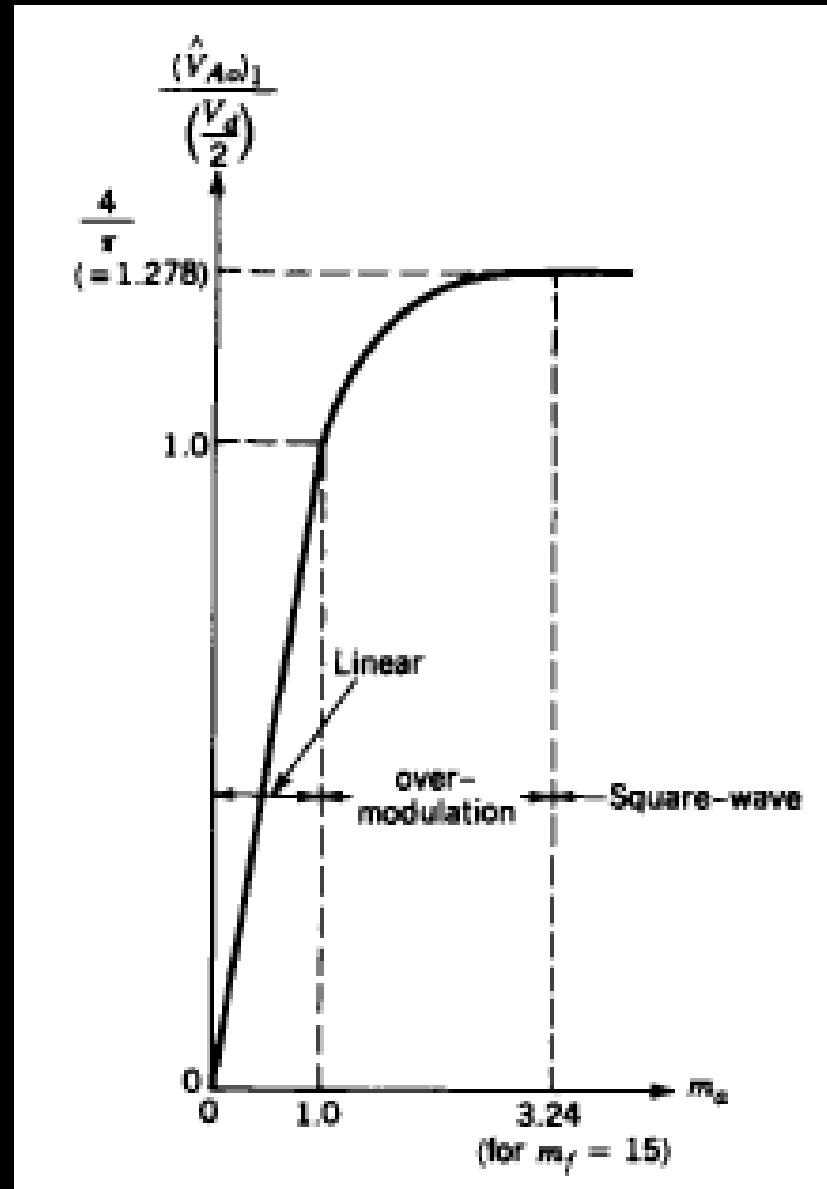
Figure 1 Classification of PWM Technique

PWM

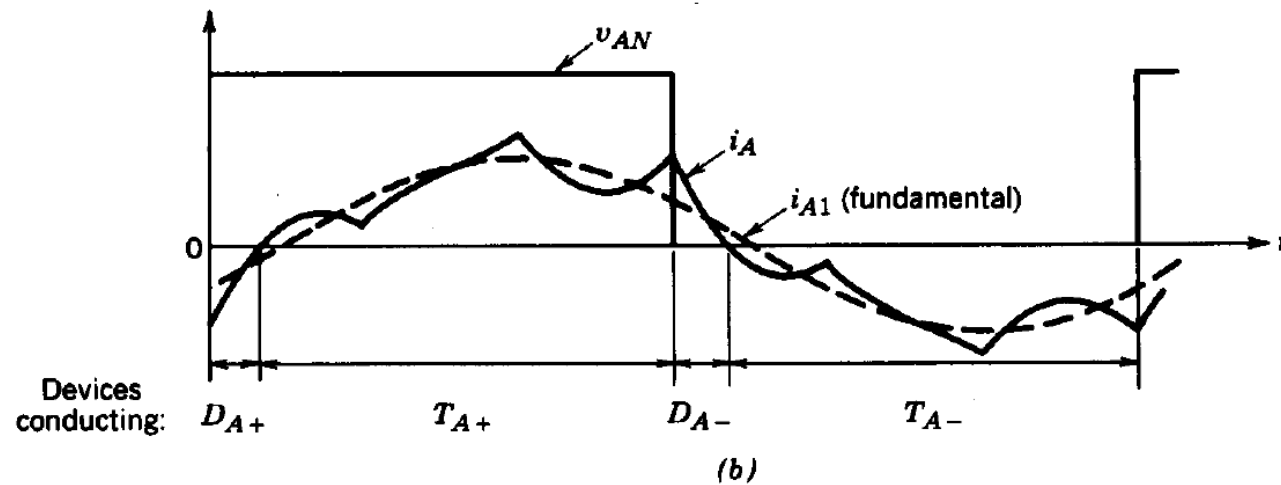
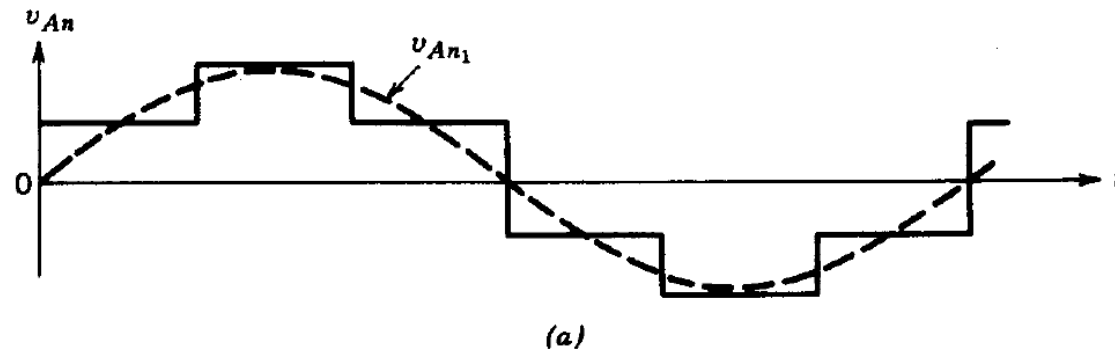




DC-AC Converters



Square-Wave Operation



DC-AC Converters

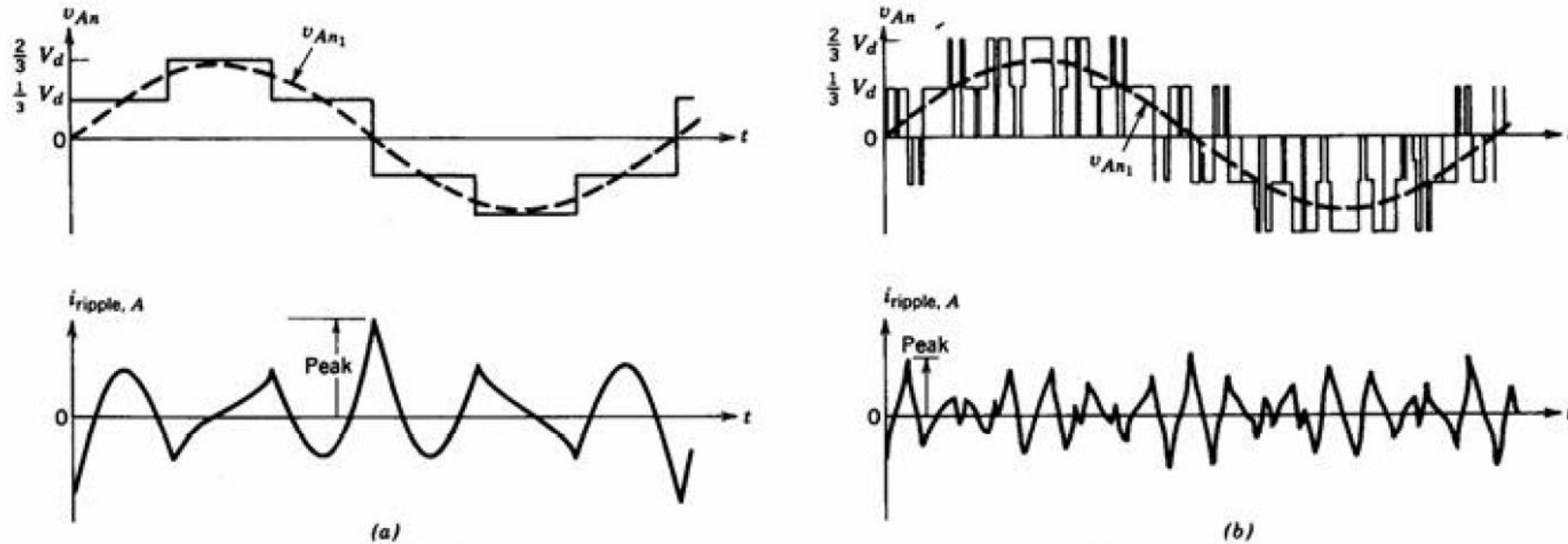


Figure 8-26 Phase-to-load-neutral variables of a three-phase inverter: (a) square wave; (b) PWM.

- PWM results in much smaller ripple current

Harmonics and the Fourier Analysis

Sinusoidal PWM
