

P4.3.2



Sterowanie w obwodzie zamkniętym

P4.3.2.2
Sterowaniej jasnością
za pomocą CASSY

P4.3.2.3
Sterowanie napięciem
za pomocą CASSY

Voltage control with CASSY (P4.3.2.3)

Cat. No.	Description	P4.3.2.2	P4.3.2.3
576 74	Plug-in board DIN A4	1	1
579 05	Lamp holder E10, lateral, STE 2/19	1	
505 10	Incandescent lamps, 3.8 V/0.27 W, E10, set of 10	1	1
579 13	Toggle switch, single-pole, STE 2/19	1	1
578 02	Photoresistor LDR 05, STE 2/19	1	
577 20	Resistor 10 Ohm, STE 2/19	1	
577 23	Resistor 20 Ohm, STE 2/19	1	
577 28	Resistor 47 Ohm, STE 2/19	1	
577 32	Resistor 100 Ohm, STE 2/19	1	
524 013	Sensor-CASSY 2	1	1
524 220	CASSY Lab 2	1	1
524 031	Current source box	1	
501 46	Cable, 100 cm, red/blue, pair	2	2
579 43	DC Motor and tachogenerator, STE 4/19/50		2
307 641ET5	PVC tubing, 6 mm Ø, 5 m		1
579 06	Lamp holder E10, top, STE 2/19		3
501 48	Bridging plugs, set of 10		1
524 011USB	Power-CASSY USB		1
	additionally required: PC with Windows XP/Vista/7	1	1

Modern technology without control engineering cannot be imagined. Practical examples such as a heating control or voltage control are familiar to everybody. In the following experiments, various controls from the two-point regulator to the PID controller are presented and investigated.

The aim of the experiments P4.3.2.2 and P4.3.2.3 is the computer-aided realization of closed control loops. In the one case, a PID controller is assembled and used to control an incandescent lamp whose brightness is measured using a photoresistor. The other configuration controls a generator which supplies a constant voltage independently of the load.